Erectus Walks Amongst Us



Richard D. Fuerle

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ErectusWalks

Amongst Us

The evolution of modern humans

by

Richard D. Fuerle

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Other works by the author

Home Page	Some articles and poems		
The Pure Logic of Choice	The basis of Austrian Economics		
A New Theory of Natural Rights	A theory of natural rights deduced from free will		
Musical Compositions	A light opera about the Whiskey Rebellion and a few other compositions.		
On the Steppes of Central Asia	A libertarian novel about a student in Mongolia		
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Contact the author

This HTML version contains updates and corrections made to the original printed version. Some of the pictures did not transfer well and will be improved later.

Uploaded July 26, 2008.

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[Back Cover]

TAKE THIS TEST!

	True	False
1. Race does not exist - a black person is just a white person with a suntan and wooly hair.		
2. All the races are equally intelligent.		
3. White racism is responsible for black failures.		
4. Africans were the first modern humans.		
5. Humans evolved in Africa from an African ape.		
6. The people living today who are most closely related to apes live in the Amazon jungle.		
7. A woman is always more closely related to her own child than she is to any other child.		

If you answered "True" to these questions, when you read this book drink a

glass of wine while listening to a recording of the ocean surf.

The author is a retired patent attorney who lives on a small wildlife refuge on an island in upstate of New York. A perpetual student, he has degrees in math (BS), law (JD), economics (MA), physics (BA), and chemistry (BA). He is an amateur composer (www.whiskeyrebellion.us) and has written books on Austrian economics (www.purelogic.us), natural rights (www.naturalrights.us), and anarchy (www.anarchism.net/steppes.htm).



Preface

"If you make up your mind about a contentious issue without having heard all sides, you will be wrong at least half the time." $\frac{1}{2}$

Every person is a product of the times he lives in. We all believe that our values are objective and moral, but that cannot be true because every generation believes that, yet they have vastly conflicting values. Only a few hundred years ago our ancestors found nothing objectionable about owning and selling other people, and some millenniums prior to that the main course at dinner might be a member of a neighboring tribe. Had we lived then, there is little doubt we would not have objected. Several hundred years from now a future generation is likely to consider our values to be as ignorant and barbaric as we consider those of our predecessors.

I mention this to encourage the reader to jettison, or at least rein in, the opinions, attitudes, and beliefs that he has picked up during his life, because in this book many of them will be disputed. Step out of your times, as though you had just arrived on this planet, and weigh the evidence and reasoning presented. It is nearly impossible to arrive at the truth by listening to only one side of the story, and you are about to hear another side.

Much of what people are told in schools and in the media today just isn't so. There are knowledgeable people who know it isn't so, but they dare not say anything. The rest of us live in this sea of misinformation. Since almost everyone believes the prevailing misinformation, we assume it must be true. So we act on it, making important decisions about our lives, decisions that all too often are disastrous.

Now, in my waning years, I can see no contribution I could make to the next generation more important than to challenge what I believe to be at least some of these erroneous beliefs. To encourage the dissemination of this book, it is being published without royalties and may be copied, with attribution, without liability to the author. I hope to make it available on the internet without charge, as I have done with my other books.

Very little is held back in this book. ² An effort was made to avoid unnecessary insensitivity, but shocking facts, even facts that some will find offensive, are displayed right out in the open where they cannot be missed. I have tried to be as accurate as possible, though I would be amazed if there were no mistakes, as so much ground is covered and speculation was required to fill in gaps in the evidence. Technical language is avoided where possible and explained where used. Large amounts of additional material could have been included, but after working on this almost full time for about four years, I've decided it's time to call it quits.

<u>Acknowledgments</u>

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FOOTNOTES

1. (1) Whenever there is a conflict, there are (at least) two versions. (2) Each side will promote its version and suppress the other versions. (3) The version of the winning side will become the establishment version that most people will accept. (4) If you knew the other versions, in a significant number of cases you would not accept the version of the winning side. (5) Therefore, in order to avoid promoting versions that are against your own interests, you should examine all versions of a conflict before deciding which version to accept.

2. Some information that is highly controversial, but off-subject or difficult to verify, even if it is probably true, was omitted. <u>Back</u>

Acknowledgments

A number of people made suggestions and provided information that was incorporated into this book. Dr. Willard W. Olson deserves thanks for his keen observations and original ideas on the evolution of man. His vast knowledge of biology, and of fossil skulls in particular, was immensely helpful and his blunt and honest opinions are appreciated.

A number of people on the "e-I" and "ARlist" Yahoo Groups also made sagacious comments and brought information to my attention. The book had its origin with posts by a self-educated ex-Marine, Ronald A. Fonda, on those two Yahoo Groups, where he repeatedly explained why he believed that the Out-of-Africa theory of human origins was wrong. Although he maintains a <u>web site</u> on that subject which documents his position in detail, I thought it was in rather technical language and difficult for a layman to comprehend. Convinced that he was on to something, though, I encouraged him, and others who agreed with him, to write a book that would make his ideas clear to an ordinary person. When, after several months, I realized that no one was going to start writing that book, I offered to be the editor. I saw myself as making sure that the writing was easy to understand and did not leave any gaps that could undermine the arguments. But still no one produced anything for me to edit, so I began researching and writing myself, first as "editor" then, when I was doing almost all the writing, as co-author with Ron.

Ron and I were already sticking our necks out by arguing that modern man did not arise in Africa, but only in Eurasia. That was contrary to both scientific theories of human evolution, the Out-of-Africa ("OoA") theory and the Multiregional theory. As the book progressed, Ron, somewhat reluctantly, and I agreed that there were good reasons for believing that man's evolution from a primitive mammal did not occur in Africa either, and that man had descended from a lineage that was closer to the Asian orangutan than to the African chimpanzee. But that was Ron's limit on taking speculative positions.

By the time Chapter 24 was seriously discussed, I had become convinced that biology was not that different from physics in that it, too, was constrained by laws or rules. Genetic and fossil data gave dates for the origin of the races of only about 65,000 years ago ("ya"), but those rules implied that the races began more than 2 million years ago ("mya"). Since Ron and I could not agree on how to resolve these and other difficulties, we amicably parted ways.

This book contains material I find absolutely fascinating, especially since one is unlikely to easily find it elsewhere, particularly in a single book. To put it together, widely different specialties had to be studied (e.g., genetics, physical anthropology, sociology, fossils, psychology), digging through controversial and contradictory information, some of it mistaken or even fraudulent. Making sense of it all was so overwhelming a task that many times I was tempted to give up. Fortunately, Ron had already acquired a good knowledge of these disciplines, had thought through the implications of all the information he had gathered, and was able to keep me on track.

To Ronald Fonda therefore belongs not only credit for being the impetus of the book, but for many of the ideas scattered throughout the book. Section III is almost entirely based on his <u>web site</u> and he is responsible for many of the ideas in Section IV as well.

I am not oblivious to the fact that the theory of human origins proposed in this book contradicts a vast literature supporting the Out-of-Africa ("OoA") theory. However, there are good reasons for believing that OoA is not correct and that modern man did not evolve in Africa. I hope the reader will impartially judge the case presented while I anxiously remain in the dock, awaiting the verdict.

As always, any errors or misstatements are mine. Comments and corrections,

preferably without cuss words, may be sent to me <u>HERE</u>.

Introduction

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SECTION I What Every Paleoanthropologist Should Know

In order to understand our origins, you are going to have to be familiar with some of the fossil humans that have been found and how evolution "works" to change living things $\frac{1}{2}$ to best fit their environment. Definitions of technical terms can be found in the <u>Glossary</u>; here are a few shorcuts that will be used:

Africans or s-S Africans = sub-Saharan Africans. LCA = last common ancestor – the most recent ancestor from which two individuals or groups descended.

yr = year. yrs = years. myrs = million years. ya = years ago. kya = thousand years ago. mya = million years ago. BP = before present, taken as 1950.

 $Hs = Homo \ sapiens -$ our immediate archaic predecessors. $Hss = Homo \ sapiens \ sapiens -$ modern man, us. $He = Homo \ erectus -$ the species of man just prior to Hs. Hn =Neanderthals.

OoA = Out of Africa, the dominant theory of the origin of modern humans. OoE = Out of Eurasia, a theory of human origins put forth in this book.

Early man = *Homo*, but not *Homo sapiens*. Archaic man = *Homo sapiens*, but not *Homo sapiens sapiens*. Modern man = *Homo sapiens sapiens*.

Chapter 1

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FOOTNOTE

1. Broadly, a "living thing" could be defined as a mechanism that uses matter and energy from its environment to make copies of itself, e.g. (Lin, 2006). Also see <u>Chemoton Theory</u>.

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Chapter 1 - A Story of the Origin of Humans

Just so you know where this book is going, here is a short story of the origin of man propounded in this book. Much of it is, admittedly, speculative, but it provides a more-or-less complete story, even if it involves some guesswork, a better read than isolated facts separated by chasms of mystery. I will not endlessly repeat, "according to the author," and the reader should realize that deductions and explanations are the author's opinion, supported by the quotations and citations that are given.

The story begins about 60 mya in the tropics of SE Asia. Early primates ("prosimians") chatter in the trees where they are safe from most predators. Some of the prosimians cling to trees vertically and have a vertical posture. They support themselves and climb with their strong back legs and use their front legs to grasp branches and food.

Some primates become larger, making it more difficult to walk on top of the branches, so they begin to move by hanging from the branches by their feet and arms, then just by their arms; they are "brachiators." Arms become longer as those with longer arms can move more efficiently with larger swings, just as longer legs make walking more efficient. Tails are no longer needed for balance and are a waste of the body's resources, so the brachiators who have shorter tails now have an advantage and tails decrease in size, then disappear entirely.

Less mobile in the trees and too heavy to reach fruit on the end of small branches, the tailless brachiators spend more time on the ground, where their size eliminates the threat of small predators and enables them to eat foods, such as underground tubers, unavailable to their tree-bound predecessors. They have not evolved the anatomy needed for efficient walking on two feet so they walked partly bent over supported by palms in Eurasia and knuckles in Africa. The environment on the ground is more complex, giving a survival advantage to those who have larger brains and are more intelligent. It is about 25 mya and the tailless brachiators have become apes.

Some of the Eurasian apes live in swampy areas, near lakes or the sea, or in forests near rivers, where they feed on plants and aquatic animals. When they are in the water, they walk on two feet ("bipedalism"). Over time, they become more and more anatomically adapted to bipedalism and venture farther away from the safety of shallow water and nearby trees. This is the first "giant step for mankind" because bipedalism was the single most important adaptation in the evolution of man; man is the only habitually bipedal mammal. It is about 10 million years ago and bipedal apes have arrived.

The Eurasian bipedal apes follow the fruiting of trees and bushes and the herds of animals that predators feed on, scavenging the remains. Walking on two feet lets them travel farther and faster and with less energy than the quadrupedal apes, ¹ and there are many other significant advantages as well. Their hands are free to carry food and rocks ² and sticks for weapons, ³ standing upright presented less surface area to the sun, keeping them cooler and able to forage longer ⁴ and, by standing, they could better spot predators. ⁵ Weapons and tools improve, as they can now be carried with them instead of being made only when needed, then discarded. Larger brains enabled them to plan better hunting strategies, thereby obtaining more meat to fuel their growing brains, creating a feedback loop of bigger brain \rightarrow better tools and weapons \rightarrow more meat \rightarrow bigger brain (where " \rightarrow " means "makes possible" or "goes to"). ⁶

Because the bipedal apes move about on the ground so much, they are constantly in different environments. They must remember where to go, when to go there, and what dangers and food sources to look for in all the many different locations they visit. A larger brain, despite its high energy requirements and additional weight, becomes worth its high cost.

Moving around on two feet means that a mother can hold her baby with one hand and gather food with the other while it nurses. $\frac{7}{2}$ Walking uses less energy if the legs are close

together (<u>Arsuaga, 2001</u>, p. 92), and women with a narrower birth canal, and therefore closer legs, survive better. But a narrower birth canal means that babies must be born less developed so their brains and skulls can fit through the narrower canal during birth; the growth of the brain is delayed and it has its greatest growth after birth. ⁸ While that solves one problem, it creates new problems, for now the less-developed baby requires longer care in order to survive. ¹ The bipedal ape's numbers increase rapidly and like his predecessors he, too, migrates into Africa, where he drives all the other great apes to extinction, except for the chimpanzee and the gorilla, who retreat to more isolated and less desirable territories. It is about 4 mya; the bipedal ape has become *Australopithecus*, the last bipedal ape.

While *Australopithecus* ventured into the subtropics, man could go farther north, into a seasonal and colder climate. Had *Australopithecus* remained in the tropics, there would today be no men, *Homo*. But when the tropics were full, some Australopithecines, the losers in the competition for the best territories, were pushed into less desirable territories, one of which was the colder north.

A seasonal climate is vastly more mentally challenging than a tropical climate. In the tropics, different types of plant food are available all year long, but in a more seasonal climate, plants begin to limit their edible portions to only the warmer seasons, which also limits the biomass of the animals who eat them. Thus, more skill and intelligence are required than in the tropics. While some species of Australopithecines partially adapted to a cooler climate, they could not go as far north as man, and hibernation was not an option. ⁹

The seasonal climate strongly selected for the greater intelligence needed to survive in this more mentally challenging environment. Individuals who had it survived and passed their particular genes on to their children; those who lacked it did not. Gradually, they extended their northern range. By about 2½ mya, the combination of efficient bipedal walking, free use of hands, and greater intelligence had paid off big time and the ape had become man. Sometime around 2 mya, a dramatic change began in these more northern Australopithecines – their brains enlarged dramatically, as must have their intelligence. This was the birth of the genus *Homo*, the first men.

For early man, struggling to survive as seasonal differences became ever more severe with each extension to the north, his larger brain, and greater intelligence, was the key to the completely different mindset needed in this environment. Impulsiveness and immediate gratification was out; saving for the future was in. Ignoring the future consequences of actions was out; careful planning became a necessity. Nature's price for becoming man was high, no more tropical Garden of Eden, but desperate preparation for the trials of winter. The *hukana matata* ("no worries") grasshopper, ¹⁰ happily singing his days away in the sun, becomes *Homo*, the hard-working, struggling ant.

The relationship between the sexes also changed. In the north, where hunting was a more important source of food, women could no longer gather the provisions needed to sustain themselves and their children throughout the year. Without a man to provide for them, they died and their children died. ¹¹ Men who committed to a single woman and cared for her, the "dads," passed on their pair-bonding genes; fewer "cads" passed on their philandering genes.

An early species of man, *Homo erectus*, spread into the warmer areas of Africa, Europe, and Asia, as far north as his naked body could tolerate the cold, driving his predecessor, *Australopithecus*, to extinction. ¹² When he had filled all the territory he could, his great expansion stopped. Any further migrations meant moving into territory already occupied by other *erectus* and fighting and defeating them. That was not easy to do because the resident *erectus* knew the land, the food sources, and the dangers, and he fiercely defended his homeland. ¹³

In widely separated and different environments, *erectus* continued to evolve, each population becoming better adapted to its unique environment; *erectus*, like *Australopithecus*

before him, becomes distinct and genetically different races. ¹⁴ In the northern range of Asian *erectus*, the climate was much colder, so those individuals who had traits that made them better able to endure the cold survived there while others did not.

In Europe and western Asia, early *erectus* eventually evolved into Neanderthals (also spelled "Neandertals") about 350,000 ya. In East Asia, cold-adapted *erectus* acquires control of fire, ¹⁵ moves still farther north, and evolves into *Homo sapiens* (*Hs*), archaic man, about 200,000 ya. Similar changes occurred in West Asia, but without cold adaptations. The last stage before becoming modern, *Hs* further improved his skills and increased his intelligence, extending his range still further north. By about 150,000 ya, archaic man became *Homo sapiens sapiens* (*Hss*), modern man. Where this happened is a major contention that is the subject of much of the rest of this book, but the author believes it happened in East and West Asia.

Like his predecessors, the new-found tools, weapon, and intelligence of *Hss* were an advantage not only in the north, but also in the south, still occupied by *Hs* and even by some *erectus* in the tropics. So, when his numbers increased and the climate became colder and winters so severe that the snow no longer melted, he moved south, invading *Hs* and *erectus* territory, driving them to extinction, but sometimes interbreeding with them along the way, creating hybrids. The glaciation of the north lowered sea levels and migration to Pacific islands and Australia became feasible. When the ice finally began to melt thousands of years later and the cold retreated, *Hss* moved north once again. West Asian *Hss* spread into Europe, where he bred to a limited extent with the Neanderthals, becoming today's Caucasians.

About 50,000 ya, one or more mutations occurred in a Eurasian population that affect the functioning of man's brain. These mutations were so favorable that they rapidly spread through to Eurasians. Man created an elaborate culture, acquired religious beliefs, and crafts, art, and tools that had to be visualized in his mind. Agriculture and the domestication of animals followed about 10,000 ya and the rest, as they say, is history.

This is our origin, according to the author of this book. Those who favor a divine origin for man will not agree, nor will most scientists who believe man's origins were in Africa. Nevertheless, I hope the reader will carefully consider the evidence that supports this story before making up his mind.

Chapter 2

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FOOTNOTES

1. (<u>Richmond, 2001</u>). Longer legs use less energy; leg length increased about 2 mya. (<u>Pontzer, 2007</u>). <u>Back</u>

2. Later bipeds carried round rocks ("manuports") left over from chipping off cutting stones. These were ideal for throwing at predators and scavengers to drive them away from carcasses. Individuals who could throw the manuports hard and accurately, due to a superior brain that could precisely calculate the instant to release the rock, were more reproductively successful. Back

3. A significant advantage as big cats found them quite tasty. (Eppinger, 2006). Back

4. Compared to walking on four limbs, standing upright exposes only 40% of the body to direct sunlight (<u>Haywood, 2000</u>, p. 23). Also, standing reduces the exposure to heat radiating from the

ground, and exposes the body to cooler breezes, keeping the brain from overheating and shutting down. (Wheeler, 1988). Back

5. Meerkats and other mammals also stand on two feet to watch for predators in the grasses. Back

6. Without meat, it is doubtful that man's brain could have increased to its present size. (<u>Taylor</u>, <u>2007</u>). <u>Back</u>

7. This simple act of carrying the baby with one arm may have profoundly affected man's brain. Because the left ventricle of the heart makes the loudest sound and babies are quieter when they hear the heartbeat they heard in the womb, most women, even today, carry their babies on their left side. Women, like men, used their free right arm to throw stones at prey and predators and those whose left side of the brain (which controls the right arm) was more adept at accurate throwing had an advantage. Thus, man became predominately right handed and his brain became more asymmetrical, making the brain more specialized and sophisticated. (Calvin, 1991). Also, (Donohoe, 2003). Humans are the only primate that is predominately right-handed. (Corballis, 1991). Back

8. The infant brain is about a quarter of the size of the adult brain and grows most after birth, not stopping until about age 30. (<u>Allman, 1994</u>, p. 56; <u>Schwartz, 1999</u>, p. 122). A newborn chimpanzee brain is about 60% of its adult weight and grows 30% to puberty, while a newborn human brain is 24% of adult weight and grows 60% to puberty. (<u>Corballis, 1991</u>, pp. 69-70). <u>Back</u>

9. Even if man could have evolved to hibernate, because of his size he would be competing for suitable quarters with other animals, such as the powerful cave bear. Hibernation can be induced in man, but in nature he would die from hyperthermia. (Stone, A., "<u>Suspended Animation</u>," *Discover* magazine, May, 2007, p. 43). <u>Back</u>

10. "The Dobe !Kung people of the Kalahari desert, for instance, are able to provide all the basics of life for themselves by about two to three hours work a day, depending on the season. The rest of their time is to be spent at leisure, either gossiping and socializing, telling stories, playing games, or resting." (Haywood, 2000, p. 82). "In tropical environments where food is available all year round, hunter-gatherers rarely store food even overnight..." (Haywood, 2000, p. 90). Back

11. "...from birth to belated maturity it takes six times as many calories of food per kilogram of adult weight to build a man as to nurture any ordinary mammal to adulthood." (<u>Coon, 1962</u>, p. 172) Without that greater intelligence, man could not have acquired that amount of food. <u>Back</u>

12. Not only did the brain of *erectus* jump in size in proportion to his body weight (Boaz, 1997, p. 141), but unlike *Australopithecus*, *erectus* could run! Two million year old *erectus* developed a delicate ridge at the base of his skull where a tendon (the nuchal ligament) was attached to keep his skull steady during running. *Erectus* may have been able to run down prey, especially in hot weather, giving him a food source unavailable to *Australopithecus*. (Bramble, 2004). Running down prey is a successful strategy only in high temperatures because, for it to be successful, the prey's temperature must reach about 105° F, which shuts down its ability to run. Back

13. A successful invasion of occupied territory typically requires at least a 2 to 1 numerical

superiority or a highly superior technology. <u>Back</u>

14. The large jump in brain size was due to a genetic change, though as yet it has not yet been attributed to any particular gene or genes. It is interesting, though, that chimps, gorillas, and orangutans have 48 chromosomes and humans have 46 chromosomes, due to the fusion of the two chromosomes into Chromosome 2 (<u>Williams, 1999</u>). It is not known, of course, how many chromosomes the Australopithecines had, so this may not have been the change that divided ape and man. The tarsier, an early primate, has 80 chromosomes, suggesting that as primates evolved, chromosomes fused. <u>Back</u>

15. Dragon Bone Hill, China, between 620,000 and 410,000 BP. Back

Chapter 2 - Early Humans

Very briefly, we will take a look at a few early humans, just to see the traits that they possessed and how those traits progressively evolved. Keep in mind that the classification of these fossils is somewhat arbitrary as species change gradually and most species live for tens of thousands of years after some of their members have evolved into other species. Nor can early human fossils be placed in the order in which they evolved by relying only on their cranial capacities because cranial capacities vary among individuals and the sexes (males skulls are larger and it is not always possible to determine sex). And the locations where the fossils were found are not proof that they evolved there.

Homo habilis

The first known member of the *Homo* genus is *Homo habilis* ("handy man"), ¹ so named because pebble tools were found with his remains. *Habilis* lived between 2.5 and 1.8 mya. The skull shown in Figure 2-1 was found in Tanzania, East Africa.² The face is primitive, but the jaw projects forward less than in his simian predecessors, though his arms were long. There are no external nose bones, the eye sockets are large, and the teeth are considerably larger than in modern humans. Cranial capacity varied between 500 and 800 cc (with an average of 650 cc), which is small, considering that *habilis* was about 127 cm (5'0") tall and weighed about 45 kg (100 lb). Internal markings on the skull indicate that his brain had a humanlike shape. A bulge in the area used for speech on the left side of the brain (Broca's area), suggests that habilis may have been capable of rudimentary speech. He was also "the first hominid to add meat to its vegetarian diet." (Arsuaga, 2001, p. 157; Haywood, 2000, p. 26). He probably descended from a gracile bipedal ape, such as *Australopithecus afarensis* or *africanus*. (Conroy, 1990).



Figure 2-1

Homo ergaster

Figure 2-2³ shows an early *Homo erectus* from Africa that is now called *Homo ergaster* and Figure 2-3⁴ is a drawing of what *ergaster* may have looked like.

Ergaster had a cranial capacity of 700 to 880 cc, lived about 1.9 to about 0.6 mya in Africa, and may have used fire. ⁵ Hand axes and cleavers were found with the fossils, but for a million years his tools did not improve. There is some doubt that *ergaster* originated in Africa as it does not seem to have an immediate ancestor there. (Dennell, 2005).

A nearly complete *ergaster* skeleton, "Nariokotome Boy," (also called "Turkana Boy") was found in Nariokotome, Kenya, Africa. He lived about 1.8 mya. Only about 10 years old when he died, he was already about five feet tall and would have been over six feet at maturity. Unlike earlier hominids, he could swing his arms when walking or running.

Homo erectus

Homo erectus, who lived in most of Africa, southern Europe, SW Asia (the Middle East), SE Asia, Japan, and even some Pacific islands, had

fire and systematically made tools. His earliest bones are almost 2 million years old and he did not become extinct until 27,000 ya on the isolated Indonesian island of Java (and perhaps even more recently, as we shall see below).

The term "Homo erectus" ("upright man") is used somewhat broadly and once included some of the prior species, which may be considered to be early erectus. Like habilis, the face has a protruding jaw with large molars, no

chin, thick brow ridges, and a long, low, and thick ($\frac{1}{2}$ inch in places) skull. But *erectus* was taller than his predecessors and had a larger brain (750 – 1225 cc), ⁶/₅ smaller canine teeth, a smaller and less protruding jaw, shorter arms, and an external nose. The cover of this book, minus the suit, tie, and glasses, of course, shows what a tropical *erectus* may have looked like and Figure 2-4 (by Russell Clochon) depicts a northern >l?erectus. ⁷/₂.

The OoA theory says that it was the African *erectus* that became modern man, then came the races, so the species *Hs* (and the subspecies *Hss*) arose before the races; the Multiregional theory says that there was an Asian *erectus* race and an African *erectus* race and they both became modern man, so the races came before the species *Hs*. And this book says the races arose before *erectus*, with *Australopithecus*, so the races came before the genus *Homo*.

Homo georgicus

Figure 2-5 shows front and side views of an early European erectus, classified as Homo

georgicus.⁸ The fossils, about 1.8 million years old and consisting of three partial skulls and three lower jaws, were found in Dmanisi,

Georgia, of the former Soviet Union. ⁹ *Georgicus* has similarities to the *habilis*, *ergaster*, and *erectus* types found in Africa, though he was somewhat more gracile.

The brain sizes of the *georgicus* skulls vary from 600 to 800 cc. The height, as estimated from a foot bone, would have been about 1.5 m (4'11") and the weight about 50 kg (110 lbs), shorter but heavier than the preceding African specimens because he lived in a cooler climate. $\frac{10}{10}$ Note the large teeth (especially the large canines, which are very



Figure 2-2

Figure 2-3



Figure 2-4

primitive), the sloping forehead, the heavy brow ridges, the projecting jaw, the absence of a projecting nose, and the bulge ("occipital bun") at the back of the head. *Georgicus* may have been an ancestor to the African and Asian *erectus* (Lordkipanidze, 2006) and a predecessor of *georgicus* may have been an ancestor of the African *ergaster* and *habilis*.

Homo antecessor

Homo antecessor was found in Atapuerca, northern Spain, along with tools; it is dated at about 780,000 to 857,000 ya (Bermúdez de Castro, 1997). The fossils are fragmentary but similar to Nariokotome Boy (Fig. 2-2 & 2-3). The bones show definite signs of cannibalism. Antecessor was robust with an occipital bun, a low forehead, no chin, and a cranial capacity of about 1000 to 1150 cc. He stood 5½ to 6 feet tall, and males weighed roughly 200 pounds. Antecessor's



Figure 2-5 Side View

Figure 2-5 Front View

lineage is unclear, but he may have been on, or a branch of, the lineage that lead to Heidelberg man and the Neanderthals.

Homo heidelbergensis

Scientists had trouble classifying many fossils from between about 800,000 and about 200,000 ya because they were not as primitive as *Homo erectus*, but yet were not really modern either, though somehow they still managed to get to northern England 700,000 ya. ¹² Eventually, they were given the name *Homo heidelbergensis*, ¹³ aka "Heidi." The skull capacity of Heidi is larger than

erectus but still smaller than most living humans, averaging about 1200 cc, and the skull is more rounded than in *erectus*. The skeleton and teeth are usually less robust than *erectus*, but more robust than modern humans. Many still have large brow ridges and receding foreheads and lack chins. Figure 2-6 shows a 450,000 year old skull found in Arago Cave. Tautavel, France. 14

This was a young adult about 1.65 m (5'5") tall, with a cranial capacity of 1150 cc. Note the receding forehead and the rectangular eye sockets. Heidi has many features that are similar to Neanderthals, such as a wide face, a heavy brow ridge, and a projecting jaw, suggesting that Neanderthals evolved from a European Heidi who, in turn, may have been a descendant of georgicus.

Neanderthals

Neanderthals, 14 Homo neanderthalensis, lived between 350,000 and 24,500 ya (<u>Finlayson, 2006</u>) throughout Europe and the Middle East but, unlike Heidi, no Neanderthals fossils have yet been found in Africa.



Figure 2-6

Neanderthals lived primarily in the cold north; they migrated to lower latitudes (e.g., Portugal, Israel) only during the ice age. Figures 2-7 ¹⁵ and 2-8 ¹⁶ show two variations.



Figure 2-7

Figure 2-8

Note the larger and rounder eye sockets in Figure 2-7. The Neanderthals had an average skull capacity of about 1450 cc, slightly greater than that of modern humans, ¹⁷ but this may be due to their greater bulk rather than to their greater intelligence. ¹⁸ The skull is longer and lower than that of modern humans, with a marked bulge ("occipital bun") at the back. Like *erectus*, Neanderthals had a receding forehead and a protruding jaw. The middle of the face also protrudes, a feature that is not found in *erectus* or *sapiens*, a feature that may be an adaptation to cold weather or, more likely, a partial retention of simian prognathism. There is a brow ridge without a gap in the middle, giving them a beetle-browed appearance; a chin is just beginning to appear.

Their barrel chests and short, stubby hands, fingers, and feet were adaptations for the cold ¹⁹ and, because of the lack of sunlight in the north, they would have had white skin (<u>Arsuaga, 2001</u>, p. 75), though they may have also been hairy. Men averaged about 168 cm (5'6") in height. Their bones were thick and heavy, and show signs that powerful muscles were attached to them, so they would have been extraordinarily strong by modern standards. Western European Neanderthals (sometimes called "classic Neanderthals") were usually more robust than those found elsewhere. ²⁰A large number of tools and weapons have been found with them that are more advanced than those of Homo erectus. Animal bones suggest that Neanderthals were formidable hunters. They are the first people known to have buried their dead, with the oldest known burial site about 100,000 ya. We will return to Neanderthals in Chapter 25.

Archaic Man and Modern Man

Archaic man, *Hs*, first appeared about 200,000 ya and modern man, *Hss*, appeared about 160,000 ya. Modern humans have an average brain size of about 1350 cc. The forehead rises sharply, eyebrow ridges are very small or more usually absent, the chin is prominent with a cleft in the middle, the teeth are small, and the skeleton is gracile (light bones). Even within the last 100,000 yrs, the long-term trends towards smaller molars and decreased robustness can be discerned. Compared to modern Eurasians, humans about 30,000 ya were about 20 to 30% more robust and until about 10,000 ya were about 10% more robust; populations that have used food-processing techniques (e.g., cooking) the longest have the smallest teeth. (Brace, 2000).

Cro-Magnons

The Cro-Magnons were the immediate predecessors of modern Caucasians. They lived in Europe about 40,000 to about 10,000 ya. They were slightly more robust than modern Caucasians and, like Neanderthals, they had brains that were larger (about 4%) than modern Caucasians, ²¹ though their skulls were thicker and brow ridges heavier. (Howells, 1948, p. 186). With the appearance of the Cro-Magnon culture, tool kits started to become markedly more sophisticated. A wider variety of raw materials, such as bone and antler, were used and specialized tools were made for producing clothing, engraving, and sculpturing. Fine artwork, in the form of decorated tools, beads, ivory carvings of humans and animals, clay figurines, musical instruments, and spectacular cave paintings (Fig. 15-1a, 15-1b, & 25-3) appeared. (Leakey 1994).

Figure 2-9 shows a Cro-Magnon skull. ²² This 30,000 year old, fully modern, Cro-Magnon skull was found in Les-Eyzies, France. The skull shows traits that are unique to modern humans, including the high rounded cranial vault, and a nearly vertical forehead. There are no large brow ridges, nor a protruding jaw. Note how the eye sockets are slightly sloped and are flattened far more than in the other fossil skulls, possibly an adaptation to protect the eyes from the cold. ²³ The flattened eye

sockets that are observed in some North African skulls may be the result of Cro-Magnons migrating there during the worst of the last ice age.

Figure 2-10 is a graph that will give the reader some perspective on the known life spans of these species. $\frac{24}{24}$



 1. There are no sharp skeletal differences separating early humans from
 Figure 2-9

 their Australopithecine predecessors. "Whether habilis is in fact man or an advanced australopithecine is a matter of scientific dispute, and largely one of semantics." (Ardrey, 1966, p. 259). For convenience, early humans can be lumped as stages of *Homo erectus*. Back

- 2. (KNM ER 1813). Photo from Wesleyan University Archeology & Anthropology Collections. Back
- 3. (KNM ER 3733) Picture from Museums Choice Fossils. Back
- 4. From Transvaal Museum, South Africa. Back

5. Ashes were found in a cave, but could have been carried there by moving mud or earth, or brush that had grown into the cave may have burned. (<u>Arsuaga, 2001</u>, p. 269). <u>Back</u>

- 6. Early erectus averaged about 900 cc, while late erectus averaged about 1100 cc. Back
- 7. A parody of a drawing from the University of Minnesota, Duluth, "Prehistoric Cultures." Back
- 8. Skull D2700. Back
- 9. Skull D2282. Back
- 10. An example of Bergmann's Rule. Back

11. (Parfitt, 2005). Boxgrove Man, a Heidi found near Chichester in Sussex, England with flint tools, was dated at about 500,000 ya. Back

12. The name is from Heidelberg, Germany, where one specimen was found, but Heidi has also been found in Spain and Africa. Heidi is also classified as *Homo erectus heidelbergensis* to indicate that it is a sub-species of *Homo erectus*. Back

13. Photo from the World Museum of Man. (Also see Figure 17-5). Back

14. Named for discoverer Joachim Neumann, who preferred his name in Greek, Neander ("new man") plus "tal," which is "valley" in German. Back

15. La Forressie (reconstructed), France. World Museum of Man Back

16. Chapelle-aux-Saints (reconstructed), France. World Museum of Man, a "classic" Neanderthal. Back

17. Wolpoff give a cranial capacity of 1525 cc for a 50,000 year old Neanderthal. (Lee, 2003, Table 1). Back

18. Neanderthals had a brain 4.8 times larger than expected for a mammal of their size, but our brains are 5.3 times larger, i.e., relative to body size, our brains are larger. (<u>Ruff, 1997</u>). <u>Back</u>

19. Bergmann's Rule and Allen's Rule, respectively. Back

20. (<u>Trinkaus, 1979</u>). Primates that eat mostly vegetables are robust (e.g., the gorilla) and those that eat mostly meat are gracile, but that does not apply to Neanderthals. (<u>Corballis, 1991</u>, p. 306). <u>Back</u>

21. The probable reason why we have smaller brains than our immediate ancestors is the change, about 12,000 ya, from hunting and gathering to farming, which selected against a large and costly brain as it was less needed. <u>Back</u>

22. Picture (now deleted) from Pleistocene"). See Figure 17-11 for H. floresiensis skull. Back

Chapter 3 - DNA

In addition to figuring out "Who Done It" on TV crime shows, DNA is also useful in figuring out "Who Begot Whom." It works like this. All humans have 23 pairs of chromosomes, making the total number of chromosomes equal to 46. One set of 23 chromosomes came from the mother and the other set of 23 chromosomes came from the father. Each of the father's 23 chromosomes is paired up with the corresponding chromosome from the mother. Each chromosome consists of a long string of DNA entwined with proteins called "histones." Histones unwind to permit the DNA to be read; the histones are inherited along with the chromosomes. (Segal, 2006).

DNA is a chain of chemical units called "nucleotides." It is like a computer code (... 011000101...), but instead of using only zeroes and ones, each nucleotide uses one of four different chemical bases, which are known by their first letters, A, C, G, and T (... ATTGCATCCA...). A "gene" is a string of DNA that "codes for" a polypeptide, which is just a string of chemically linked amino acids. The order of those A, C, G, and T bases in the coding portion ("exon") of the DNA sequence of a gene determines which polypeptide is made, and stringing different polypeptides together produces different proteins. ¹ (See <u>Appendix</u>). Proteins and other substances are assembled to give various traits, the "phenotype." Less than 2% of our genome is required to make all the proteins we need to live.

All humans have the same genes, ² but not the same form of those genes. To clarify, we all have the EYC3 gene for eye color, but one A-C-G-T sequence of that gene makes eyes blue and another A-C-G-T sequence of that gene makes eyes brown. Each different A-C-G-T sequence of a gene is called an "allele." In some populations, a gene may come in only a single allele, so everyone in that population has the same A-C-G-T sequence for that gene and has the same trait, i.e., the allele is "fixed"; genes in other populations come in many alleles, some of which only very few people have. Some alleles are very beneficial and give an individual a highly desirable trait, such as greater intelligence, athletic ability, or good looks, and other alleles may be lethal or debilitating. There is an average of 14 different alleles for each gene.

In addition, regulators (the "epigenome") determine whether or not a string of DNA is read. ³ The epigenome also differs between people and is inherited with the chromosomes. Putting all this together, it is obvious that unless two people are identical twins, it is extremely unlikely that they will be genetically identical, and even "identical" twins, i.e., twins with the same DNA sequences, may differ slightly due to differences in their epigenomes. ⁴

And, hang on, it gets even more complicated. If two alleles have different A-C-G-T sequences they can nevertheless still code for the same polypeptide (i.e., the two alleles are "synonymous"), or they can code for different polypeptides ("non-synonymous"). ⁵ Each A-C-G-T difference, e.g., a "T" instead of an "A," is called a "single nucleotide polymorphism" (SNP). The difference between an "A" and a "T" may be only in how difficult it is for a cell to obtain and assemble an "A" instead of a "T," or the difference may be advantageous, disadvantageous, or even deadly.

vew	
^{lleles} Very occasionally, there is a throwback ("atavism"), a	
an subsection and the section of the	
person whose gene regulators have turned on genes that were	
turned off a long time ago in the rest of us. (LePage, 2007).	
Vithin Figure 3-1 is a picture of Azzo Bassou, Bassou was living	
is the Value of Dedee potential taxe of Charter in Marcas in	
in the valley of Dades, hear the town of Skoura in Morocco in	

he is a throwback, he should express some primitive white ind/or African traits, along with his mulatto traits. Some experts pelieve that Bassou was a microcephalic (e.g., had a genetic efect that left him with a small brain), but he was not a drwarf, as hany microcephalics are. (The villagers would not permit an xamination of his body when he died.) His behavior, aside from ourred s primitiveness, was also not that after primitiveness, was also not that of most microcephalics. "With arms so long his fingers hang below his knees when stands upright; with massive, bony ridges above his eyes and sharply receding forehead; with jaws, teeth, chin, and expones all showing pronounced ape-like characteristics. He leeps in the trees there and subsists on dates, berries, and ects. He wears no clothes (although he was persuaded to don burlap sack for the photograph which appears here), uses no bols, and speaks only in grunts." (*National Vanguard*, Issue No. 44, 1976). Figure 3-1

new allele increases reproductive success it will spread throughout the population and, if it is reduces reproductive success, it will disappear along with those who had it. ⁶ Almost all new alleles are detrimental because, after millions of years, almost all the alleles that are possible have already entered the population's gene pool at one time or another. Since beneficial alleles usually remain in the gene pool once they arise, there are very few new beneficial alleles that could arise and enter the gene pool. But detrimental alleles are eliminated from the gene pool, so they can arise and re-enter it over and over again. (And alleles that are detrimental in one environment may be beneficial years later when a population faces a different environment or has evolved in other ways.)

Expanding populations acquire alleles (because there are more people in whom mutations can occur) and contracting populations lose them (because people who have unique alleles, even if they are not detrimental alleles, die without progeny) – an example is the loss of alleles that occurred in Eurasians after vast numbers died during ice ages. Barring such disasters, an allele that increases reproductive success is unlikely to be lost. Indeed, if an allele is widely expressed in a population, one can safely conclude that the allele has increased the reproductive success of that population in its present environment. However, an allele that, for some period of time, has been only sparsely expressed either does not increase reproductive success or increases it only when it is sparsely expressed and is detrimental when it becomes widespread.

Because populations can gain and lose alleles, and alleles that are advantageous in one environment can be detrimental in a different environment, determining descent by studying the alleles of different populations can be tricky. Suppose population A has a large number of alleles, such as an average of 20 alleles per gene, while population B has only a few alleles per gene, perhaps an average of only 5, and those 5 are also in population A. Does that mean that population A is older? Not necessarily, because population A may have acquired many of those alleles by interbreeding with other populations, not by mutations occurring over a longer period of time. Also, population B may be older, but may have suffered a catastrophic drop in its numbers, wiping out most of the alleles it had accumulated.

Similarly, if population A has old alleles that population B lacks, it is not possible to conclude that population B descended from population A and lost the old alleles. Population A may have old alleles simply because it has stayed in the same, fairly constant, environment

and has not evolved as much as population B, which has moved to a very different environment. Also, the old alleles may have entered population A because members of population A interbred with population C, which had the old alleles.

All DNA in every plant and every animal has the same basic structure. (See Appendix). In all animals with a nucleus ("eukaryotes," e.g., every living thing other than bacteria, bluegreen algae, and viruses), there are two kinds of DNA in its cells – the DNA in the nucleus ("nuclear DNA") and the DNA in mitochondria ("mitochondrial DNA" or "mtDNA"). ⁷ Mitochondria, remnants of bacteria that were captured by cells over three billion years ago, provide energy for the cell. The captured bacteria helped the cells survive and that is why their DNA is still there. Later, some of that mtDNA moved into the nucleus and became nuclear DNA. ⁸

There are some dramatic differences between nuclear DNA and mtDNA. Nuclear DNA is in the form of a double helix, a twisted ladder whose rungs are an A base on one side weakly bound to a T base on the other side, or a C base weakly bound to a G base. One strand is the "sense" strand that is read to make a polypeptide and the other strand is the "antisense" strand that is a complementary backup copy. Nuclear DNA is a two-strand string with two ends; mtDNA is a one-strand (usually) ring (a "plasmid") with no ends, except that when it is being read the ring opens. In each cell, there are only two copies of each strand of nuclear DNA, one from the mother and one from the father; ⁹ there are usually thousands of copies of mtDNA in each cell, almost always only from the mother. ¹⁰ There are over 3 billion base pairs (i.e., A, C, G, or T) ¹¹ in 20,488 genes in nuclear DNA, but only 16,569 base pairs in 37 genes in mtDNA. Nuclear DNA is located in 23 pairs of chromosomes; mtDNA has no chromosomes. Nuclear DNA has a number of DNA repair molecules ¹² that move along it and correct errors: mtDNA has no way to correct errors, so errors accumulate at about 20 times the rate for nuclear DNA. (Sykes, 2001, p. 55). Nuclear DNA mutates at the rate of once per billion cell divisions; mtDNA mutates about 10 times as fast as nuclear DNA. (Patterson, 1999, p. 152). Nuclear DNA comes in two types - exons, DNA that codes for polypeptides ("genes"), and introns ("junk DNA") – DNA that does not code for polypeptides: ¹³ mtDNA has no introns and it codes for RNA as well as for proteins. (RNA is the same as DNA but "U"s replace the "T"s and ribose replaces deoxyribose - see Appendix.) Almost all racial traits are coded for in nuclear DNA; mtDNA only rarely has an effect on racial traits, e.g., respiration at high altitudes and during long distance running and metabolic advantages in the Arctic.

A major difference for the purpose of deciphering human origins, however, is that mtDNA is in the sperm's tail and nuclear DNA is in its head. What does that have to do with human origins, you ask? Well, during fertilization, only the head of the sperm normally enters the egg (Schwartz, 2005, p. 194) and any sperm mtDNA that slips in is tagged and destroyed; therefore, the father's mtDNA does not normally contribute to the genome of the fertilized egg. ¹⁴ (Occasionally, some of the father's mtDNA slips by (Schwartz, 2002), thereby giving the fertilized egg both the mother's mtDNA and the father's mtDNA, confusing the geneticists. ¹⁵) This means that a person's mtDNA, whether that person is male or female, is (almost always) inherited only from the mother. Your mtDNA, even if you are male, came from your mother, hers from her mother, and so on.

But there is some DNA that comes only from the father. Normally, the father and the mother each contribute half of their child's chromosomes. Females have a pair of X chromosomes (XX), so the mother can contribute only an X to her child. Males have an X chromosome and a Y chromosome (XY). If the father contributes an X, the child will have two X chromosomes and will be female (XX). If he contributes a Y, the child will have an X and a Y chromosome and will be male (XY). Thus, (almost always ¹⁶) Y chromosomes are inherited

only from fathers and are inherited only by sons. This means that the DNA in the Y chromosome of a male alive today came from his father, who got it from his father, and so on all the way back.

This information is useful in forensics, since a person's mtDNA will be the same as his mother's and her other children, and a man will have the same Y chromosomal DNA as his father and his father's other sons, but it is also useful in paleoanthropology, as we shall see.

Chapter 4

Table of Contents

FOOTNOTES

1. Because polypeptides can be assembled different ways, humans have over 500,000 proteins but only 20,488 genes, though more genes may be found. Exons are only 1.5% of the human genome. (Carroll, S.B., "<u>Regulating Evolution</u>," *Scientific American*, May, 2008). <u>Back</u>

2. There may be a few exceptions. (Miller, 2006; also see gene APOE). Back

3. Epigenetics is an exciting new science with much promise of important discoveries. (Watters, 2006, p. 33; Cropley, 2006). Back

4. (Fraga, 2005). The number of copies of an allele may differ in identical twins. (Bruder, 2008). Back

5. See the <u>Appendix</u> for an explanation. Until recently, it was assumed that synonymous alleles produced exactly the same biological product. Although they do produce the same string of polypeptides, it has been found that they can cause the resulting protein to have different shapes. (Soares, C. "<u>Codon Spell Check</u>," *Scientific American*, May, 2007). <u>Back</u>

6. Because reproductive success is a *sine qua non* for all life, with large numbers of individuals over long time periods, reproductive success determines even the finest details of a species' traits. (<u>Miller, 2007</u>). <u>Back</u>

7. DNA is also found in the chloroplasts of plants. Inherited RNA is found in centrosomes, which oversee cell division. (<u>Alliegro, 2006</u>; *Wikipedia*, <u>Extranuclear Inheritance</u>). <u>Back</u>

8. Some other parts of cells (e.g., cilia, flagella, and centrioles) are also believed to be the remnants of captured microbes. (Patterson, 1999, pp. 133-134). In addition to the incorporation of microbe DNA into our own DNA, we have 10 times as many microbial cells in our body as our own cells. <u>Back</u>

9. One parent may contribute more copies of a gene than the other, resulting in greater genetic differences between people, including racial differences. (<u>Redon, 2006</u>). <u>Back</u>

10. The last two sentences explain why it is much easier to find mtDNA than nuclear DNA in fossils. Bones and teeth are made of a hard, calcium-based mineral, hydroxyapatite, that helps preserve DNA by keeping out bacteria and fungi. Although strongly acidic soil can kill the microbes, acid also attacks both the calcium and DNA; heat and temperature fluctuations also destroy DNA. (Sykes, 2001, pp. 171-172). Back

11. That may seem like a huge number, but the single-celled amoeba, *Amoeba dubia*, has over 670 billion base pairs. (*Wikipedia*, "<u>Gene</u>"). <u>Back</u>

12. An example is the UDG ("uracil DNA glycosylase") enzyme, which latches on to DNA blocks that are the wrong size. (<u>Parker, 2007</u>). (*Wikipedia* "<u>DNA Repair</u>"). <u>Back</u>

13. Genes account for only 1.2% of our genome's three billion base pairs. (<u>Birney, 2007</u>). Junk DNA can regulate the expression of a gene, e.g., how exons are spliced and folded to make them active. Humans have more junk DNA than other vertebrates. <u>Back</u>

14. Also, the human egg has about 250,000 mitochondria, while the sperm has only a few, just enough to create the energy needed to swim the last few millimeters to the egg. (Sykes, 2001, p. 54). Back

15. Even more confusing, it has just been found that, at least in mice, RNA in the sperm can also enter the egg and affect traits. (<u>Rassoulzadegan, 2006</u>). A similar phenomenon may occur with crosses between wild Mallards and White Pekin ducks, where the color of the duckling is determined by which species lays the egg. <u>Back</u>

16. A female may occasionally have an XY (androgen insensitivity syndrome, "AIS") or three sex chromosomes, an XXY. Thus, if the female gives her male child a Y chromosome and the normal (XY) father gives the male child an X chromosome, then the assumption that the Y came from the father will be false. (A male could also have three sex chromosomes, an YYX, or extremely rarely, even an XX, but that is not important here.) <u>Back</u>

Chapter 4 - Evolution

"Nothing in biology makes sense except in the light of evolution." Geneticist Theodosius Dobzhansky

Although about half of all Americans ¹ and Britons do not believe in evolution and, in particular, that man and the great apes living today evolved from an ape common ancestor who probably lived between about 4.5 and 8 mya, ² all of the scientific theories of the origin of man postulate that beginning. It is not the purpose of this book to dispute Creationism or Intelligent Design, but simply to present evolution as scientists understand it.

Since that epic separation, the human and ape lineages have diverged genetically, culturally, and intellectually to such an extent that the chasm between us has grown so vast that one could question whether we were ever once the same species. But we were. There are about 3 billion genetic units (base pairs) in the genetic blueprints for chimps and for man and, when they are matched up, only 40 million of them are different. We are therefore genetically 1.3% "not-chimpanzee," but 98.7% "chimpanzee," ³ and men and women differ by more than that. ⁴ Small genetic differences in genetic blueprints (the "genotype"), however, can result in huge differences in the traits (the "phenotype") of living creatures made using those blueprints, as we shall see. ⁵

Biologists apply the word "evolution" to two different questions: (1) "Have species changed over time?" and (2) "If they have changed, what caused them to change?" The first question is a question of fact. There is so much evidence that species <u>have</u> changed over time, that scientists say the answer to that question is "Yes, evolution has occurred," without any doubt. ⁶ The second question asks for an explanation, a theory that describes the mechanisms that caused those changes. The only theory that scientists believe is valid, however, is Darwin's theory of evolution, which is today called "neo-Darwinism" because it is confirmed and supported by genetics.

As the Creationists love to point out, theories can always be disproved, and certainly neo-Darwinism can be disproved. Indeed, there are all kinds of potential evidence that could refute neo-Darwinism, e.g., dinosaur bones that are only a few thousand years old or fossils organisms in an older rock stratum than their progenitors. But, so far, there is <u>no</u> evidence that refutes the theory and mountains of evidence that is consistent with it.

Darwin's theory can be expressed as a syllogism:

Premises: If an individuals in a population have traits that

(1) are heritable;

(2) and are different;

(3) and result in a difference in reproductive success between individuals who have them and individuals who do not have them, then:

Conclusion: the frequency of the traits that result in greater reproductive success will increase in that population.

There are only two ways that the syllogism can be "wrong": (1) by showing that it is not relevant because the premises do not apply to a particular population, i.e., in that population all individuals have the same traits or, if their traits are different, the traits are not heritable or, if they are different and heritable, possessing them does not result in differences in reproductive success, or (2) by showing that the conclusion does not follow from the premises. But, given that individuals in a population have such traits, which all populations do, except possibly laboratory organisms (e.g., clones, and animals with medical conditions), the conclusion must

follow. ⁷

Traits that increase reproductive success pass on the alleles that code for those traits. Reproductive success alone determines whose lineage continues and whose becomes extinct.

Note that the syllogism requires a population from which individuals who have heritable traits that differ in their contribution to reproductive success can be selected, ⁸ which means that evolution cannot occur if all the individuals in the population have the same heritable traits. ⁹ In other words genetic equality, egalitarianism, makes evolution impossible. And, without the possibility of evolving, a species can only go extinct when its environment changes, as it inevitably does.

Generalized Versus Specialized

In this book, generalized and specialized survival strategies play a critical role in deciphering human evolution. A species, individual, or portion of an individual is more generalized if it can perform more functions, and is more specialized if it is limited to a smaller number of functions. A species is more specialized if it has evolved the anatomy (and/or physiology) needed to better exploit a particular niche, e.g., a food source, territory, or reproductive strategy.

A generalist is an opportunist, ready to exploit any niche that it happens upon before the specialists find it. Raccoons, rats, and cockroaches are generalized species; the koala eats only eucalyptus leaves and many parasites live off only a single host species, so they are specialized.

Humans, omnivores eating a variety of plants and animals and living everywhere on the planet, including under the water, in the air, at the poles, and even in spaceships and on the moon, are by far the most generalized species. Our feet, however, have become specialized, since they have lost the ability to



grasp things (though I have an ex wife who picks things up with her big toe), but are excellent for bipedal walking, unlike the feet of the great apes, which can also grasp branches, but are poorly constructed for bipedal walking.(Fig. 4-1). ¹⁰

The human hand, however, is so generalized that it can thread a needle, swing a bat, or play a piano concerto. Compare your hands to the specialized hands of the baby aye-aye in Figure 4-2. Aye-ayes, an early primate, stick the middle finger of their hand into termite mounds, then withdraw it and eat the disgusting termites clinging to it. 11

Like so much else in biology, there are tradeoffs between generalizing and specializing. A generalized species is like a Swiss army knife - it can do a lot of things, but none of them as well as a tool made to do just one thing. A species that is anatomically more generalized less is vulnerable to changes in its environment because it can

function in a variety of Specialized environments. species, on the other hand, can exploit a particular environment to the fullest, but when that environment goes, it goes with it. Should a disease kill off the termites. the ave-ave in Figure 4-2 will be hampered by his long, weak fingers. A specialized species bets all its resources on one niche; a generalized diversifies species its investments.

Humans are not exempt from the same tradeoffs that other animals face – we, too, could not be both specialized and



Figure 4-2

generalized and, for the most part, we stayed generalized. But unlike all other animals, we discovered a way to nevertheless become much more effective at performing almost any task. We lack the anatomy (and physiology) for running as fast as a cheetah, swimming as efficiently as a dolphin, jumping as high as a grasshopper, or flying as acrobatically as a hummingbird, but we can nevertheless out-perform almost any animal at almost any task by means of our technology – we are anatomically generalized, but can be technologically highly specialized. Perhaps counterintuitively, the more adept we become at using technology to enhance our natural abilities, the more "human" we become, as that is a major difference between us and all other species. And, unlike anatomically more specialized animals, our technological specializations have made us less vulnerable to extinction when our environment changes.

Rules of Evolution

Unraveling the story of man's evolution is like trying to put together a thousand piece puzzle with only 10 of the pieces. But because certain rules apply as to where the pieces can or cannot be placed, it is still possible to position them, by their straight edges and colors, even when there are no contiguous pieces. Similarly, there are rules that constrain evolution, including the evolution of man.

Évolution, because it occurs over great periods of time and large numbers of individuals, is less of a hit-and-miss or random process ("genetic drift") than it is usually portrayed. ¹² Accidents and good and bad luck do happen, of course, but as the amount of time and the number of individuals increase, their importance diminishes. The result is that evolution follows rules as logical as the evolution syllogism itself, not in every instance, of course, but often enough that the rules can usually be relied upon. Here are few rules that will be used to explain the evolution of humans:

(1) Evolution is cumulative. The genome of a population, altered by mutations, deaths, and individual differences in reproductive success, is passed on to the next generation, where it is then subjected to additional changes, and so on. (Barkow, 1991, p. 83). Thus, evolution proceeds by changing what is already there; evolution is not God and does not, and cannot, re-design species from scratch. If the environment changes, individuals can evolve only by changing what they already have; if that cannot be done to meet the demands of a new

environment, they go extinct. For that reason, genomes will more and more come to resemble Rube Goldberg inventions rather than masterpieces of intelligent design. That is one reason why biochemistry is so complicated.

MacLean's triune theory of the human brain is a good example of the additive nature of evolution. To a 500 million year old reptilian brain (midbrain – the interior of the cerebellum), was added the 200 million year old limbic system of lower mammals (amygdala, and hippocampus), then the 500 thousand year old neocortex (outer portion of cerebrum) of higher mammals. (Fig. 4-3), ¹³

Another good example of this rule is the <u>Biogenetic Law</u>, originally stated as "ontogeny [fetal stages] recapitulates [repeats] phylogeny [evolutionary stages]," but more accurately stated as "fetal stages repeat evolutionary fetal stages." ¹⁴ In other words, later fetal stages are the result of adding additional stages to earlier fetal stages.



Figure 4-3

The additive nature of evolution implies that organisms will almost always become more complex, and that is indeed the case. (Adamowicz, 2008). It also implies that organisms at <u>each</u> step of the way must have traits that enable them to be reproductively successful. In other words A cannot evolve into B unless organisms at all the stages in between A and B survive and reproduce. ¹⁵ It also means, to paraphrase the "Law of Storage," that useless genetic material accumulates to fill space in the genome and is cleaned out only when those who have it die without issue; no icon has been discovered in the genome that is labeled "Empty Spam Folder."

(2) Addition is easier than subtraction. Like a government bureaucracy, the evolution of new traits is more likely to occur by adding alleles, copies, and regulations to an existing genome than by removing them. A new trait can arise either when a new allele is expressed, copied, or gene regulators change the expression of alleles. If the new trait increases reproductive success, it spreads through the population.

Losing a trait, on the other hand, implies that a trait that was an asset has become a liability, i.e., the niche made more exploitable by having that trait has disappeared. Fish that get trapped in a cave can no longer exploit a sun-lit niche, so eyes become an unnecessary cost and fish that invest fewer resources in their eyes now have the advantage; eventually cave fish become blind.

New traits arise by tinkering with an organism's alleles, e.g., a DNA mutation or adjusting regulators bit by bit, with each tiny change usually making only a small improvement, if any. But getting rid of that trait means undoing all that tinkering and each step back must also make a small improvement in order to be selected, and it may not. Turning off a key allele may end the trait it coded for, but other alleles and regulators probably changed and were selected because they facilitated the expression of the key allele, and they will be left unchanged, perhaps producing unnecessary, and now deleterious, polypeptides.

When a daughter population splits from its parent population to exploits a new niche it will usually acquire new traits that facilitates that exploitation of that new niche. Meanwhile, the parent population does not acquire those new traits, but instead acquires other traits useful in the old niche that the daughter population does not acquire. If the new niche disappears, the new traits become liabilities and the daughter population cannot successfully compete with its parent population in the old niche. Once a fish becomes a land-walker, it cannot again become the fish it evolved from if the land disappears.

(3) Generalized \rightarrow specialized \rightarrow extinction. Generalized populations tend to evolve into specialized populations, not the reverse. ¹⁶ A population becomes more specialized if its traits evolve anatomically (or physiologically) to better perform a function they already perform. Thus, specialization requires changing what is already present, not returning to a previous state and, by Rule 2, it is easier to add an allele or the regulation of an allele, which could produce a new phenotype (the expression of a gene), than it is to lose or change the regulation of an allele to re-acquire a previous phenotype. ¹⁷ This rule implies that evolution goes mostly in one direction and ends in extinction when the environment changes and the specializations become liabilities. While specialized populations can evolve from specialized populations, the dominant generalized-to-specialized directionality of evolution suggests that generalized populations will be the source of most evolutionary changes.

If the environment changes, and it always does sooner or later, one of the many functions that the traits of a generalized species can perform, but the specialized species cannot perform as well, is likely to be useful in the new environment; the specialized species, however, is stuck with traits that enable it to perform only one or a few functions well. If the niche the species became specialized to exploit becomes less available, the species can become more generalized only by becoming less efficient at exploiting that niche, which only brings about its extinction sooner.

There are several ways a population can avoid this rule and become more generalized. A fetus has less structure than an adult so, if the adults in a species retain their juvenile traits ("neoteny," <u>Chapter 6</u>), the species can become more generalized. ¹⁸ Neoteny played an important role in making man more generalized and thereby more capable of migrating out of the warmer climates. Also, a population could acquire more generalized traits by interbreeding with a more generalized population, thereby becoming more generalized than one of its parent populations.

A specialized species can become more generalized by partially changing its behavior and use its existing structure for a different purpose ("exaptation"), e.g., a fish can walk on its fins and still use them to swim, and evolve to walk better on its fins while still retaining the usefulness of the fins for swimming, though it will do neither as well as a fish that can only walk or only swim.

Similarly, a portion of an existing structure may remain unchanged, performing its usual function, while another portion of the same structure evolves to perform a different function, e.g., a retina that has only rods for seeing in black and white retains some of those rods while other rods evolve into cones that see in color. Fewer rods mean less definition in black and white, but that was the price for seeing in color; now the retina is more generalized than it was initially. ¹⁹

(4) Specialized populations evolve in a stable environment; generalized populations evolve in a changing environment. If the environment is stable, then a population that specializes to exploit a niche in that environment has an advantage over a population that remains more generalized, at least as to that niche, because individuals will be selected for traits that make the exploitation of that niche more efficient. The individuals in any population will vary in their degree of specialization and a plot of degree of specialization versus number of individuals will approximate a normal curve. The average of that curve will be higher for a more specialized population and its standard deviation will be less (Rule 5).

The longer an environment is stable (and the more time populations have had to evolve towards equilibrium, Rule 10), the greater will be the ratio of specialized populations to generalized populations in that environment. Conversely, in a changing environment, e.g., a seasonal climate, generalized species will be more likely to evolve. (*New Scientist*, Apr. 21,

2007, p. 21). Since tropical and polar climates are more stable than seasonal climates, populations that live in the tropics and at the poles will be more specialized than populations that live in a seasonal climate. 20 A species whose territory encompasses both a changing environment and a stable environment may split, with the more generalized individuals living in the changing environment and the more specialized individuals living in the stable environment, so that two species evolve.

In accordance with Rule 3, it is more likely that a generalized population will evolve from another generalized population in a temperate zone than that a specialized population will evolve into generalized population in the tropics or in a polar region, then migrate into a temperate zone and become generalized; and the greater the evolutionary change is, the truer that statement is.

(5) Specialized populations have less genetic variation than generalized populations. Individuals who deviate from the most efficient traits in a specialized population are more likely to be selected against than individuals who deviate from the most efficient traits in a generalized population because the specialized population lives in a more stable and less variable environment (Rule 4). ²¹ Thus, the evolution of a more generalized species, such as man, is more likely to occur in a more variable temperate zone than in the tropics. Although humans are often described as a tropical species because, for example, they sweat to keep cool and cannot survive (naked) in cold weather, the fact that they are so generalized compared to other species suggests that although their lineage began in a warm climate, they either were generalized or became more generalized at some stage in their evolution. ²²

(6) Specialized populations evolve less and more slowly than generalized populations. Since a specialized population has less genetic variation than a generalized population (Rule 5), there are fewer alleles and traits that can be selected. Thus, when the environment changes, a specialized population cannot evolve quickly through the selection of alleles that are already present in its gene pool, but must wait until mutations occur. As a result, populations will change more slowly in a stable environment, though a stable environment may still end up with more species (Rule 8). ²³ Since man is a relatively generalized species, and generalized species are more likely to arise in a changing climate (Rule 4), man is more likely to have evolved, at least in his later stages, in a temperate zone, not in the tropics. This is especially true of Caucasians, who are more generalized than Africans and Asians.

(7) Specialization increases carrying capacity. The carrying capacity (maximum possible biomass or numbers) in a stable environment is greater when populations specialize to exploit slightly different niches, because specialized individuals are more efficient at extracting useable energy; a more generalized population is less efficient at exploiting a niche in a stable environment. Thus, by specializing, a population can increase its numbers and therefore the rate at which mutations enter the population, which may enable it to evolve faster.

Here, a caveat is needed. Man, unlike almost all other forms of life, can specialize by using technology instead of by evolving (except the extent needed to create and use the technology). Thus, by creating technology to perform special tasks instead of evolving specialized traits to perform them, e.g., building a sailboat or an airplane instead of evolving flippers or wings, he can increase the carrying capacity of his territory even though he physically remains generalized. Although there is a physical limit to the amount of useful energy that can be extracted from a territory, the carrying capacity of a territory will increase as evolves the traits needed to create and use it; the carrying capacity of a given territory will then depend upon the population living there, and will be greater for some populations than for others.

(8) More useable energy \rightarrow more biomass and more species. The greater the amount of energy available for life per unit area (or volume), the greater will be the biomass ²⁴ and (usually) the number of species in that area. ²⁵ There is a minimum number of individuals needed to sustain a population (175 to 475 individuals for modern hunter-gatherers; Hoffecker, 2002, p. 10) and, when more individuals can live in the same territory, more populations having that minimum number are possible and, if niches are different so that specialization can occur, those populations will evolve into more species. The tropics receive the most energy as sunlight, so the tropics have the most biomass and, because the tropics are more stable, the greatest number of species (again, per unit area or volume). Although specialization, which evolves in a stable environment (Rule 4), increases the population size of a species by extracting more energy (Rule 7), that effect may be overwhelmed by the splitting of populations into more species tends to be greater than the number within tropical species, probably because they are less concentrated (i.e., their numbers are less per unit area) and they spend less time in any one niche because they migrate more, and therefore specialization is less selected.

Note that Rules 7 and 8 somewhat mitigate against Rule 6. That is, specialization reduces evolution due to less variation (Rule 6), but increased carrying capacity (Rule 7) and more useable energy (Rule 8) increase variation, due to the extraction of more energy and the availability of more energy, respectively, and all three are more likely in a stable environment, e.g., the tropics.

(9) More biomass \rightarrow a more "r" reproductive strategy. A population that lives in the tropics has more offspring and cares for them less (a more "r" reproductive strategy, Chap. 11) than a population of the same species that lives in a colder climate. The reason is that, due to greater energy and biomass per unit area in the tropics, less care is required in order to raise the young to maturity, so individuals who expend their resources having more offspring with less care on each have greater reproductive success than individuals who expend their resources on extra care for fewer offspring. This would suggest, for example, that mammoth calves received more parental resources than elephant calves, though both receive lots of care compared to other species.

(10) A trait evolves until it reaches its optimum, and a population evolves until it reaches equilibrium. The amount of each trait a population has gradually (i.e., asymptotically, because, on average, the additional benefit from each succeeding genetic change decreases) optimizes for that population in that environment. ²⁶ Of course, as a population evolves or its environment changes, the optimums for its traits can also change. All the traits an individual has must work together to ensure its reproductive success, and too much or too little of any one trait will reduce its reproductive success, i.e., plotting reproductive success against amount of a trait will produce a bell-shaped curve. A change in one trait has subtle effects on other traits, as the change may free up or use up resources needed for other traits, facilitate or interfere with reactions, etc. (That is another reason why biochemistry is so complicated.) Thus, the optimum for each trait will change as other traits move towards their optimums; when each trait in each individual is at its optimum, the population is in equilibrium with that environment, a condition that will hardly ever exist.

A first important corollary is that the farther a species is away from its optimum, the faster it evolves or the sooner it goes extinct. This is, of course, an approximation as the desperate need for a genetic change does not produce one, but it does spread it around much faster. This corollary suggests that the magnitude of the gap between the traits a species' genome codes for before the environmental change and the amount the genome must change is achieve equilibrium once again will be somewhat proportional to the rate at which the species

evolves. Thus, after an environmental change, evolution will be rapid, then will gradually slow down as equilibrium is approached.

A second important corollary is that the amount of a trait that a population has, especially if the environment has been the same for a long time (stable or constantly seasonal), is likely to be close to optimum for that population in that environment.²⁷

(11) The origin of a trait is where it is found. Unless a population has migrated away from the source of a trait, ²⁸ that trait is most likely to have originated in the population that has the highest percentage of it. Over time, the same mutation may occur in individuals living in many different territories, but it is likely to become established only in that territory where it confers a significant reproductive advantage, e.g., if traits adaptive in the tropics arise in the Eskimos, they simply disappear. Interbreeding can, and does, transfer traits, but a population is more likely to acquire a trait by mutation than by interbreeding. ²⁹

(12) Behavior changes before the genome changes. Behavior changes to take advantage of changes in the environment, then individuals who have or acquire the traits that best facilitate that behavior have more reproductive success and the genome changes. <u>First</u>, apes struggled to walk on two feet, <u>then</u> they evolved to walk more facilely. ³⁰

Since reproductive success occurs only when an individual acquires resources and breeds, ³¹ evolution is driven by changes in the environment and changes in the behavior of individuals in response to those environmental changes. Similarly, individuals can change their behavior to better acquire resources and more and better mates then, if those individuals are more reproductively successful, a sub-set of them who have the anatomy and physiology that best facilitates the new behavior will be selected.

(13) Time and population size increases the genetic variability of a population and disasters decrease it. Because mutations occur constantly, the longer a species is around, the more variation, i.e., non-lethal new alleles, it accumulates. Also, populations tend to increase their numbers with time and the larger a population is, the greater is the number of mutations that occur and accumulate.

On the other hand, disasters, e.g., accidents, disease, predators, bad luck, etc., remove alleles from the gene pool and reduce variation. Thus, a population with less variability may actually be older, if disasters have reduced its numbers.

(14) The longer a population has not interbred with other populations, the more homozygous (inbred) it becomes and the percentage of its alleles that are recessive increases. The more closely two persons are related, the more alleles they share, so the likelihood that they each have a copy of a recessive allele increases with relatedness. Thus, increased inbreeding increases the expression of recessive alleles, whether the recessive alleles are advantageous, disadvantageous, or neutral. If they are advantageous, they spread throughout the population. If they are disadvantageous, they are lost when the individual in whom they are expressed dies before he can breed. Thus, the longer a population has been isolated, the more it will be free of disadvantageous recessive alleles and the greater will be the percentage of its expressed alleles that are recessive; also, the percentage of those expressed recessive alleles that are recessive; also, the percentage of those expressed that are recessive; also, the percentage of those expressed that are recessive; also, the percentage of those expressed recessive alleles that are advantageous or neutral, and not disadvantageous, will be greater. (See Chap. 30). As a corollary, the greater the percentage of a population's expressed genes that are recessive, the longer a population has been isolated. (And Caucasians may win the prize for having the most expressed recessive alleles.)

Note that Rules (13) and (14) work against each other in isolated populations. Over time, mutations occur and an isolated population picks up and retains alleles that do not reduce

its reproductive success, adding to the variability of the population (Rule 13). On the other hand, the longer a population is isolated, the more likely it is that less advantageous alleles will be lost; even beneficial alleles will be lost if still more beneficial alleles arise (Rule 14). The net result of these two effects is that any increase in variation due to Rule (13) will not be random, but will be an increase in beneficial alleles.

There are (at least) six ways that the genome of individuals in a population can be altered (i.e., so that the genome of their descendants is different than it otherwise would have been): mutation, epigenetics, isolation, hybridization, recombination, and selection, but nature has made only one of them fun.

<u>Mutation</u>

Populations change genetically when their DNA changes. A <u>heritable</u> change occurs only if the DNA in a germline cell (an egg or sperm, or a cell that makes eggs or sperm) changes. ³² Genetic material in sperm and eggs can be changed by, e.g., cosmic rays, high temperatures, misreading the DNA code when sperm and eggs are made, and mutagens, such as certain pollutants.

It has recently been discovered that non-coding nuclear DNA ("junk" DNA), which can itself be mutated, can become coding DNA, thus changing the traits of the next generation if it occurs in a germline cell. ³³ Additionally, DNA can be altered when a germline cell is invaded by a virus or bacteria and its genetic material is incorporated into the nuclear DNA of that cell. The occasional movement of sections of DNA within a gene, or even between genes, also alters the DNA code. (Patterson, 1999, Chap. 6). The DNA code can also be changed if germline DNA is duplicated not once, but multiple times; it has been estimated that at least 12% of the human genome (about 20,500 genes) differs in the number of copies that people have. (Redon, 2006).

Over time, DNA that is least vital accumulates the most mutations, as one would expect. This includes some non-coding DNA ("introns"), ³⁴ genes that have been silenced ("pseudogenes"), and often DNA that codes for the same amino acid ("synonymous DNA").

Epigenetics

Since access to the DNA blueprint is controlled by means of gene regulators, if the environment changes the regulators in germ cells ("epigenetic changes"), those changes can be passed on the next generation (*Wikipedia*, "Epigenetics"), ³⁵ though most are not and epigenetic changes may be lost after a few generations. Regulators determine whether or not DNA is read, what portion of a string of DNA is read, when it is read, how many times it is read, and which sections are spliced together to be read. ³⁶ There are quite a few gene regulators and more are being discovered all the time. Best known are the histones, the proteins that entwine the DNA strands in chromosomes and uncoil to permit DNA to be read. Various chemical groups, such as methyl, phosphate, and acetyl, can be attached to a DNA strand to prevent it from being read. When DNA is being copied, the number of copies made is regulated and differences in copy number can affect susceptibility to disease as well as racial differences.

Gene regulators are inherited along with the DNA they are attached to. ³⁷ Regulators are estimated to evolve about 10 times as fast as DNA, so most evolution results from changes in the regulators rather than from changes in DNA itself, ³⁸ though changes in DNA are more fundamental. Changes in the regulators occur more easily because there are no error repair mechanisms for regulators, as there are for DNA, and environmental influences change regulators more readily than they change DNA. ³⁹

The gene regulators of the races are likely to differ by a far greater percentage than the DNA of the races. However, this is a new area, and the study of racial differences in gene regulators is still in its infancy.

Isolation

Isolation changes the genome of populations by increasing inbreeding (Rule 14), which makes it easier for advantageous, but rare, combinations of alleles, especially recessive alleles, to spread through a population when they arise. Since inbreeding enhances the likelihood that an individual will inherit two copies of the same allele, inbreeding can also more quickly eliminate from the gene pool alleles that code for traits that are lethal prior to maturity or that otherwise impair reproductive success. Isolation requires only no interbreeding, not physical separation. People on different Melanesian islands have become genetically different because, despite the closeness of their islands, they were reproductively isolated from each other. (Friedlaender, 2007).

Hybridization

Hybridization occurs whenever (genetically different) populations interbred. After a population has become isolated from its parent population and genetically different from it, its males, females, or both can interbreed with another population, even its parent population, thereby infusing different alleles into the resulting hybrid population. This can occur when an isolated population simply increases in numbers and expands into the territory of another population or is driven there by climate changes or other factors. Caucasian men were explorers and typically bred with women in the other lands they went to. Africans captured as slaves were brought to other territories in Africa, as well as to India, the Middle East, southern Europe, and the Americas, ⁴⁰ where they interbred with the populations already there. Early man lived in groups of about 150 people (Arsuaga, 2001, p. 295) and the males in these groups would raid the territory of other groups, killing off the males and taking the women, ⁴¹ thus hybridizing their own group.

The individuals in the hybrid population will have various combinations of the alleles they received from the two parent populations, with some individuals being better adapted, and others worse adapted, than either parent population. If there is natural selection of the hybrid population (there is little natural selection in the welfare state, where even the poorly adapted can survive and reproduce), the best adapted hybrid individuals form a new population. This is called "adaptive introgression" because new alleles are introduced into the two parent populations and the individuals having the most adaptive combination of alleles in the hybrids are more reproductively successful. Chapter 30 covers hybridization in more detail.

Recombination

Sex, which has been enjoyed for 1.2 billion years, ⁴² changes populations genetically in two ways. First, when an egg is made, some of the nuclear DNA in each of a woman's 23 chromosomes that came from her mother (other than the X chromosome) is exchanged with the corresponding nuclear DNA in each of the 23 chromosomes that came from her father. (Ditto for making sperm, except for the Y chromosome.) This means that the DNA in each chromosome is no longer all from the women's father or all from her mother, but contains a mixture of DNA from each of her parents; this is called "crossover."

Each egg and each sperm then receives 23 of these mixed chromosomes, not 23 pairs of unmixed chromosomes, as other cells do. When a sperm fertilizes an egg, its unpaired 23 mixed chromosomes pair up with the egg's corresponding unpaired 23 mixed chromosomes, resulting in 23 pairs once again, a process called "recombination." Because of crossover, the fertilized egg has DNA from each of the 4 grandparents, rather than from only two of them. Recombination and crossover ensure that the mixture of DNA is different, not only between generations, but also between siblings. ⁴³ Sexual reproduction scrambles alleles so much that everyone except identical twins and clones has a different DNA blueprint, and very likely a

unique combination of traits. If the new mixture results in greater reproductive success, the population changes genetically with each birth. ⁴⁴

Why did this elaborate scheme to mix up DNA, and thereby make siblings genetically different, evolve? Because it avoids putting all the parents' fertilized eggs in one basket. If all their offspring were genetically identical they would all have the same vulnerabilities and none might survive. If the environment changes, e.g., a different climate, different predator, different food source, different parasites, etc., that would be the end of their lineage, but if their progeny are different, some might survive. (Zuk, 2007).

A trait may not be controlled by a single gene, but by the interactions of several different genes. Many traits, including high intelligence, require the presence in a single individual of particular alleles of a number of different genes. (Lykken,1992). Thus, each time alleles are mixed there is a different collection of alleles for that trait, which can result in more or less of the trait or even in an entirely new trait.

Selection

Traits that are helpful in achieving reproductive success are "positively selected" ⁴⁵) or "selected for," ⁴⁶ traits that reduce reproductive success are "negatively selected" or "selected against," and some traits may do neither and be neutral. ⁴⁷ Traits that are positively selected in one population, or in one environment, may be more or less positively selected, or even negatively selected or neutral, in another population or environment. When the sun is almost directly overhead, dark skin is a life saver as it protects the body from receiving too much ultraviolet light but, if there is little sunlight, it prevents the absorption of enough ultraviolet light to make enough foliate and vitamin D. ⁴⁸ As selection works its magic, a population becomes more and more adapted to the environment changed. Thus, over time, selection pushes the individuals towards optimal mixes of alleles and traits for their particular environment (Rule 10). If a costly trait (a trait that requires the expenditure of extra resources, e.g., high intelligence) has been present (or absent) in a population for a considerable time, that trait is very likely an advantage (or disadvantage) for that population in that environment (Rule 10 second corollary).

And, because traits are not "free," but must be "paid for" with the body's resources, more of one trait means less of others, and the others that will be sacrificed are those whose loss reduces reproductive success the least. Some tradeoffs are obvious, e.g., more speed (fast twitch muscles) means less endurance (slow twitch muscles), and other tradeoffs are obscure, e.g., larger testicles means a smaller brain (Note 4 of Table 12-1, p. 90). As in economics, where no voluntary exchange occurs unless both parties believe they will gain from it, so in evolution, sacrificing some of one trait to acquire more of another does not occur unless it increases reproductive success, and trades and tradeoffs will be made until values and reproductive success, respectively, are maximized. More of every desirable trait is not an option.

Nor is it true that it is always better to have more of even the most desirable traits – even for those traits, there is an optimal amount at which reproductive success is maximized. Too much brain and too little brain will both bring less reproductive success than somewhere in between. Nor is the optimal amount of a trait the same in every environment. A small brain may be optimal when one is living in technologically simple times, but may not be optimal once the technology becomes complex.

Traits need not become more and more complex – they can become simpler and simpler, as a bird, such as the ostrich, that still has wings, but can no longer fly or a snake that still has (vestigial) legs, but can no longer walk. Traits are "lost" when they are no longer positively selected – individuals who lack them reproduce at least as successfully as those who

have them – the traits are no longer "reproductively profitable," i.e., they contribute less to reproductive success than do other traits that could be "bought" with those resources.

Nietzsche said, "That which does not kill me makes me stronger." That may or may not be true, but evolution's version, "Selection that does not kill off an entire population, accelerates its evolution," is true. And the greater the number of individuals that don't reproduce, the faster the population will evolve (provided at least the minimum number of individuals required to sustain the population are left). ⁴⁹ The more that having a particular trait increases the chances of an individual successfully reproducing (or not having it decreases the chances), the faster that trait will spread through the population (or the faster that trait will disappear). Nature has no soft feelings, no empathy for the weak and helpless, and is not trying to make any particular type of individual. The end product is whatever succeeded in reproducing, regardless of how despicable, degrading, or degenerate we find it to be. Reproduce more than others and you stay in the game; otherwise, you're out. Permanently.

Another way to more rapidly evolve is to increase the rate of "turnover," the replacement of one generation by the next. Aging is a waste of breeding adults and is not a biological necessity as some species live for hundreds or even thousands of years (e.g., bristlecone pines – 5000 yrs). ⁵⁰ But if individuals do not age and die, freeing up territory and resources for the next generation, there will be less turnover and the species will not be able to evolve quickly should its environment change; that problem is avoided if there is a genetic clock that causes individuals to age. ⁵¹

Faster evolution leads to the concept of "selection pressure," an indication of the magnitude of the "gap" between how successful a population is in its environment and how successful it would be if it could evolve a new trait or traits. A population can be said to have been under great selection pressure when, after acquiring a new trait, the number of its members having that trait increases rapidly.

An important consequence of selection pressure is that if an environment is stable and the population has reached, or nearly reached, equilibrium in that environment, it will be under little or no selection pressure and is unlikely to evolve (Rule 10). On the other hand, if the environment changes, the population will be farther away from equilibrium and will be more likely to evolve. Compared to a population that stays put, a population that moves from one climate zone to another, as man's predecessors did when they migrated north (Section IV), enters a new environment and faces stronger selection pressures, which accelerate its evolution. ⁵²

Selection pressure therefore helps determine where evolution is most likely to occur. Except for occasional drastic changes in the amount of precipitation in Africa, ⁵³ the African and Asian tropics and the Arctic and Antarctic polar regions have a more stable environment than the temperate zones in between, which not only have wide yearly changes in seasons, but have also suffered through several ice ages that lasted thousands of years. As a consequence, selection pressures are greater in the temperate zones, and species, including man's predecessors, were more likely to have evolved there than in the tropics or the polar regions. ⁵⁴

Chapter 5

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FOOTNOTES

1. Only about 40% of US adults accept the basic idea of evolution, lower than any European country and second only to Turkey. (Michigan State University Press Release, Feb. 15, 2007). About half: ("Who Believes in Evolution," *Half Sigma*, Jan. 25, 2008). Back
2. "It is even harder for the average ape to believe that he has descended from man." (H. L. Mencken). A recent article says the split occurred 4.1 mya \pm 400,000 ya. (<u>Hobolth, 2007</u>). <u>Back</u>

3. (<u>Curnoe, 2003</u>) would even classify chimpanzees in the same genus as man, *Homo*. A more recent study, however, found only 86.7% genetic similarity, when indels (insertions/deletions), in addition to substitutions, were counted. (<u>Anzai, 2003</u>). Another recent study showed 96% consistency (<u>Mikkelsen, 2005; Redon, 2006</u>) and the most recent "at least 6%" difference" (<u>Demuth, 2006</u>), when the number of copies of genes are included. Also see (<u>Watanabe, 2004</u>). Chimpanzees are genetically closer to humans than they are to gorillas. www.bonobo.org <u>Back</u>

4. Because the male Y chromosome is much smaller than the X chromosome, men and women differ in their DNA by about 1.5%, but one cannot conclude that men and women are more closely related to chimps than they are to each other. Differences in how strings of DNA are read and assembled have a greater effect than differences in the DNA itself. (Schwartz, 2005, p. 241-242). Back

5. "Genetic blueprint" means any inherited information and "DNA blueprint" means just DNA. Back

6. One can actually watch evolution occurring in a Petri dish as mutant bacteria with favorable traits increase in numbers. (Hittinger, 2007; Griffin, 2004; Losos, 2006; Holmes, B. "Bacteria make major evolutionary shift in the lab," *New Scientist*, June 9, 2008; and Ariza, L.M, "Evolution in a Petri Dish," *Scientific American*," Nov., 2007, for worms.). Particularly convincing evidence for evolution is that way that single-celled organisms can cooperate, suggesting how even the great leap from single-celled to multi-celled organisms, 600 mya, could have been bridged. (Wingreen, 2006). Also see (Herring, 2006) and the behavior of slime molds. (Ardrey, 1966, p. 202; Navas, 2007). Back

7. "In this sense, natural selection is not a scientific theory but a truism, something that is proven to be true, like one of Euclid's theorems." (<u>Patterson, 1999</u>, p. 118). <u>Back</u>

8. "Mutation provides the raw material, but selection will propagate a new mutation only if it is favoured by the environment, and this is most likely in a changed or changing environment." (<u>Patterson, 1999</u>, p. 78). <u>Back</u>

9. Evolution has been aptly described as "blind variation and selective retention." (Campbell, cited in <u>Barkow, 1991</u>, pp. 23, 112). In other words, mindlessly create and try a multitude of different solutions, keep whichever one works and throw the rest away. Evolution can also be applied to ideas. A "meme" (<u>Dawkins, 1976</u>) is an idea that is like a germ, e.g., a cold virus that makes a person sneeze and cough to propagate itself, except that a meme is not a physical thing but an idea that gets into people's minds, then alters their thinking and behavior to make them try to put that idea into the minds of others. The meme evolves because it is modified from time to time, with the more "reproductively successful" memes controlling more minds. Successful religious memes, e.g., Islam, require keeping women subservient and pregnant, justify the forced conversion or death of non-believers (i.e., those not infected with the meme), and make promises of rewards for adhering to the meme and punishment for not doing so, to be redeemed only after death. The free market is also analogous to evolution, with old firms (species) that do not change with the times (evolve) dying (going extinct), releasing their resources (territories, energy sources) to new firms (species), who may grow (achieve

reproductive success), change (evolve) according to selections made by their customers (the environment), while competing with other firms (species) for profits (stores of energy). <u>Back</u>

10. The human foot has only an arch to remind us that it was once good for something other than walking on. (<u>Howells, 1959</u>, p. 94). <u>Back</u>

11. Picture from *National Geographic News*, Apr. 20, 2005. Man, no doubt, would find other uses for such a finger. <u>Back</u>

12. There is probably too much reliance upon genetic drift (random changes) to explain evolution. (Kiontke, 2007). Although mutations cannot be made to occur as needed, they do not occur randomly because some are far more likely to occur than others. And, once they do occur, the number of mutations that are truly neutral (and therefore cannot be selected, but proliferate randomly) is likely to be very small. Only a few mutations have a dramatic effect, and those that appear to have no effect may have such a small effect that it is concealed by "noise," chance events in the environment. A "noiseless" laboratory environment may be required to measure the effect. Even then a great deal of time may be needed before the effect becomes statistically significant. Moreover, in a natural environment there will be infrequent events (e.g., floods, drought) that only then cause selection. There are very few "clean" chemical reactions, where only a single product, and no byproducts, is made; that may be especially true inside a living organism, which would explain why virtually all drugs have side effects. Thus, many seemingly neutral mutations will have subtle effects that are difficult to detect. In math, it is very difficult to generate numbers that are truly random; it is probably even more difficult to generate random or neutral mutations in biology. The egalitarians have exaggerated the role of drift and neutral alleles because those concepts suggest that racial differences are accidental and of little importance, instead of having been selected because they made the difference between reproductive success and failure. Back

13. Illustration from "The Reptilian Brain" by David Icke. Back

14. (<u>Schwartz, 2005</u>, pp. 55-56). A bit of the earlier evolutionary stages can be seen not in the fetus, but in the still-developing infant. "... the newborn infant concords very well with 20 million years ago in the Miocene epoch, when our ancestors were apes of some sort. Newborn infants can often grasp and suspend themselves and even swing enough to suggest brachiation. Their hallux or big toe is often highly movable and the rest of their feet (showing a slope of their curled toes that is virtually tranverse) are apelike." (<u>Swan, 1990</u>). <u>Back</u>

15. It is possible, however, for an organism at a particular stage to do rather poorly, but to still hang on until another mutation occurs that enables it to do better. <u>Back</u>

16. (Howells, 1948, pp. 11-15). Rule 3 is intended to apply to changes in the alleles present in the population's gene pool, not to their frequency. That is, a population will include both individuals who are more generalized and are more specialized than the average for that population and, depending upon which individuals have more reproductive success, the ratio of more generalized to more specialized individuals can change, thereby changing the average amount of specialization in that population without changing any alleles. Back

17. Even with the selection being made by man instead of by nature, it is doubtful that one could breed a (generalized) wolf from a (specialized) Chihuahua in the same amount of time it took to breed a Chihuahua from a wolf. Another reason for the rule may be "environmental heterogeneity." In a seasonally-changing environment, a (specialized) population who has traits

advantageous in only one season may be at a disadvantage relative to a (generalized) population who has traits less advantageous in that season, but more advantageous over the entire year; to become generalized, the specialized population has to acquire the allele(s) of the generalized population but, to become specialized, the generalized population only has to turn off one or more alleles. <u>Back</u>

18. A fetus has some specializations for survival as a baby, e.g., short limbs, subcutaneous fat, epicanthic folds, and round heads, which are lost in Caucasian and African babies when they become adults, but are not lost in East Asians. Thus, neoteny can generalize an adult if the adult remains at a stage <u>after</u> fetal specializations have been lost, but <u>prior to</u> a stage where later specializations were acquired. <u>Back</u>

19. Similarly, a monkey's tail, used for balance, can evolve to become prehensile, becoming heavier and sluggish, and therefore less useful for balance. Going from specialized to generalized may seem similar to going from a more ordered state to a less ordered state, which should occur spontaneously according to the Second Law of Thermodynamics. However, the generalized state is not necessarily less ordered and may actually be more ordered. <u>Back</u>

20. A good example is the bear. The tropical giant panda bear's diet is 99% bamboo shoots, the polar bear eats almost entirely marine mammals and, although the American black bear prefers picnic baskets, it will eat a wide variety of foods. However, although polar regions are stable, they support less life and that may limit the niches for specialized species. <u>Back</u>

21. This is not true of Africans, who have more variation, but that will be explained in subsequent chapters. <u>Back</u>

22. That change is believed to have occurred when man became more neotenic. Man's neoteny can be seen in the loss of primitive features in fossil skulls (Chap. 2), which began slowly with the first Homo species, then gradually accelerated. <u>Back</u>

23. Until recently, biologists have believed that most evolution occurred in the tropics because the tropics had the most species. Now there is support for the idea that not only did man evolve at higher latitudes, so did most other animals. (<u>Weir, 2007</u>). The New Zealand <u>Tuatara</u> is the fastest evolving animal. (<u>Hay, 2008</u>). <u>Back</u>

24. There is more biomass in the tropics (tropical rain forest = 2299 g/m²yr, temperate deciduous forest and grassland = $600 - 1200 \text{ g/m}^2\text{yr.}$; Hoffecker, 2002, p. 6). Back

25. The amount of energy needed to create a new species is 10²³ joules. (*Discover*, Sept., 2006, p. 14). <u>Back</u>

26. There may be multiple optimums for a species, each for a different combination of traits, even in a single environment. Individuals in a species may even have different optimums for a particular trait, depending upon the other traits they possess. There can also be an optimal percentage of individuals in the population that have a trait. Since catching and repairing all DNA errors would not only be very costly, but would also reduce variability, there will even be an optimal amount of DNA repairing, with the optimum being lower in a more variable environment. (Sniegowski, 2000). Back

27. "... any adaptation exists because it increases the reproduction of the genes encoding it,

relative to that of the alleles for alternative characters." (Ridley, 1996, p. 334). Back

28. Some migrants to the Americas were more successful than those they left behind in Asia. (Green in Fig. 21-1). <u>Back</u>

29. Individuals in a population who do not or can not interbreed with individuals in other populations preserve their collection of alleles, which have been selected to work well together in that environment. On the other hand, by not interbreeding they forego the possibility of picking up beneficial alleles that may have arisen in other populations. Thus, even the amount of interbreeding will optimize. But, since beneficial alleles arise rarely, the optimal amount of interbreeding will be low. Back

30. "A bird does not fly because it has wings; it has wings because it flies." (<u>Ardrey, 1966</u>, pp. 7, 9). <u>Back</u>

31. Up to the Industrial Revolution, the rich had more surviving children than the poor, as one would expect. (<u>Clark, 2007</u>). Also see (*Wikipedia*, "<u>Baldwin Effect</u>"). <u>Back</u>

32. (Sykes, 2001, p. 55). Even if a mutation occurs in the DNA of a germline cell that makes an egg or sperm, none of the eggs or sperm produced may be fertilized and produce breeding offspring. And, even if a mutation occurs in the mitochondria of a germline cell that makes an egg, the mutated mtDNA may not be part of the mtDNA that ends up in the egg or, if it does, that egg may not be fertilized. On the other hand, the germline divides 24 times between generations. (id., p. 157), increasing the chances that a mutated mitochondria will end up in an egg that is fertilized. Back

33. (Cheng, 2006). "Junk" DNA also performs other useful functions. (Lowe, 2007). Back

34. "We now know that more than 98 per cent of our DNA is of the non-coding variety." Only 1.2% of our DNA codes for proteins. (*New Scientist*, July 14-20, 2007, pp. 43, 3). <u>Back</u>

35. (Pray, 2004; Carroll, S.B., "Regulating Evolution," *Scientific American*, May, 2008). Here is an excellent four-part video on epigenetics. Note that epigenetic change, i.e., changing regulators, is not the same thing as the inheritance of acquired characteristics, "Lamarckism," because acquired characteristics do not necessarily change the regulators, i.e., there is no mechanism for an acquired characteristic to change an individual's genome. "Imprinting" is due to a regulator that silences either the allele from the mother or the allele from the father, so that the sex of the parent determines whether or not a gene is read. (Montgomery, 2005; Goos, 2006; Bereczkei, 2004). A genetic defect inherited from the father causes Prader-Willi syndrome, where the infant eats litte, then becomes voracious when a few years old; the same genetic defect inherited from the mother causes Angelman syndrome, where the child perpetually smiles and laughs, but also has symptoms found in severe autism. (Zimmer, C., "The Brain," *Discover*, Dec., 2008). <u>Back</u>

36. That is why even though the same DNA is in all the cells, the cells can nevertheless grow into brain cells, liver cells, and so on – the regulators cause different genes to be read; different portions of a gene are read, depending upon the tissue that gene is in at the time. (Wang, 2008). The DNA code for the polypeptides that are assembled into proteins can be in different locations, even on different chromosomes. <u>Back</u>

37. We inherit chromosomes from our parents, not naked DNA. The DNA is only 50% of the

chromosomes. Back

38. (Choi, "Regulators Evolve Faster Than Genes," The Scientist, Aug. 9, 2007). Back

39. That is why our DNA can be so similar to chimp DNA, yet we are so different from chimps. (<u>Schwartz, 2005</u>, p. 242). <u>Back</u>

40. "[The] Arabs are known to have taken slaves from Africa to south Arabia, Persia, the Far East, China, and Japan ..." Some were even found in Russia. (Eribo, F., *In Search of Greatness*, 2001, Chapter 1). <u>Back</u>

41. "How could Moses prohibit murder and then, in Numbers 31, fly into a rage because a returning Israelite war party has slaughtered only the adult male Midianites? 'Now kill all the boys,' he tells them when he calms down. 'And kill every woman who has slept with a man, but save for yourselves every girl who has never slept with a man.' [Numbers 31:17]" (Lazare, 2002). A study of 500 skeletons massacred in North and South Dakota about 1325 A.D. showed "a striking absence of young women." (Buss, 2005, p. 10). Most murders are by men in their years of reproductive competition. (Buss, 2005, p. 23). Back

42. It's hard to believe that anyone would give up sex, but some entire species have. (<u>Patterson, 1999</u>, pp. 136-137; "...bdeloid rotifers abandoned sex about 100 million years ago...," Zimmer, C., "<u>What Is A Species?</u>," *Scientific American*, June, 2008). <u>Back</u>

43. Although the progeny have some of the same alleles as each of their parents, crossover may alter traits. Alleles can also move to a different chromosome which may affect traits so much that the species splits. (Masly, 2006). Back

44. On the other hand, "The cost of sex, in terms of fitness, is enormous." (Patterson, 1999, p. 136). In asexual reproduction 100% of the alleles are passed on; in sexual reproduction, each parent passes on only half of his alleles. Sexual reproduction requires two individuals to produce one offspring; asexual requires only a single individual. Sexual displays also make males more vulnerable, and both sexes are more vulnerable during sex. <u>Back</u>

45. Alleles are inherited in large blocks ("haplogroups," Chap. 20). If an advantage allele arises, those who have it will have more progeny. Many years later, as mutations accumulate, there will be more variation in other blocks than in the block with the new allele because that block has not been around as long as the other blocks. So, less variation in a block means that the block contains an allele that was positively selected. <u>Back</u>

46. Culture, although it is not inherited behavior, is also subject to selection and can lead to the selection of alleles that accommodate it. (<u>Rogers, 2008</u>; Chap. 4, Rule 12). Anything that can be affected by the genome can be selected and anything that changes the genome can select. Lawnmowers have selected dandelions for low leaves and fast-growing stalks. <u>Back</u>

47. (FN 88, p. 19). Note that traits are selected, not the alleles responsible for the traits. Even synonymous alleles can affect the function of the encoded protein by altering its structure (<u>Goymer, 2007</u>) and "neutral" DNA strings may be lumped with non-neutral strings during cross-over, making the combination non-neutral. <u>Back</u>

48. Polar bears' fur appears white but consists of transparent hollow hairs that conduct light to their heat-absorbing black skin; they also obtain sufficient vitamin D from their food. <u>Back</u> 49. "

... selection at the rate of .01 can increase a gene's frequency from 1% to 99% in 1000 generations ..." (Levin, 1997, p. 123). Back

50. There is some evidence that women do not die soon after menopause because they help care for their grandchildren, thus increasing the number of them who survive. (*Wikipedia*, "Grandmother Hypothesis"). Back

51. (Fuerle, 1986, p. 133). This can be accomplished by losing telomeres at the end of chromosomes; when all the telomeres are gone, the chromosome can no longer replicate. Dietary restriction extends life (Bishop, 2007), which reduces the likelihood of extinction during scarcity; this suggests that aging and death are programmed. Back

52. Environmental change, and the resulting increase in selection pressure, can result in "bursts" of evolution separated by periods of little genetic change. "Although each species must have passed through numerous transitional stages, it is probable that the periods, during which each underwent modification, though many and long as measured by years, have been short in comparison with the periods during which each remained in an unchanged condition." (Darwin, 1859). Back

53. (<u>Lippsett, 1998</u>). The longer the time in between the recurrence of an event, and the faster its effects dissipate, the less alleles for traits that are advantageous during the event will be selected. <u>Back</u>

54. There is evidence that people living in different geographical locations, and therefore usually in different climates, are under different selection pressures, as one would expect. (Voight, 2006). Alleles selected in one racial group were therefore quite different from those selected in other racial groups. Back

Chapter 5 - Selectors

A "selector" is whatever increases or decreases the reproductive success of an individual because he has (or does not have) a particular combination of traits. With modern science and international aid, humans today don't need to worry too much about selectors other than occasional germs and the whims of the opposite sex, but early humans were mercilessly brutalized by selectors far beyond their control. We should be grateful to them because without the terrible suffering and death they endured from these selectors, we would not have the traits we do today.

A selector can be a cold climate that kills off those who lose heat too easily, a warm climate that kills off those who cannot lose heat fast enough, a predator that kills off slow runners, a bacteria that kills off those with weak immune systems, a competitor (perhaps even an individual in the same population) who is better adapted, and so on. If there are two sexes, the selector may be one or both of those sexes, who selects beautiful feathers, lovely songs, or weird appendages in the other sex. Even culture, if it alters reproductive success, can be a selector. Indeed, anything in the environment that affects reproductive success can be a selector, and that includes man, who may select for traits that he finds useful, "cute," or otherwise attractive.

Climate

Climate is the strongest selector, not only for humans, but for almost all living things, for the simple reason that it directly affects the amount of food available, which directly affects the number of progeny that can survive. Climate includes temperature, rainfall, sunlight, air pressure, oxygen and carbon dioxide content of the air, and how different the seasons are, all of which, in turn, determine the type and quantity of food that is available, when and where it is available, and how easy it is to obtain it.

Humidity, rainfall, and the presence of predators and prey can change for a variety of reasons, but changes in the amount of energy useable by organisms, e.g. as sunlight, food, or heat, is critical. Temperature is a good surrogate for available energy. Temperature is affected by altitude (it decreases about 1°F for every 275 feet you go up) and warm ocean currents (it decreases about 1°F for every 5½° longitude you go east in Europe), ¹ but the amount of sunlight striking the earth's surface has the greatest effect on temperature. The difference in the distance from the sun to the earth between the winter (91,700,000 miles) and the summer (94,800,000 miles) has less effect on the amount of sunlight than does the angle between the sunlight and the earth's surface. The equator, which is more directly under the sun, receives much more sunlight than the poles, where the sunlight is at a small angle to the surface, if the sun rises at all.

The point on the surface of the earth that is perpendicular to the sunlight traces a somewhat sinusoidal path across the surface of the earth that moves from the equator to 23° 26' 22" north latitude (Tropic of Cancer, Figure 17-6, p. 147) in the northern summer, then back across the equator to the same south latitude (Tropic of Capricorn) in the northern winter. Except for rare catastrophes, the amount of sunlight striking any particular part of the earth has not changed greatly since the beginning of life on this planet, about 3.8 billion ya (Haywood, 2000, p. 13), but migrations from one latitude to another change the amount of sunlight a population receives.

The average amount of sunlight over a year decreases with latitude away from the equator (reducing the average temperature about 1 °F for every 70 miles you go north in Eurasia). More importantly, however, is the fact that as one moves from the equator to the poles, the difference between summer and winter temperatures increases to a maximum, then decreases again. In the temperate zones, where that maximum difference occurs, food comes

in abundance at the end of the growing season, but during the winter edible vegetation is hard to find, though herds of large mammals may still be available.

Catastrophic climate changes have occurred throughout the history of the Earth, from ice ages to impacts by comets to volcanic eruptions. ² Most occurred long before humans appeared and some affected only small areas. There were no major disasters due to comets or asteroids during man's time on Earth, ³ but there were ice ages, glaciers, and rising and falling sea levels that affected the areas our ancestors inhabited.

Mount Toba or "Toba," as it is affectionately known, is a volcano in Sumatra, Indonesia. Today, it is peaceful and shows no inclination to devastate the planet, but 73,000 ya it was an angry beast, blasting 2800 km³ (671 cubic miles) of material into the sky, along with millions of tons of poisonous sulfurous gases, blackening the skies across the northern latitudes of the earth. The ash dropped in a northwest path across India, in places 18 feet deep. (Savino, 2007). Analysis of ice cores indicated the temperature dropped 61 Fahrenheit degrees in Greenland for about six years.⁴ Since Toba lies only 3 degrees north of the equator, the amount of energy reaching the earth for warmth and photosynthesis was drastically reduced. The resulting "volcanic winter" blotted out the sun, killing vegetation, then herbivores, then carnivores and humans. The effects were more severe in the northern latitudes, where winters already made survival difficult, but Toba did not have much affect on Africa. Some of the people affected by Toba were better able to cope with its effects than others, so Toba not only killed people, it altered the genome of the surviving populations, as we shall see in Chapter 20.

There were two ice ages that affected the evolution of modern man, together referred to as the Würm glaciation period. The first ice age began about 73,000 ya, when Toba erupted, and lasted until about 55,000 ya. Although ice ages are attributed to changes in the Earth's orbit (Hayes, 1976), it is quite likely that Toba triggered or accentuated that ice age by increasing albedo, the reflection of sunlight back into space from snow and ice. Temperatures fell and snow stayed on the ground longer before it melted, until it did not melt at all, but accumulated as thick glaciers that covered the land and inched south, wiping out most of the evidence that man had once lived there. The entire area north of India and most of West Asia north of the Caucasus Mountains was under a sheet of ice, but some of central China remained ice-free, giving East Asians a head start on Caucasians. Water evaporated from the oceans and fell as snow, no longer flowing back into the oceans, so sea levels fell, creating more shoreline and land bridges between continents and former islands. In Africa, however, there was no continental glaciation, ⁵ even near the southernmost tip of Africa, just "moderate fluctuations in climate" (Howells, 1959, p. 120), though there was drought.

The movement of cold air and glaciers down from the north forced Europeans and West Asians to migrate farther south (less so in East Asia), no doubt creating conflicts with the humans already there. The Eurasian population fell drastically ⁶ and the selection pressure for cold adaptation was severe. ⁷ Those Eurasians who were better adapted for a colder climate had to migrate less, suffered fewer losses, and passed on their alleles for cold-adaptive traits.

When warmer temperatures returned, the glaciers melted and the seas rose. The Bering Strait again separated North America from Asia. Shorelines and low areas were flooded, concealing evidence that man once lived there, and higher grounds again became isolated islands. Eurasians followed the receding ice north, increased their numbers once again, and recolonized Eurasia.

The second ice age occurred from about 30,000 ya to about 12,000 ya. It was more severe, but had less effect on man's physical evolution because by that time man had culturally evolved (e.g., garments, constructed shelters) and was better able to cope with the cold. Sea levels fell again, 130 meters (427 feet) lower than today, giving Eurasians easy access to North America, Australia, ⁸ Japan, and Africa. The English "Channel" was dry land and one could walk

from France to England and Ireland. (<u>Sykes, 2001</u>, p. 9). Although both ice ages severely reduced Eurasian populations, when temperatures rose again populations expanded greatly, and the coming of agriculture, about 12,000 ya, produced an even greater population expansion.

Figure 5-1 shows volume of ice for the last 450,000 yrs. Note that from about 120,000 ya until about 10,000 ya the temperatures were much colder than they are now; the peaks of the first and second ice ages are indicated by the two arrows.



Sexual Selection

After climate, sexual selection is the next strongest selector for humans. ⁹ Sexual selection means that the sexes do not mate indiscriminately, but preferentially select individuals who have certain traits. Because populations that have a more "K" orientated reproductive strategy (fewer children, more child care) pair bond more, they have more stringent requirements for their mates and therefore have more sexual selection than populations that have a more "r" orientated reproductive strategy (more children, less child care).

Although both sexes do some selecting, especially in modern times, if the sexes are free to make a selection it will be the sex that has the most to lose by a poor choice that will select most cautiously, and that is usually females. ¹⁰ Because women need food not only for themselves, but also for their fetus and then their child, sex, at least until contraceptives came along, was very costly for them.

Thus, the balance between male selection and female selection shifts according to how much of the food and other resources each sex provides. In Africa, the women, even today, farm and gather food, so they have more selection power, ¹¹ but in the colder climates more of the food was meat, especially in the winter, and hunting was done by men, shifting some selection power to men. (Miller, 1994a). As a result of selection by men, Eurasian women have become more beautiful ¹² and, as a result of selection by women, Eurasian men have become workaholics and slightly more intelligent than Eurasian women (more intelligence = a better provider in Eurasia). African women have become slightly more intelligent than African men, however, who have become the more physically attractive sex. ¹³

The sex that has evolved a lot of superfluous traits, traits that are not useful in obtaining food, evading predators, and the like, but do appeal to the opposite sex, is certainly being sexually selected. For birds, it is almost always the male that has superfluous traits, as the male often has bright, colorful plumage and lovely songs that attract both females and predators; the superfluous traits tell females that the males must be of really high quality to be able to present such a display and not get eaten. Although the difference in beauty between men and woman is not as stark as between male birds and female birds, it is fair to say that, at least for Eurasians, the ladies have the edge in beauty, suggesting that men are doing some selecting of women, though women still do most of it. As (Coon 1962, p. 86) put it, "all females receive sexual attention. Among primates, [in order to reproduce] it is easier to be a female than to acquire one." However, once meat became an important component of the human diet, the "meat for sex" trade ¹⁴ began to play a greater role and selection by men increased.

Selection by Women

If a woman and her children don't need a man to survive, she can choose a man who is handsome and charming, but likely to leave after copulation. In other words, she can choose a "cad" and, if she can do so without diminishing the survival chances of herself and her children, she is more likely to do so. The handsome, charming cads then have more offspring and pass their alleles for cad-like behavior on to their sons. ¹⁵

On the other hand, if she is not capable of providing for herself and her children, she will have to be more practical and chose a man who is likely to stick around after sex and take care of her and her children, a "dad." (Chu, 2007). Clark Gable for thrills, Joe Sixpack for bills. Of course, it would be nice if Joe Sixpack were also young, healthy, romantic, and had good genes, ¹⁶ but those qualities mean nothing if he does not provide for her and her children. Today, a woman can choose a man who can not, or will not, help her survive and the welfare state will force that man and other people (taxpayers) to provide for her and her children, but before the welfare state a woman who unwisely chose such a man would have a life of poverty and an early death.

It has been suggested that women select men for intelligence (Ananthaswamy, 2002), ¹⁷ and that may have played a significant role in man's evolution towards higher intelligence. Intelligence, as we shall see (Chap. 14), correlates well with wealth, so intelligence is a way to identify men who have, or are likely to acquire, the resources needed to care for a woman and her children. ¹⁸ High status men are also likely to have access to more resources, and so high status is a strong magnet for the ladies. (Pollet, 2007). But since women today have less need for the resources of men, many women define "high status" less as having money and power ¹⁹ and more as being "cool," i.e., having currently-fashionable clothes, language, and behavior.

Selection by Men

A man can impregnate many women and have far more children than can a woman, so a reproductively successful man can have a greater effect on the traits of future generations than can a reproductively successful woman. ²⁰ Although a man can rape a woman, thereby eliminating any selection on her part, in most societies rape is not a good reproductive strategy as pregnancy is hit or miss and the penalties for rape may be severe. ²¹ But for a man with low status and few resources, rape can be worth the risk. ²² Other male strategies include paying for sex (prostitution) and sincere or deceitful courtship. (Shields, 1983, pp. 117-119; Wrangham, 1996, pp. 131-146).

If sex is going to cost a man little beyond an ejaculation he won't be very selective. But if it is going to cost him a lifetime of support for a wife and children and possibly deter him from having sex with other women, ²³ he will select much more carefully. (Power, 2006).

Since the better providers are desired by more women, but may not be able to support more than one, those men will select the woman they will provide for, and they will make that selection based on which woman they think will make a good wife and mother. ²⁴ If they do not select on that basis, their children are less likely to survive and men who lack alleles for careful selection will be replaced by men who have them. A good future wife and mother must have a pleasant, caring personality, be young (i.e., many years of child-bearing), ²⁵ healthy (i.e., capable of bearing and raising children), likely to be faithful (i.e., <u>his</u> children), and have "good genes." Since good genes are required to make a face and body that are symmetrical and are not deformed or diseased, physical attractiveness is a good indication not only of health, but also of high quality genes. ²⁶ Paradoxically, Eurasian women owe their beauty not to the choices made by their mothers, but to the choices made by their fathers, grandfathers, etc. ²⁷

Group Selection

A "group animal" is a species whose members live in groups, usually cooperating to obtain food. Wolves are the archetypical group animal, but probably from the first primates and for millions of years thereafter the animals in man's lineage have been group animals at least as much as those in the wolf lineage. Group behavior is still deeply ingrained in our genes and we see it today in how readily we form groups and how important it is for us to be accepted by others in our groups. Allegiance to a group arose because individuals who acted in concert with their associates for their mutual benefit, especially in conflicts with others, were more reproductively successful than those who did not.

For a group animal, and especially for males, high status within the group is the trait most worth having because it is the high-status individuals who mate the most. The importance of status to humans is obvious from the amount of money we spend on clothes, cars, homes, parties, and generally "keeping up with the neighbors." And, conversely, low status, and expulsion from the group is most feared. ²⁸

Since group animals usually breed more among themselves than with outsiders, ²⁹ they are more closely related to each other and share many of the same alleles and traits. This inbreeding not only enhances the cohesiveness of the group, it also makes the group genetically different from other groups and, if one group is better adapted, its members will have more reproductive success than the members of other groups. Although a group can therefore be selected, ³⁰ it is individuals that biologically reproduce, not groups, and it is the individuals within the group that is positively selected who have greater reproductive success, passing on the traits that enabled their group to be selected. (Levin, 1997, p.167). Even if a member does not himself reproduce, since he is more related to others in his group than he is to outsiders, and his fellow group members therefore carry more of his alleles than do outsiders, he nevertheless also achieves reproductive success because others in his group pass on many of the same alleles that he would pass on. (See Chap. 8). A more reproductively successful group will grow in numbers and will more frequently split into two groups than other groups do, a process somewhat analogous to asexual reproduction.

Individuals within a group are permitted to remain in the group provided they can be expected to make a net contribution to the reproductive success of those individuals within the group that produce the next generation. The likelihood of a male successfully reproducing after he is forced out of the group is low, so low status males do their best not to anger the leader. By expelling a member, the remaining members alter the gene pool of the group and, when groups compete against other groups of the same species, those other groups become part of the environment that selects whether a group is successful. ³¹

If an individual's alleles cause him to act only for his own reproductive success, even when it is damaging to the reproductive success of his group, and those alleles spread throughout his group, eventually both his group and his own lineage will go extinct. The result is that each individual in a group will carry some "altruism alleles" that code for behavior that increases the group's fitness, even though that behavior reduces his individual fitness, such as alleles for deferring to the leader for breeding and for caring for the leader's offspring.

Both man and other group animals are normally innately capable of suffering social control emotions, such as guilt, shame, embarrassment, depression, and remorse, in response to communications from others of approval or disapproval of their behavior. ³² These social control emotions are detrimental to the individual, but essential to the successful functioning of the group. ³³ Individuals quickly pick up the meaning of facial expressions and other signs of disapproval, and usually end up following the rules to avoid having to endure the unpleasant emotion. ³⁴

The intra-group rules need not be the same for different groups, and behavior that

produces a devastating social control emotion in an individual in one group may create no emotion or even the opposite emotion in an individual in a different group. ³⁵ The group's culture (i.e., information that is not inherited) programs and activates these emotions, inducing an individual to alter his behavior so that he benefits others in his group, even though that may reduce his personal fitness. ³⁶ Nevertheless, he accepts, and often vehemently defends, the culture of his group because an attack on his culture threatens his acceptance as a member of the group. ³⁷ If particular cultural rules enable a population to better compete with others populations, then individuals in that population who do not feel guilt, shame, or remorse when they break those rules (i.e., sociopaths) will be eliminated from that population, and the only individuals who remain in that population will be those that inherit the propensity to feel the emotions that induce them to follow the rules. Since survival in the colder north depended more on following rules than in the tropics, individuals in northern populations should have more of those social control emotions. There is some evidence that Africans are less controlled by those emotions, which may contribute to their higher crime rate.

Chapter 6

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FOOTNOTES

1. The formation of the Isthmus of Panama 3 to 3.5 mya, isolating the Pacific and Atlantic Oceans, changed ocean currents, cooling Europe. (<u>Arsuaga, 2001</u>, p. 115). <u>Back</u>

2. Catastrophes other than climatic catastrophes also changed man's evolution. A contemporary example is a mutation, the delta 32 deletion of the CCR5 receptor gene, that occurred in some northern Europeans, which enabled them to survive the bubonic plague during the Middle Ages, when hundreds of thousands of their countrymen died; more recently, it offers some protection against AIDS. (Guilherme, 2002). Back

3. The only major one occurred in Siberia in 1908 and it had little effect on humans. Back

4. Temperatures are estimated to have dropped about $30 \degree C$ ($54 \degree F$) for weeks or months in the Northern Hemisphere. (<u>Rampino, 1988</u>). During the Ice Age of 30,000 to 12,000 ya, the climate in Germany was quite cold and the Mediterranean Sea had the climate the Baltic Sea has now. <u>Back</u>

5. There were limited glaciers around Kilimanjaro and Mount Kenya. (Hasterath, S., *The Glaciers of Equatorial East Africa*, 1984). <u>Back</u>

6. (<u>Ambrose, 1998</u>). "The scarcity of artifacts in the loess bed that overlies the [central Asian plain] suggests that much of the plain was abandoned between 73,000-55,000 years ago." (<u>Hoffecker, 2002</u>, p. 19). <u>Back</u>

7. In Asia, the cold selected for neoteny. (Chap. 6). Back

8. Even when sea levels were lowest, there was still at least 50 km (31 miles) of open ocean between Australia and Asia. (Sykes, 2001, p. 285). Back

9. (Weston, 2007). An excellent book on sexual dynamics is The Woman Racket, by Steve

Moxon. Back

10. The general rule is that the sex that invests less in raising the offspring, usually the male, will pursue the opposite sex, who will do more of the selecting. In some species of seahorses, however, the male incubates the young, a costly investment, and he is pursued by the females and he does the selecting. (Allman, 1994, p. 114). Similarly, female phalaropes (ducks) pursue males because the males brood the eggs. (Rising, G. "Nature Watch," *Buffalo News*, Oct. 21, 2007). A man who must spend a lifetime caring for a wife and his children will be more pursued by women, and will do more selecting than a man who incurs no such obligation. Back

11. (Lynn, 2006a, p. 224). "Women perform 80 percent of daily work" in Africa. (Wax, 2003). Polygyny is also common in Africa, with the best men having the most women, but this is mostly economic as the wives do the work and are self-supporting and have access to many other men. "In Africa, feminist groups don't protest that men don't let them do work, they protest that men leave them most of the work." (Sailer, S. Oct. 9, 2007 comment on Megan McArdle, *The Atlantic.com*, "Why is Africa So Screwed Up?"). Agriculture made women more self-sufficient, making additional wives affordable, which lead to polygeny. That left many men without women, increasing the selective power of women, resulting in the enhanced physical attractiveness of African men and the diminished attractiveness of African women. "The traditional Zulu does not make physical beauty a first priority or even an important qualification in a wife..." (Vilakazi, 1962, p. 59). Back

12. Women would not spend billions of dollars on clothes and cosmetics if men were not selecting them for beauty. <u>Back</u>

13. "There is some ambivalence in societies where women do most of the agricultural labor. In such a context, wives tend to be chosen for their ability to work outdoors, especially in the sun, and less weight is given to other criteria, like physical beauty. This is true in most agricultural societies of sub-Saharan Africa and in New Guinea." (Frost, 2005). "Among the Nigerian Wodaabes, the women hold economic power and the tribe is obsessed with male beauty; Wodaabe men spend hours together in elaborate makeup sessions, and compete - provocatively painted and dressed, with swaying hips, and seductive expressions in beauty contests judged by women." (Wolf, 1991; also Hunt, 1864, p. 20). Now that white women are becoming financially independent, they are also placing more emphasis on male appearance. (Moore, 2006). In time, if whites survive, white men will also become better looking and white women less attractive. Back

14. In addition to meat, males also provided protection from predators and other males. This implied pair-bonding contract is strongest when women are least capable of acquiring food for themselves, i.e., in the northern climates. When a population is starving, there is a widespread trading of sex for food. (e.g., <u>Keeling, 1947</u>, pp. 57-59). <u>Back</u>

15. Any man besieged by women is likely to find the temptation to be a cad irresistible since the more women he impregnates, the more reproductively successful he is likely to be. Women are enthralled by cads because they seem to be genetically superior, as evidenced by the quality of the music they can create, their athleticism, their looks, confidence, etc. And, if other women want cads, the sons they have with a cad may also be more reproductively successful. Wealth, in addition to providing assurance of support, can be used to create an effective "bluff," so a man can present himself as being of better genetic quality than he is. Ditto for a woman and her makeup, clothing, and grooming. Back

16. (Buss, 2008). She can obtain all those qualities in a man and still keep Joe Sixpack's pay check by successfully cheating, so men select for faithfulness in long term relationships. (Salter, 1996). Back

17. Actually, both sexes select for intelligence, though women more so. (Rosenberg, 2008). That brains increased in size from the beginning of hunting means that the possessors of larger brains were more successful with the ladies, probably because of the additional meat that more intelligent men were able to acquire and trade for sex. (Coon, 1962, pp. 78, 86). Women often say they want a man with a good sense of humor, and humor also correlates well with intelligence. Back

18. It also correlates well with a lower crime rate, less psychopathy, and other traits desired by most females. <u>Back</u>

19. "Power is the ultimate aphrodisiac." (Henry Kissinger). The drive for status is hard wired into the human brain. (Zink, 2008). Back

20. (<u>Coon, 1962</u>, p. 93). By conquest, Genghis Khan had about 800,000 times the reproductive success of the average man of his age; about 8% of the men (16 million men, 0.5% of all the men in the world) in a large area of Asia carry his Y chromosome. (<u>Zerjal, 2003</u>). <u>Back</u>

21. During war and occupation, there is often no penalty and rape is common. (Keeling, 1947, pp. 49-57). Back

22. The more polygynous a society is, the more men there will be who cannot find a woman. Almost all suicide bombers are single Muslim men because Islam permits polygyny and promises 72 virgins if a believer dies for the faith. The dearth of women caused by polygyny also led to the importation of female African slaves. <u>Back</u>

23. Both sexes may be able to achieve more reproduction success by not putting all their germ cells in one basket, so to speak, but that is usually easier for a man to do. With the courts favoring women much more than they used to ("Why get married? Just find a woman who hates you and give her your house."), the cost to a man has increased, perhaps discouraging marriage. <u>Back</u>

24. This suggests that the more selective the sexes are, the higher the quality of the population will be and, conversely, the more indiscriminate sexual relations are, the faster the population will degenerate. <u>Back</u>

25. And beauty correlates well with fertility, both tending to maximize at age 24.8. (Johnston, 2006). Since younger women are more fertile and more capable of raising children, men prefer youthful women and most marriages are younger woman – older man. Women are more neotenic than men because men have selected them for youthfulness. Light skin is also associated with youth (and dark skin) with masculinity. In one study, the skin of white women was 15.2% lighter than the skin of white males, and the skin of black women 11.1% lighter than the skin of black men. (Bauman, 2004). Back

26. Good looks are less important to women, provided they need men to provide food and other resources, because their reproductive success is limited if they don't have access to resources; male reproductive success, however, is limited by access to females. (Lewin, 1998, p. 162; McNulty, 2008). Also see (Etcoff, 1999; Barash, 1997; Small, 1995; Botting, 1995). Fifty-six cell

divisions are required to go from a human egg to an adult and good genes are required to accomplish that with a minimum number of errors. (<u>Schwartz, 1999</u>). <u>Back</u>

27. (Frost, 2006). Beautiful people have more female children. (Kanazawa, 2007). Why? Because people who carry alleles for <u>both</u> beauty <u>and</u> more female children have greater reproductive success than people who carry alleles for <u>only</u> beauty or <u>only</u> more female children. Women pass on their beauty to their daughters, but men don't pass on their good looks to their sons. Why? Because women select men more for traits other than good looks. (Cornwell, 2008). Back

28. Groups develop rituals, beliefs, customs, language, and apparel to induce individuals to identify with their group and to discourage desertion. <u>Back</u>

29. In group animals, even though the loss of members weakens a group, one or both of the sexes often leaves the group at sexual maturity and joins a different group. This may be to reduce inbreeding, to spread the group's alleles, or to acquire new alleles that may have arisen in other groups. In most primates that live in groups, it is the adolescent males that leave. Since males compete for females, males leaving reduces intra-group strife, though it means that many young males will never find mates. The absence of a male does not reduce the reproductive success of the group much because a single remaining male can impregnate many females. In gorilla, chimpanzee, and human groups, however, it is the females who leave the group (Allman, 1994, p. 124; Wrangham, 1996, p. 24; Arsuaga, 2001, p. 164; Also see (Bonobo Initiative and De Waal, 1997, p. 60), sometimes by being captured by males from other groups. About 70% of human societies are "patrilocal" (male stays, as opposed to "matrilocal," female stays). (Burton, 1996). (The fact that humans are patrilocal may help explain the higher miscegenation rate of white females.) The most obvious reason for this difference is that gorillas, chimpanzees, and humans engage in more intense inter-group competition (Van Vugt, <u>2007</u>), i.e., war, and males are required to defend the group's territory. Groups without adult males would simply have their females and territory taken by males in other groups. Thus, the success of the group is so important to the survival of humans that the advantages of retaining females in the group are sacrificed to achieve it. (A pecking order ("dominance hierarchy") reduces male-male competition for females within a patrilocal group; also, males in the group are related and carry many of the same alleles; see Chap. 8). Back

30. (*Wikipedia*, "<u>Group selection</u>"; Wilson, 2007 & 2008). Groups exist only because they are adaptive (<u>Chapter 4, Rule 10, corollary 1</u>) and, if they are adaptive, they must be selected. Also see "<u>Dual Morality</u>," p. 284. <u>Back</u>

31. (Levin, 1997, p. 74). Here is a remarkable example of the power of selection on groups: In North America there are southern cicadas that emerge from the ground every 13 years and northern cicadas that emerge every 17 years. Why such weird numbers? Well, they are both prime numbers, which means the southern and northern cicadas will emerge the same year only in once every 221 years (13 x 17 = 221). Thus, any predator that relies upon eating cicadas for survival will have great difficulty increasing its numbers at the same time that the cicadas emerge. (Patterson, 1999, p. 82). In other words, initially there were many cicada groups with many different cycles. Over time, only those groups that had long cycles that did not frequently coincide with the cycles of other groups were able to avoid predators and survive. Back

32. For example, 200 years ago, calling someone a "racist" would have generated no emotional response. Today, the name-caller knows he is being verbally agressive and the other person

knows he is under attack; their amydalae respond by jacking up their adrenalin. An individual who lacks the capacity for these social control emotions, i.e., a sociopath, can nevertheless pretend to have them and, at the same time, not have his actions impeded by them. (<u>Stout</u>, <u>2005</u>). <u>Back</u>

33. In addition to reducing intra-group conflict and increasing intra-group cooperation, they also reduce the "tragedy of the commons," where individuals within a group exploit resources beyond the level at which the resources are self-sustaining, which is detrimental to the group as a whole. (Wilson, 2007). Although Wilson (2007) states, "Selfishness beats altruism within single groups. Altruistic groups beat selfish groups," this is not always true as other members of the group can and do punish selfish members. Back

34. Guilt is self-punishment for not following the group's rules and shame induces submission to those rules. See various papers by Robert Trivers. Both are genetically-predisposed emotions. Sociopaths do not feel these emotions, because they lack alleles for them or those alleles have been turned off. <u>Back</u>

35. For example, in "respectable" society, getting drunk is disgraceful, but sailors may take pride in it. <u>Back</u>

36. (<u>Plutchik, 1980</u>). Another group animal, the dog, is also said to have some of those emotions. <u>Back</u>

37. We are the product of our place and time, "imprinted" with the beliefs of those around us. We fear contradictory views because they threaten our acceptance within our group. To avoid expulsion, we sacrifice our objectivity and fervently believe and rationalize obvious falsehoods. Back

Chapter 6 - Neoteny

Biologically, an organism becomes "sexually mature" or an "adult" when it is capable of reproducing. And it becomes "physically mature" when it acquires its adult form. The rate at which an organism matures physically and the rate at which it matures sexually are independently controlled by different genes. ¹ A population can evolve so that individuals physically mature faster or slower, while keeping their rate of sexual maturation constant, or it can evolve so that individuals mature sexually faster or slower, while keeping their rate of physical maturation constant, or both can change.

A population can evolve so that individuals remain childlike in their adult form ("paedomorphism") in two ways. It can evolve to speed up physical and sexual maturation so that individuals become both physically and sexually mature while they are still infants ("progenesis," e.g., newts), or it can evolve to slow down or stop physical maturation so that the age of sexual maturation stays about the same, but individuals are childlike when they reach sexual maturity ("neoteny"). "Neoteny" (new-stretch) refers to a gene-controlled change in the way individuals mature, where they mature sexually at about a normal rate but, although the body grows in size as they become sexually mature, their juvenile features (and their ancestors' juvenile features) are retained into adulthood and are not replaced by distinctively different adult features; in other words, a child becomes a larger, but sexually-mature, child.

The evolution of man was accomplish bv а number of genetic changes, but one of the most important was neoteny. Humans are the most neotenic of all



Figure 6-1

primates. Notice, in Figure 6-1,² the remarkable and important comparison of an adult and baby chimpanzee. The adult chimpanzee did not retain his babyish face, but instead replaced it with a very different face. The more human-looking face of the baby chimp is much flatter, while the adult has a very protruding jaw.³ Because the adult did not retain the baby's face. the chimpanzee is not neotenic. Now imagine that the baby chimpanzee grew up to become sexually mature, but his face did not change; then the chimpanzee would be neotenic and would look much more human.

Now that you know what neoteny is, it should not be difficult to see that man is neotenic. In fact, man is so neotenic that he has been described as a "sexually mature fetus." $\frac{4}{2}$ Many of our neotenic traits were vital to our evolution. As in most fetal mammals, including humans, the foramen magnum (the opening through which the spinal chord exits the skull) is more in the center of the base of the skull. As quadrupedal animals mature it moves to the rear (Table 9-2), but in humans, who are bipedal, it remains in its infant position (so the eyes are directed perpendicularly to the spine). In embryonic mammals, the vaginal opening is more to the front, and remains so in adult human females (for front-to-front intercourse) and does not move to the rear (for front-to-back intercourse), as in other mammals. Our big toe remains parallel to our other toes (for walking) and does not move to a 90° angle to them (for grasping) as in the great apes. Man's neotenic traits also include a more gracile (i.e., less robust) skeleton, a skull that is larger (in proportion to body size), rounder, and more spherical with thinner bones, a flatter face with a less protruding jaw ("prognathism") ⁵ and smaller teeth, little body hair, smaller arms, legs, fingers, and feet, and more fat under the skin, all traits found in primate babies. ⁶

Flesh-colored skin may also be neotenic in humans. Newborns of dark-skinned parents are lighter-skinned (<u>Abner, 1998</u>), then their skin darkens as they grow older. ⁷ It is interesting to note that young chimpanzees have flesh-colored skin which becomes blackish or black between ages 10 and 12 (<u>Baker, 1974</u>, p. 112); that suggests that our last common ancestor (LCA) with chimpanzees may also have had light skin when young. ⁸ There is some genetic evidence that "the common ancestors of all humans on earth had white skin under dark hair – similar to the skin and hair color pattern of today's [young] chimpanzees." ⁹

The hair of newborns is also straighter, even of African babies, and fetuses have an epicanthic fold (a fatty fold of skin that partially covers and protects the eyes, Figure 10-3), 10 so those traits are also neotenic. A white sclera (eyeball) may be neotenic as "most animals have sclera that darken with age, [but] humans retain white sclera all of their lives." (Etcoff, 1999, p. 33).

What caused man's neoteny? The obvious answer is that before man became neotenic, individuals differed slightly in how neotenic they were, just as they differ in nearly all traits; man would have stayed non-neotenic forever, but his environment changed. After that change, those individuals who were more neotenic had more reproductive success than those who lacked alleles for neoteny, and the entire population became more neotenic.

The next question is, "What environmental changes would make neotenic traits more advantageous?" A smaller, non-protruding jaw and less robustness (smaller bones and muscles) would be a major disadvantage in a fight. But, if man had advanced enough to develop tools and weapons, those traits would be unnecessary, a waste of the body's resources and energy, and would reduce speed and agility. What other traits do babies have that, if an adult had them, would make that adult more likely to survive?

Another possibility is a larger brain. In proportion to body size, babies have larger brains than adults, ¹¹ and more neotenic adults usually have larger brains than less neotenic adults. It is also true that there is a moderate ¹² correlation (r = 0.44, Lynn, 2006a, p. 214) between intelligence and brain size. ¹³ It is not a perfect correlation – people with large brains can still be stupid – but it is still a significant correlation. So it is possible that if the change in the environment required more intelligence to survive, then individuals who were more neotenic and therefore had larger brains and greater intelligence, would be selected. ¹⁴ If a population migrated from the tropics, where there is little seasonal change, to the north where there are four distinct seasons, including a long, cold, winter, more intelligence would be an asset in planning for the winter and provisioning food. Thus, seasonal differences in climate would select for more intelligence and therefore for more neotenic individuals.

How severe the selection for intelligence would be is hard to estimate. Small brains are, after all, capable of provisioning for the winter – squirrels do it all the time and, in proportion to body size, their brains are far smaller than man's were. Moreover, the brain is the body's most

costly organ, as it requires more energy (per unit weight) than any other organ. ¹⁵ An adult brain is about 2% (<u>Leakey, 1994</u>, p. 54) or 3% (<u>Foley, 1995</u>, p 170) of body weight but uses 20% of the body's energy ¹⁶ and the average newborn's brain consumes an amazing 75% of an infant's daily energy needs. ¹⁷ A bigger brain may help solve more problems, but it is extra weight to carry around and requires extra food to keep it functioning. To see which way the assets and liabilities shifted, it is necessary to see how much intelligence in the north actually increased, which we will examine later in this book.

Babies almost anywhere, except possibly in the tropics, must be kept warm to prevent death by hypothermia. Because of their small size (high surface area to mass ratio) they need to conserve heat and minimize the burning of calories. They have many traits that help them do this, which would be useful to adults who migrated north, one of which is baby fat. Babies have extra fat under their skin evenly distributed over their bodies which stores energy for their rapidly-growing brains, provides some protection against bumps, and keeps them warm. Other neotenic traits useful in colder climates include an epicanthic fold and traits that reduce surface area, ¹⁸ e.g., a flatter face, small hands and feet (<u>Baker, 1974</u>, p. 307), and a thick trunk, all of which are characteristic of northern Asian populations. This suggests that neoteny could be strongly selected for in a population that migrated into a colder climate.

The most neotenic people on the planet are the East Asians and the most neotenic East Asians are the Koreans, who have the most subcutaneous fat, ¹⁹ followed closely by the Han Chinese and other Mongoloids. ²⁰ Just like babies, East Asians have a round head with a flat chubby face, a small nose, short arms and legs, very little body hair, and extra fat evenly distributed over their entire body. Their "third eyelid" (epicanthic fold) and smaller eye sockets help to protect their eyes from the cold. Clearly, these people evolved to live in a cold climate and, since they became so neotenic, that suggests that neoteny was advantageous in that climate. (Chap. 4, Rule 11).

The European lineage became neotenic as well, but much less so than the Asians. Europeans have longer heads, more hair, longer limbs, and the fat under their skin is less uniformly distributed; instead, it accumulates in unsightly bunches around the abdomen, hips, and thighs, providing a good source of income for the weight-loss industry. Most Africans are still less neotenic, but their lineage is more complicated, giving different African populations some very different traits. (Chap. 26).

Chapter 7

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FOOTNOTES

1. Sexual and physical maturation rates are controlled by only a few Hox (homeobox) genes, genes that turn on or off a host of other genes, in this case genes that regulate physical and sexual maturation, so genetically changing the physical or sexual maturation rate does not necessarily require a large number of mutations in order to occur. Neoteny may "work" by halting the additive process (Chap. 4, Rule 1) that occurs in the fetus. Back

2. From (*Naturwissenschaften*, Vol. 14, 1926, pp. 447-448). Figure 6-1 shows common chimpanzees. The differences are less striking for the more-neotenic bonobo chimpanzee. When the smaller baby chimp grew into the larger adult chimp, its skull cap did not enlarge; unlike humans, the chimp brain stops growing at a much earlier age. The difference between the young and adult orangutan is so great that an early naturalist (Saint-Hilaire, in 1836)

thought they were not even in the same genus. Back

3. The protruding jaw appears by the age of sexual maturity, when males fight for access to females. The absence of this menacing jaw in the baby makes it appear harmless and arouses caring emotions. <u>Back</u>

4. "If I wished to express the basic principle of my ideas in a somewhat strongly worded sentence, I would say that man, in his bodily development, is a primate fetus that has become sexually mature." <u>Bolk, L.; Bolk, 1926</u>). <u>Back</u>

5. "Young monkeys and young negroes, however, are not prognathous like their parents, but become so as they grow older." (<u>Cartwright, 1857</u>, p. 45). <u>Back</u>

6. Baker (<u>1974</u>, p. 312) implies that wide-apart eyes are neotenic, though bonobos are neotenic and have eyes close together. (id, p. 113). <u>Back</u>

7. "Negro children and white children are alike at birth in one remarkable particular – they are both born *white*, … " (<u>Cartwright, 1857</u>, p. 45). "Apes when new born have very much lighter skins than adults; additional pigment becomes deposited during later development, and the same is true of the Negro. In this respect the white races are neotenous, for they retain the embryonic conditions of other forms. (<u>de Beer, 1951</u>, pp. 58-59). <u>Back</u>

8. "It is likely, then, that the common ancestor of humans and chimpanzees had light skin covered with dark hair, ..." (Jablonski, 2006, p. 26). "Skin color of the infant langur, baboon, and macaque is pink, in contrast to the almost black skin of the older infant or adult." (Frost, P. "Parental Selection, Human Hairlessness, and Skin Color," *Evo and Proud*, Apr. 1, 2007). Back

9. (<u>Rogers, 2004</u>). "[Chimpanzees] are extraordinarily variable in skin color, running from a grayish pink that is almost white to black, with several yellowish shades between. Their color range is essentially the same as in the races of man ..." (<u>Coon, 1962</u>, p. 145). <u>Back</u>

10. Epicanthic folds develop in fetuses of all races during the third to sixth month but disappear in Caucasians. Children with Down syndrome also have them. (*Wikipedia*, "Down Syndrome"). Back

11. At birth, a baby's brain is 24% of its adult weight, while its body is only 5% of its adult weight (<u>Coon, 1962</u>, p. 78). <u>Back</u>

12. A "weak" correlation is less than 0.4, a "moderate" correlation is between 0.4 and 0.6, and a "strong" correlation is greater than 0.6. The correlation squared times 100 gives the percentage explained, e.g., a correlation of 0.6 explains 36% of the effect. <u>Back</u>

13. (<u>Witelson, 2006</u>; McDaniel, 2005). <u>Back</u>

14. Genius today is often associated with youthfulness. (Charlton, 2006). Back

15. "<u>Grey matter is the gas-hog of our bodies</u>." (Sloan, C.P., *National Geographic*, Nov., 2006, p. 159). <u>Back</u>

16. Compared to 9% for a chimpanzee. (Arsuaga, 2001, p. 38). Back

17. The acquisition and loss of traits, e.g., brain size, tails, ability to run, behavior (agriculture, seasonal migrations), and reproductive strategy (number, size, and frequency of offspring), can often be best explained in terms of energy expended and energy acquired. (Foley, 1995, p. 171, 176). Back

18. A sphere has the least amount of surface area (for the volume contained) of any threedimensional shape, hence a rounder head retains more heat. Minimizing projections, such as the arms, legs, fingers, and toes, makes a body more spherical and therefore helps to retain heat. (<u>Allen's Rule</u>). <u>Back</u>

19. From 1910 to 1945, the Japanese used completely naked Korean women, well-insulated by subcutaneous fat, as pearl divers. (<u>Rennie, 1962</u>). <u>Back</u>

20. "...the yellow races are nearest to the infantile condition." Havelock Ellis. Han Chinese males lack hair on their arms, legs, and chest and also lack beards, having only head hair and some auxiliary and pubic hair. They don't even have "peach fuzz" on the arms and legs. Most pure Han women have only sparse hair on the mons pubis. Koreans are nearly as hairless. Back

Chapter 7 - Genetic Distance

Populations that are reproductively isolated, usually because they are separated geographically, gradually become genetically different. The principal reason for the differences is that the selectors in different environments (or the selection pressures of those selectors) are different. Also, if a portion of a population moves to a different territory, or becomes isolated from the rest of the population due to waters rising, rivers shifting, glaciers and deserts forming, or other reasons and, if some of those isolated people just happen to be a little genetically different from the remainder of the population, which is probable, the entire isolated population is likely to become even more genetically different, which is called the "Founder Effect." Chance mutations may also arise in one population that do not arise in another population, or only one of the populations may interbreed with a third population.

"Genetic distance" is a way of numerically expressing how genetically different two individuals or two populations are. As explained in Chapter 3, everyone has the same genes, e.g., we all have a gene for eye color, but each gene comes in an average of 14 different A-C-G-T sequences, called "alleles." To determine the genetic distance between two individuals, the number of alleles that differ between them can be counted; ¹ for populations, the number of people in each population who have a particular allele is counted (preferably using a large number of alleles to increase precision), and the results are expressed mathematically. ² If the other person is your identical twin, all of your alleles and your twin's alleles will be the same and the genetic distance between you will be zero. ³ If the other person is your child, at least half will be the same. (If his other parent has some of the same alleles that you do, more than half will be the same.) If a mating is incestuous, the

number of the child's alleles that are the same as a parent's would be higher than if the parents were unrelated. The number of alleles in common is lower between cousins, still lower for people of your own ethny and race, ⁴ still lower for different races and, for different species, it continues to decrease as the age of the LCA between humans and the other species increases.

If we plot your genetic distance (assuming you are Caucasian) from all the other people on the planet, it might look something like Figure 7-1. Figure 7-1 shows, very approximately, how genetic distance increases quickly as one moves away from one's close relatives. Then a large increase in genetic distance occurs between you and Asians and a much larger increase between you and Africans. ⁵

It is not yet possible to completely analyze the DNA of every person on the planet $\frac{6}{2}$ and compare any person's DNA to any other person's DNA in order to determine how many alleles are identical, but there are some shortcuts that give approximately the same results. The genetic distance (the "variance," F_{ST}) between people and populations can



be calculated from DNA sampling. ⁷ By collecting DNA samples from individuals around

the world and counting SNPs, scientists have determined the genetic distances between various populations, ethnies, races, and species. The numbers at the top of Figure 7-2 (<u>Cavalli-Sforza, 1991</u>) give the percentage genetic distances (multiplied by 10,000) between various human populations using a modified Nei method of calculating genetic distance.





As to the three major races, Figure 7-2 shows that s-S Africans and everyone else are the most unrelated, and North Eurasians and Southeast Asians are the second most unrelated. Note that "Caucasoids" includes North Africans (i.e., around the Mediterranean Sea), S.W. Asians (Middle East), and Indians (from India). Also note that N.E. Asians and American Indians are more closely related to Caucasians than they are to Southeast Asians.



Figure 7-3

Figure 7-3 is a graph that positions 42 human populations along two axes that measure differences between two highly variable sections of mtDNA. (Cavalli-Sforza, 1994, p. 82). The First PC (Principal Component) and Second PC divide the data into the two halves that have the greatest and second greatest variance, respectively (Wikipedia "Principal Components Analysis"); Africans are on one side of the two PC axes and everyone else is on the other side because Africans differ genetically the most from everyone else. Since some populations (Eurasians) have evolved more than others (Africans), the point where the First and Second PC axes cross is not necessarily at or close to the LCA for the populations on the graph.

Mongol: Nomadic people of Mongolia.

Tibetan: People of Tibet.

Eskimo: People inhabiting the Arctic coastal regions of North America,

Greenland, and northeast Siberia.

Na-Dene: North American Indian language.

Uralic: Language family that comprises the Finno-Uric and Samoyedic

subfamilies [named after the Ural Mountains]. North Turkic: Turkey.

Ainu: A separate indigenous people that live in Japan. [See p. 206].

South Dravidian: A language spoken by peoples in southern India and

northern Sri Lanka.

Chukchi: Northeast Siberia.

Lapp: Nomadic herding people in northern Scandinavian countries.

Basque: A people inhabiting north central Spain [said to be the most

homogeneous racial group found by Cavalli-Sforza, early

Europeans, with their own unique language].



Figure 7-4

As you can see in Figure 7-3, Europeans are in the top right corner, Africans are in the lower right corner, ⁸ and Asians are on the left side. The Nguni, Sotho, and Tsonga are South Africans, the Blaka (Figure 7-4) are pygmies in Niger, and the Mbuti are pygmies in the NE Congo. Note that the center of the graph is relatively empty, even though it represents the average of these measurements. This is because, although all these populations were once a single population, they have been becoming increasingly genetically different, on their way to becoming different species.

Figure 7-5 is a map from the same work and shows populations grouped according to genetic



Figure 7-5

similarity. Africans are yellow, Caucasoids green, Mongoloids dark blue, and Australian Aborigines brownish-red. There is a Caucasoid component in the people of northern Africa, which does not show up well in the map. The map clearly shows that people who are genetically similar occupy the same geographical area, just as one would expect; ⁹ in other words, race is real.

Sardinian: Sardinia, an island west of Italy.

Thai: A people of Thailand.

Polynesian: A division of Oceania including scattered islands of the central

and southern Pacific Ocean roughly between New Zealand, Hawaii, and Easter Island.

Melanesian: Islands northeast of Australia and south of the equator. Khmer: A people of Cambodia.

Micronesian: A division of Oceania in the western Pacific Ocean comprising

islands east of the Philippines and north of the equator.

Malaysian: Southern Malay Peninsula and the northern part of the island of

Borneo

Berber: North Africa.

San: Nomadic hunting people of southwest Africa.

Mbuti: African pygmies.

Bantu: linguistically related central and southern Africans. Nilo-Saharan: linguistically related sub-Saharan Africans from Nigeria to Kenya

regions of North America, Greenland and northeast Siberia.

Figure 7-6 compares the genetic distance (numbers at the bottom) between African (blue in A and B and green in C) and European populations (red in A and B and yellow in C). ¹⁰ The vertical black lines at the top are the means and the horizontal black lines at the top are the standard deviations. In Figure 7-6, note that when alleles that are common in Africa are compared to alleles that are common in Europe

(graph C) the two populations can be separated with close to 100% accuracy. The means are farther apart and the genetic distances are greater in graph C. In graphs A and B the means are close together, the genetic distances are smaller, and there is much more overlapping because far fewer alleles that are unique to those populations were used in the comparison.

Returning to numerical genetic distances, Cavalli-Sforza's team (1994) compiled tables that give the genetic distance separating 2,000 different racial groups from each other. Table 7-1 gives the genetic distance (using the F_{ST} method of calculation) between a few selected populations in percent (multiplied by 10,000), e.g., Bantu-Australian aborigine $F_{ST} = 0.3272\%$. ¹¹



	Ban	F Af	W Af	San	Ind	N.F.	Kor	S.C.	Fng	Δus
Bantu	0			Curr	mai			0.0.	g.	, 1001
E. Africa	658	0								
W. Africa	188	697	0							
San	94	776	885	0						
India	2202	1078	1748	1246	0					
Near East	1779	709	1454	880	229	0				
Korea	2668	1475	1807	1950	681	933	0			
S. China	2963	1664	1958	2231	847	983	498	0		
English	2288	1163	1487	1197	280	236	982	1152	0	
Australia	3272	2131	2694	2705	1176	1408	850	1081	1534	0

Table 7-1

Note that, of the Africans, the Bantu and San, who live in South Africa, are genetically close. The East Africans, who live in the Horn of Africa, where the Eurasians entered Africa, are closer to non-Africans than any other Africans and are the population that is the most genetically distant from other Africans. Also note that the most unrelated people are the Bantu and the Australian aborigines.

Once numerical genetic distance data had been collected, it became possible to calculate other results, some of which are quite startling. For example, we all assume that a mother is more closely related to her own child than she is to anyone else's child, but that is not always true. For most Asians, and a large (but less than half) percentage of white Europeans, a mulatto child with a Bantu African would be less closely related to them than a randomly-selected child of their own race! ¹² The explanation for that strange result is simple – the isolation of the Bantus from the Eurasians has resulted in the two populations becoming so genetically different from each other that, because Eurasians have interbred among themselves for at least tens of thousands of years, the neighbor's child has more alleles in common with the Eurasian than the Eurasian does to his or her own mulatto child. ¹³

Compared to all the human genetic variation in the world, people in the same ethnic group can be almost as related to each other as a parent is to his child. (<u>Salter, 2003</u>, pp. 42, 67, 124, 327, 329). "... in most situations individuals have a larger genetic stake in their ethnic groups than in their families." (<u>Salter, 2003</u>, p. 37). Thus, racism is in everyone's genetic interest.

Genetic distances are useful in trying to figure out man's genetic tree, which shows how people evolved into their present populations. The less the genetic distance between populations, the more recently they were a single population or, at least, the more recently they interbred. A theory of human origins has to be consistent with, at least approximately, the genetic distances between different populations.

The concept of genetic distance has, however, been distorted by the egalitarians to show that everyone is genetically about the same. ¹⁴ For example, in his January, 2000, State of the Union address, then President Bill Clinton stated, "We are all, regardless of race, 99.9 percent the same." The implication is that the remaining 0.1% will produce only trivial differences and can be ignored, but "one-tenth of 1 percent of 3 billion is a heck of a large number -- 3 million nucleotide differences between two random genomes." (Anthropologist John Hawks). ¹⁵ On the other hand, ...

"We share 98.4 percent of our genes with chimpanzees, 95 percent with dogs, and 74 percent with microscopic roundworms. Only one chromosome determines if one is born male or female. There is no discernible difference in the DNA of a wolf and a Labrador retriever, [¹⁶] yet their inbred behavioral differences are immense. [¹⁷] Clearly, what's meaningful is which genes differ and how they are patterned, not the percent of genes. A tiny number of genes can translate into huge functional differences." ¹⁸

The fact that the percentage difference between populations is small is not the whole story. Although some genes code for very specific traits that are not even easily detected, other genes, such as *Hox* genes, $\frac{19}{2}$ can turn on or off large collections of genes and thereby have an immense effect on an individual's traits. (Zimmer, 1996).

Another distortion that has been repeated many times in the media is known as "Lewontin's Fallacy." (Edwards, 2003; Sarich, 2004, p. 169). Richard Lewontin stated, "nearly 85 per cent of humanity's genetic diversity occurs among individuals within a single population." ²⁰ "In other words, two individuals are different because they are individuals, not because they belong to different races." ²¹ Therefore, the egalitarians gleefully concluded (e.g., <u>Zimmer, 2001</u>, p. 81), that it is meaningless to classify people in races – biologically, there is no such thing as "race." ²² Unfortunately, Lewontin made a statistical error because he was comparing differences in the alleles of single genes instead of groups of genes that are unique to each race. If you are told that Al has dark skin, Bob has very curly hair, Carl has short hair, Dave has black hair, Earl has long arms, Frank has a protruding jaw, Garth has a broad flat nose, and Harvey has small ears, you could not correctly identity the race of those people because those traits occasionally appear in people of all races. ²³ Lewontin and the egalitarians

would yell, "See, there is no such thing as race!" But suppose you are also told that those eight people are all the same person. Now you can easily correctly identify his race because having a collection of certain traits, or the alleles that code for those traits, is how we identify a race. (Figure 7-5). Some people become immortal for their discoveries, others for their mistakes. ²⁴



Similarities between the original languages spoken in different geographical areas coincide well with genetic similarities, ²⁵ suggesting common ancestral populations. Figure 7-7 presents the results of an analysis of language similarities. In Figure 7-7, the small solid round circles are the locations of the Y chromosomes of populations relative to the two principal coordinate axes and the dotted ellipses enclose populations with similar languages. Note that language similarities coincide well (but not perfectly) with genetic similarities, as one would expect. The "Khoisan" cluster is the Bushmen and Hottentots (pp. 224-226), the "Niger-Congo" cluster is the western s-S Africans, the "Afro-Asiatic" cluster is the North Africans, Middle Easterners, and Sephardic and Ashkenazic Jews, and the "Indo-European" cluster is the people from India, the Australian aborigines, and the Europeans.

Chapter 8

Table of Contents

FOOTNOTES

1. More accurately, the number of differences in the A-C-G-T bases on each allele (the number of SNPs) is counted. If the bases are different, but synonymous (see Appendix), that is still a SNP. However, SNPs are not the whole story. One SNP may make its allele 100% compatible with all the other alleles, while another SNP may make its allele incompatible; counting SNPs does not capture that information, which is relevant to the concept of "genetic distance." Besides counting SNPs, the number of generations to an LCA could be counted; if you are Caucasian, there are more generations between your LCA with an African than between your LCA with another Caucasian. The number of paths of descent per generation (preferably weighted by relatedness) from you to your LCA with another person also provides an indication of genetic distance; if the other person is the same race as you, that number will be greater than 1, its magnitude increasing with the amount of inbreeding. All races are inbred, and inbreeding reduces the number of ancestors because more ancestors are the same individual, thereby increasing the number of paths of descent. (Sailer, S., "Pedigree Collapse' Due to Inbreeding," *iSteve Blog*, March 17, 2006). Back

2. The numerical result will depend upon the equations used, but the same relationships are obtained for the major methods. Back

3. Although identical twins have the same alleles, their environment may have altered the expression of those alleles in a way that is heritable so, in that case, one might say that they differ genetically. Also, a process called "random monoallelic expression" causes individual cells to switch off an allele received from one of the parents. (Gimelbrant, 2007). Back

4. "[O]n average, people are as closely related to other members of their subracial "ethnic" group (e.g., Japanese or Italian) versus the rest of the world as they are related to their grandchildren or nephews and nieces versus the rest of their ethnic group." (Sailer, 2007a). A race is "a partly inbred extended family." (Sailer, 2002). A race is "a group of persons related by common descent or heredity." (Webster's College Dictionary, Random House). Back

5. Within the last 60,000 yrs, the genetic distance between the races has increased due to their more rapid evolution in different directions. (Hawks, 2007; Barreiro, 2008). Back

6. The complete genomes of 2 Caucasians, 1 Asian, and 1 African (Nigerian) have now been sequenced, but only the two Caucasian sequences have been released to the public. ("Illumina unveils genome sequence of African male," *Nature News*, Feb. 13, 2008). Back

7. (<u>Salter, 2003</u>; the mathematics of doing this will be omitted). Genetic distance data can be mitochondrial or autosomal; it is not always clear which are being used, but the mitochondrial values are much higher. (John Goodwin, "<u>The Race FAQ</u>"). <u>Back</u>

8. The genetic difference between Africans and Europeans is so distinct that the proportion of European admixture in African Americans can be determined with a margin of error of only 0.02. (<u>Destro-Bisol</u>, 1999). <u>Back</u>

9. This is to be expected because people in the same geographical area face the same selectors and share alleles due to interbreeding. "Racial categorizations have never been based on skin pigment, but on indigenous continent of origin." (Risch, 2002). Back 10. (Witherspoon, 2007; graph A compares individual Africans to individual Europeans, graph B compares each individual to the centroid of its population, and graph C compares alleles common in Africa to alleles common in Europe; also see "Italians," excerpted from Rosenberg, 2005). Back

11. Taken from (<u>Salter, 2003</u>, p. 64, based on Cavalli-Sforza, 1994). Comparisons can be made between populations, such as that the South Chinese are about six times as closely related to the Koreans as they are to the Bantu ($2963/498 = \sim 6$). <u>Back</u>

12. The statement will therefore be true of any population where the genetic distance, " F_{ST} ," between it and Bantus is greater than 0.25%; even if the " F_{ST} " of the population is less than 0.25%, the statement will still be true of a percentage of the population, which will increase with

its " F_{ST} " to the Bantus. (<u>Salter, 2003</u>, pp. 38, 45, 46, 64). Relatedness, $r_{st} = (\frac{1}{2})^n$, where "n" is the number of generations between two related people. (<u>Salter, 2003</u>, p. 38). For a parent and his child, n=1 so $r = \frac{1}{2}$. Kinship, $f = \frac{r}{2}$ (Salter, p. 45), so your kinship to your child is $\frac{1}{4}$. The local kinship coefficient, fo = $F_{ST} + (1 - F_{ST})[-1/(2N - 1)]$, where " F_{ST} " is the genetic distance or variance and "N" is the number of people in the population. (Salter, p. 46). If the population, N, is large, then -1/(2N - 1) will be close to zero and fo $\approx F_{ST}$. Back

13. In fact, people tend to choose mates who look like their parent of the opposite sex, thereby ensuring that their children will have more of their alleles and that favorable traits will be passed on to their own children. (Bereczkei, 2004). Back

14. Craig Ventor, the "star" of the Human Genome Project, reported the 99.9% figure in 2001, but now admits that it is wrong and the true figure is over 7 times greater. (*World Science*, "Finding said to show 'race isn't real' scrapped," Sept. 3, 2007). Back

15. (Tang. 2005) showed that self-described race coincides almost perfectly with genetically-identified race. (Korbel, 2007) found that rearrangement of large chunks of DNA made the differences 2 to 5 times larger than the widely-quoted 0.1%. In addition, large strings of DNA are duplicated, missing, or inverted, and that may be even more important for explaining racial differences. (Lucito, 2003; Eichler, 2006; Nguyen, 2006; Redon, 2006). When those differences are included, people can differ genetically by at least 12%. (Redon, 2006; Komura, 2006). In addition to racial differences in alleles, there are also racial differences in the expression of those alleles. (Spielman, 2007). "The genetic differences between continentally defined groups are sufficiently large that one can accurately predict ancestral continent of origin using only a minute, randomly selected fraction of the genetic variation present in the human genome." (Allocco, 2007; also see Newsome, M., "The Inconvenient Science of Racial DNA Profiling," Wired, Oct. 5, 2007). Back

16. Breeds of dogs are vastly more different in appearance than races of people, yet they are so genetically similar that until 2003 geneticists could not distinguish between them using DNA. (Sarich, 2004, p. 185). Back

17. Since behavioral changes drive genetic changes (<u>Chap. 4, Rule 12</u>), one can expect behavior to be vital to reproductive success and therefore to be largely genetically controlled. <u>Back</u>

18. Entine, J., "Demystifying Genetics: What Sydney Can Teach Us About Science," San Francisco Examiner, Sept. 20, 2000). ("Tiny genetic differences have huge consequences," PHYSORG.com, Jan. 19, 2008). Back

19. <u>Hox genes</u> are highly conserved, i.e., they don't mutate much. "It is mind-boggling to realize that, for all intents and purposes, many differences between a fruit fly and a human may lie pretty much in where and when certain homeobox genes are activated." (Schwartz, 1999, p. 13). "Geneticists believe that just one regulatory gene, the testis determining factor on the Y chromosome, is responsible for all sex differences." (Salter, 2003, p. 90). Back

20. "Evidence from the analysis of genetics (e.g., DNA) indicates that most physical variation, about 94%, lies within so-called racial groups. Conventional geographic 'racial' groupings differ from one another only in about 6% of their genes." American Anthropological Association Statement on "Race." Similarly, "Greater mtDNA differences appeared within the single breeds of Doberman pinscher or poodle than between dogs and wolves." (The 85% truism, Evo and Proud, Jan. 4, 2008). Back

21. In a 1972 paper, "The apportionment of human diversity," and again in a 1974 book, The Genetic Basis of Evolutionary Change. Back

22. The popular science magazine, *Discover*, published (Jan., 2004, No. 25) an article, "Our Genes Prove It: We Are Family," which asserted "Humans are all so closely related that our entire population shows less genetic diversity than that of a small group of chimpanzees," a version of Lewontin's Fallacy. Also see (Jared Diamond, "<u>Race Without Color</u>," *Discover*, Nov., 1994). *New Scientist* (Buchanan, M., "<u>Are we born prejudiced?</u>" Mar. 17-23, 2007) informs us that "... what we recognize as racial markers are biologically next to meaningless," and *Scientific American* (Dec. 2003), published "<u>Does Race Exist?</u>" which denied that genetic information can be used to distinguish human groups that have a common heritage and assign individuals to those groups, even though for about \$100 you can have a DNA test done that will do exactly that, though they will tell you it is the "geographical area" your ancestors came from, not your racial makeup; the origin of Europeans can sometimes be determined from DNA to within a few hundred kilometers. None of these magazines apologized to their readers for misleading them. "Repeatable, independent academic research has established that with 100 genetic markers, it is possible to sort people whose known ancestors are from Africa, Europe, Asia, or the Americas with almost 100 percent accuracy." (<u>Sarich, 2004</u>, p. 21; also, Witherspoon, 2007). Other scientists determined the continent people came with "perfect intercontinental differentiation" using only 14 SNPs; only 50 SNPs were needed to assign people to 9 different populations. (<u>Paschou, 2007</u>). Indeed, in some cases, "<u>DNA could reveal your surname</u>" and, if you are European, your geographic origin "within a few hundred kilometers" of where you were born. (<u>Novembre, 2008 Back</u>

23. See (<u>Witherspoon, 2001</u>, 2007) for a detailed explanation of Lewontin's Fallacy. Actually, for some traits, such as Gm blood type, you could fairly accurately determine a person's race. A person who is fb1b3 is almost certainly white or who is ab1b3 is almost certainly s-S African. <u>Back</u>

24. To be fair, Lewontin has made important contributions to biology, e.g., the mathematics of population genetics. On the other hand, he has also denied that humans have genetic interests in their ethnies, again revealing his allegiance to politics over science. (Dobzhansky et al., ed., *Evolutionary Biology*, 1972, Vol. 6., pp. 381-98). Here is another example of Lewontin's Fallacy by a group that should know better: "Evidence from the analysis of genetics (e.g., DNA) indicates that most physical variation, about 94%, lies within so-called racial groups. Conventional geographic "racial" groupings differ from one another only in about 6% of their genes. This means that there is greater variation

within "racial" groups than between them." American Anthropological Association Statement on "Race" (May 17, 1998). Back

25. (Poloni, 1997). "Mex" is Mexican Indians, "Pol" is Polynesians, "Bas" is Basque, and "Chi" is Chinese. Lack of data prevented inclusion of much of Asia in the graph. Back

Chapter 8 - Evolutionary Psychology 1

"Blood is thicker than water."²

Heinrich der Glichezaere

Where you end up depends upon where you start. In other words, the conclusions reached by correct reasoning are determined by one's premises. Certainly, someone whose premise is that all people are genetically equal will reach vastly different conclusions than a person who believes there are significant genetic differences. In this chapter, the premise, which is supported by evolution (Chap. 4), selection (Chap. 5), and genetic differences (Chap. 7), is that the alleles, and therefore the traits, that are passed on to and survive in future generations, are those that code for traits that aid in putting those alleles into future generations. That is so obvious, it may seem like a tautology, but it is not. The successful alleles could be those that code for goodness, love, and universal brotherhood, but they are not, because alleles get into the next generation not as a reward for virtue, but as a result of the reproductive success that results from the traits they code for. That premise has profound implications, as the remainder of this book will demonstrate.

Not only are there genetic differences between individuals but, as we saw in the previous chapter, entire populations are, on average, genetically different from other populations. In this chapter, we answer the questions, "Are people able to, at least roughly, discern the genetic distance between themselves and others, i.e., whether others carry more of the same alleles that they have?" and, "Do they act on that information to further their own reproductive success?" In other words, are our alleles influencing our behavior to make us favor our own alleles? ³ In this chapter, we examine the evolutionary rationality of inherited behavior; we do not consider learned behavior, i.e., "culture."

Shared Alleles

Genes are the unit of inheritance. Other than women nursing infants and organ transplants, we don't pass our flesh on to our descendants, as an amoeba does when it divides into two amoebae. We don't even pass on our traits - you cannot "give" your children your red hair or high IQ. What we pass on is a copy of one of our two blueprints, i.e., half our chromosomes, our gene regulators, and our mtDNA if we are female. Each of our 23 pairs of chromosomes contains the same genes that everyone else has, but we will frequently have alleles of those genes that are not the same as the alleles that many other people have. One half of the father's genes (23 chromosomes) become part of his sperm and one half of the mother's genes (23 chromosomes) become part of her egg, and the corresponding chromosomes pair up again after fertilization. ⁴ Since portions of chromosomes are mixed up in forming the 23 chromosomes for each sperm and for each egg ("cross-over," p. 26), two siblings, other than identical twins, could, theoretically, receive completely different alleles or exactly the same alleles, depending upon luck during crossover and whether the mother and father had no alleles that the other had or had all the same alleles that the other had (both very unlikely). If the parents are 100% heterozygous their two siblings will, on average receive half of the same alleles ⁵ but, since parents are likely to have some of the same alleles, siblings are likely to have more than half their alleles in common.

When the father's copy and the mother's copy pair up in their child, only one allele in each pair may be expressed, or each allele may be partly expressed. But alleles that aren't there cannot be expressed, i.e., you cannot have a heritable trait unless you have the particular alleles that code for that trait. And, even if your child has the alleles for a trait, unless some of his other alleles motivate and enable him to survive and reproduce, all of the alleles in his body die when he does. Conversely, if the child does have alleles that motivate and enable him to reproduce, each parent's alleles in their child have at least a 50% chance of being passed on to the child's progeny. (If he receives the same allele of a gene from both parents, one of those two alleles is certain to be passed on if he has progeny.) Alleles don't "want" to survive

and get passed on. They are, after all, just strings of DNA in a chromosome. But if they code for traits that motivate and enable the individual to pass them on (alleles A in Figure 8-1), they may be passed on; otherwise, they are not passed on (alleles B in Fig. 8-1).

So, as Samuel Butler insightfully put it (*Life and Habit*, 1877, p. 134), "A hen is only an egg's way of making another egg." That is, an individual, with his collection of allele-expressed traits that motivate him to reproduce, can be thought of as his alleles' way of making more of those same alleles (in other individuals). This means that every



living thing must be "selfish," in the sense of placing its own reproductive success first, or it is simply out of the game. A unique collection of alleles in an "unselfish" organism, that makes no effort to achieve reproductive success, lasts only a single generation. To put it more abstractly, a fertilized egg contains a set of instructions that, given the appropriate environment, causes another fertilized egg to be made that contains a copy of at least half of those same instructions.

But alleles have another way of getting a copy of themselves into the next generation of eggs, besides making the egg they are presently in become a reproducing hen (or rooster) that makes more eggs. Since alleles are instructions written in DNA, animals don't need to reproduce the normal way, by putting copies of their DNA into an egg; they are just as reproductively successful if the DNA that is put into the egg is identical to their DNA. Who puts that DNA into the egg is of no biological importance because the next generation is the same either way though, of course, having someone do the putting isn't nearly as much fun. Thus, if animals don't reproduce at all, but instead help others of their species to put the same instructions that they have into the eggs, they are just as reproductively successful as if they themselves put a copy of their own DNA into those eggs.

Social insects, such as honeybees, are a good example of the "helping-othersreproduce-who-have-my-alleles" reproductive strategy, i.e., "altruism." <u>6</u>) The worker bees are females and do not reproduce, but they spend their lives helping the queen, their mother, to reproduce. The resulting siblings carry, on average, three-fourths of the workers' alleles. ⁷ Thus, when the workers die of exhaustion without ever reproducing, they still pass on most their alleles to the next generation through the siblings they fed and cared for, any one of which can be fed royal jelly to turn it into another queen with three-fourths of their alleles.

Here is an amazing discovery about the relatedness of alleles: if a population is isolated and its members breed among themselves, the relatedness among them can rise to as high as 1/2, the same as between parents and their children or between siblings! ⁸ Thus, if that maximum were to be reached, the members of that group could help pass on their unique alleles as much by helping another member of their group as they could by helping their own brother or sister. Indeed, if another member of their group is better positioned to reproduce (younger, healthier, better traits), a member could increase his reproductive success <u>more</u> by helping him than by

helping his own siblings. ⁹ Every person therefore has a genetic interest in the welfare of his own group, ethny, and race, and favoring them over others is rational and adaptive. ¹⁰

Alleles that code for altruistic behavior are more advantageous in populations where individuals are able to identify and help those who carry their alleles, e.g., where relatives don't scatter, individuals differ genetically in their appearance, odor, or behavior (so that those having similar traits can be identified), and pair bonding reduces promiscuity (so that men know who their children are). Racial differences in altruism have not yet been quantified, ¹¹ but northern populations, which pair bond more and are more "K" orientated reproductively, should be more genetically altruistic.

Like all traits, there is an optimal amount of altruism. Too little or too much means resources are not being used to maximize reproductive success and, as with other traits, populations will tend to evolve towards the optimal amount of altruism. A population that is reproductively isolated, and therefore inbreed and less diverse, will have a higher optimal amount of altruism because the likelihood that others carry the same alleles is higher. If two reproductively isolated populations, one high in altruism and the other low in altruism, are intermixed, they will each continue expressing their differing degrees of altruism, the low altruism population taking advantage of the generosity of the high altruism population. This is the situation that now exists in the multicultural western nations, where genetically different immigrants from the warmer climates, who are less altruistic, have been allowed to move into northern wealthier nations whose populations are genetically closely related and who have a higher optimal amount of altruism.

Now that you know the behavior predicted by the logic of our genes, let's see if real people actually behave that way. Altruism is most commonly seen in animals that live in inbreed groups, such as humans, especially if they care for their young. ¹² We make our greatest sacrifices for our children ¹³) because, unless we have an identical twin, our children carry more of our alleles than any of our other relatives (your parents may carry about the same number as your children but, since they are older, they may be less likely to reproduce and less in need). Your child has at least half of your alleles, ¹⁴ so if you help him survive (so that he can reproduce), you are helping at least half of your alleles to survive and, hopefully, make you a happy grandparent. The more related you are to another person, the greater the number of your alleles he is likely to carry, and the more your sacrifice for him increases your fitness, your likelihood of reproductive success. ¹⁵ Alleles in common, and therefore altruism, decreases with increasing genetic distance, i.e., from blood family members to blood relatives to ethny to race to species to genus, etc. ¹⁶ If you have a will and your wealth goes mostly to your relatives in approximately the order they are related to you, then you behave as predicted.

If you have ever been to a funeral, you have probably observed that the amount of grief that you and other mourners feel is proportional to how closely you and they are related to the deceased. Indeed, that is so obvious and normal that people would be puzzled if it were not so. Grandparents grieve more for their daughter's children than their son's children, because they are more certain they are related (Littlefield, 1986), i.e., their son's wife may have cheated on him. And identical twins grieve more for their dead co-twin than do fraternal twins, who sharer fewer alleles. (Rushton, 2005a; Segal, 2002). In general, people grieve more for someone who has more of his alleles (e.g., a child of the same race), as that is a greater genetic loss. ¹⁷

Unrelated people living together are more likely to kill each other than are related people. (<u>Daly, 1988</u>). Children in the U.S. are about 100 times as likely to be abused or murdered by a parent if one of the parents is a stepparent. (<u>Schnitzer, 2005; Daly, 1988</u>). We care more about our own children than the children of strangers, we practice nepotism, our charity is greater when we give to our own ethny, and we even care more about how we treat gorillas, chimpanzees, and orangutans than we do about mice, which aren't as closely related.

A man will help his sister's children more than his brother's children because his brother's wife may have cuckolded him, but he knows his sister's children are related to him and carry his alleles. ¹⁸ For the same reason, we help our mother's sister's children more than our other cousins (Jeon, 2007) and maternal grandparents are more willing to travel to see their grandchildren than paternal grandparents. (Pollet, 2007). "Blood is thicker than water" because our alleles are pulling the strings, and those persons who did not have alleles pulling their strings to induce them to pass on their alleles have long since departed without progeny. ¹⁹

And how do we know how closely related another person is to us? It was only recently in man's history that he kept records of who his relatives were, but there are two methods that can be, and are, used, even by animals: (1) Location – if it is in your nest, it is probably yours. That is why, when cowbirds lay their eggs in the nests of other species, the non-parents feed them even when the rapidly growing cowbird chicks push their own chicks out onto the ground. (2) Traits – the more it looks like you, smells like you, and behaves like you, the more of your alleles it is likely to have. Although humans do smell and behave differently, appearance is more telling. (Rushton, 2005b). A woman knows for certain who her children are, but until DNA analysis came along, a man could never be sure. That is why the first words a new mother says to her mate are, "He looks just like you." ²⁰ She is reassuring him that he is, indeed, the father, so that he will make sacrifices that will enhance her baby's chances of surviving.

Amazingly, people pick not only spouses (<u>Bereczkei, 2008</u>) and friends (<u>Rushton, 1989</u>) who have similar traits, and are therefore more genetically similar, but even pick pets that look similar to themselves. ²¹ And the more heritable a trait is, the more it is used to determine how closely related someone is. (<u>Rushton, 2005a</u>).

In other words, we are attracted to our own traits in others. ²² We do not have to be consciously aware that we are doing this because our alleles provide us with stimulation to the pleasure centers of our brain if we do it. All we have to do is "act normally" and not consciously resist our desire for that pleasure. ²³ Even though we try to treat all our children equally, it is hard to resist favoring those who are most similar to us.

And how could it be otherwise? People who favor carriers of dissimilar alleles over carriers of similar alleles are killing off their own alleles. Before a population can be moral, creative, productive, or anything else, it must first survive and pass on its alleles.

Inter-Ethny Dynamics

Now let us apply the findings of evolutionary psychology to the behavior between ethnies, which are groups of people who are not necessarily close relatives, but are more genetically-related to each other than to people in another group. Nations were first formed from ethnies to reduce internal conflicts and to protect and advance interests of the ethny vis-à-vis other ethnies, just as individuals act to advance their individual interests. Thus, "nations" were, at least in part, founded on genetic similarity. ²⁴ Today, egalitarians promote "concept nations" - politically organized groups of mixtures of ethnies who supposedly share common values, e.g., democracy, Western standards of behavior and justice, etc. Concept nations can not be stable (i.e., long lasting), however, because the individuals within them can advance their own genetic interests more by helping individuals of their own ethny than by helping individuals of other ethnies, and that is exactly what they do, for the simple reason that those who do not do that will have less reproductive success and will eventually go extinct: favoring one's own ethny can be avoided only if the nation comprises a single ethny, i.e., multiculturalism is not stable. Moreover, the more inbred (i.e., genetically related) people within the ethnies in a mixed ethny concept nation are, the more ethnocentric they will be and the more they will act to advance the interests of their own ethny vis-à-vis other ethnies.

When ethnies are in the same territory, they will compete for resources and there will be ethnic conflicts, the severity of which will be roughly proportional to their ethnocentrism and the genetic distance between them. ²⁵ A mutually beneficial relationship ("mutualism") between ethnies living in the <u>same</u> territory is not stable because the carrying capacity of all territories is limited and each ethny either expands its own population or eventually goes extinct. ²⁶ Only if ethnies live in <u>different</u> territories and meet only to trade are stable, mutually beneficial relationships between them possible, ²⁷ and that is the only stable relationship between ethnies.

When ethnies live in the same territory, their relationship will not for long be a mutually beneficial one. Instead, one ethny will be a predator and the other its prey, or one ethny will be a parasite and the other its host. In both cases, the prey or host does not consent and therefore neither relationship is stable. In a predator-prey relationship, the predator ethny uses open violence against the prey ethny, e.g., colonialism, slavery, war, local gangs. In a parasite-host relationship, however, open violence by the parasitic ethny is not possible as the host ethny is more numerous and is militarily dominant.²⁸ Moreover, the host ethny regards the parasitic activities of the parasitic ethny as unfair, unethical, immoral, illegal, or criminal, making it necessary for the parasitic ethny to either (1) conceal its parasitism so that the host ethny is not aware that it is being parasitized or (2) incapacitate its host ethny 29 so that even though its host ethny is aware that it is being parasitized, it is unable to free itself. Both require controlling the media 30 and the government - a "covert coup." These tactics are major and expensive operations requiring years to put into place. They are therefore available only to a parasitic ethny that has access to a great deal of wealth. When the host ethny discovers that it is being parasitized, and it is able to free itself, the parasite-host relationship ends, perhaps not pleasantly for those in the parasitic ethny. Neither a predator-prey relationship nor a parasitehost relationship is likely to last indefinitely because conflict is inherent in both relationships. There are two possible resolutions of ethnic conflict over territory: (1) one ethny wins and destroys or expels the other or (2) the ethnies interbreed and become a single ethny. Expelling the parasitic ethny preserves the genetic uniqueness both ethnies; interbreeding destroys it.

Individuals within the parasitic ethny develop a set of values, even a religion, that justifies their parasitism, simply because those individuals who feel their behavior is their right and feel no remorse, shame, or guilt are more effective parasites and are therefore reproductively more successful. Individuals in the parasitic ethny are therefore selected for a lack of empathy, i.e., for sociopathy; such individuals differ genetically from everyone else in that their mirror neurons, which enable people to empathize with the feelings of others, are absent or turned off. The parasitic ethny will rather quickly achieve a high percentage of sociopaths, people who are charismatic, charming, and often well-liked, but whose only goal in life is winning, i.e., defeating those outside their ethny. ³¹ The parasitic ethny cannot become less virulent, as microbial parasites do,³² because they are too invested – genetically, socially, religiously, and culturally – in their parasitic lifestyle and less parasitic individuals within their ethny are selected against even by others in their own ethny, i.e., they do not rise to positions of influence within their ethny. Like all parasites, they are specialized and cannot easily become more generalized. ³³ Host and parasite ethnies are on a collision course and neither can back down.

The evidence that human behavior is so strongly influenced by our genes is disturbing news to the egalitarians, who want man to be brain-washable, ³⁴ so that his behavior can be controlled, which is difficult or impossible if behavior is in our genes, even if the genetic influence is subtle. Now the findings in evolutionary psychology have become even more controversial and abhorrent to the egalitarians because, as we saw in the preceding chapter,

geneticists have found that individuals of the same ethnicity and/or race share more of the same alleles than do others and, as described in the last few paragraphs, sharing alleles can strongly affect the behavior of genetically cohesive groups as well as individuals. To those of us whose minds are not self-censored, this may seem obvious, but it is an unwelcome truth to the egalitarians, for whom everyone must be genetically the same in order to be genetically equal. And not only are people genetically different, but they are genetically programmed to favor others who are genetically similar 35 – horror of horrors, racism is not only genetic, but it serves our most important biological purpose – the survival of our alleles! 36

Section II

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FOOTNOTES

1. Scientists who studied the relationship between behavior towards others and possession of similar alleles were initially called "sociobiologists" (<u>Wilson, 1975</u>), but they were so vilified by the egalitarians that they changed the name of their science to "evolutionary psychology." (<u>Barkow, 1992</u>). Genetic similarity theory (<u>Rushton, 2000a</u>, pp. 69-90), i.e., "birds of a feather flock together," and population genetics are subsets of evolutionary psychology. <u>Back</u>

2. "Verwandschaftsblut wird nicht durch Wasser verdünnt." (c. 1130, "Reynald the Fox") Back

3. The premise of evolutionary psychology is that inherited behavior, like all inherited traits, is present (barring abnormalities) because it enhanced reproductive success. <u>Back</u>

4. Just to be clear, each parent contributes half of his (or her) child's chromosomes and therefore half of the child's alleles, i.e., two alleles for each gene, one from each parent. That does not mean that only half of the child's alleles are identical to that parent's alleles. The more of one parent's alleles that are the same as the other parent's alleles, the more alleles the child will have that are the same as that parent's, if the other parent donated the corresponding allele for that gene that is in the chromosome he did not donate (and the probability that he or she will do so is 1/2). Thus, a person can pass on more of his alleles if he chooses a mate who is genetically more similar to himself and therefore who has more of the same alleles that he has. A child could have 100% of one parent's alleles if one parent has a set A of alleles in one chromosome and a set B in the other chromosome, the other parent has sets B and C, and the child receives set B from one parent and set C from the other. "Sexually interacting couples who produced a child together are more genetically similar than either randomly paired individuals or sexually interacting couples in which the male is excluded from paternity. The two sexually interacting groups combined share about 50% of measured genetic markers [on average], part way between the mothers and their offspring who share 73%, and the randomly generated dyads [couples] who share 43%. Thus these results demonstrate that successful human mating follows lines of genetic similarity." (Rushton, 1988). Back

5. Each child of 100% heterozygous parents will, on average, share half his alleles with each of his siblings because the probability that any allele he receives from one of his parents will be the same allele that his sibling receives from that parent is ½. It is likely, however, that he will have more alleles in common with some siblings than he will have with other siblings. (Patterson, 1999, p. 59). We feel closer to some of our children, siblings, cousins, etc. than to

others, perhaps because we share more than the average number of alleles with them for that relationship. It is theoretically possible to list every person on the planet in order according to the number of alleles they have in common with you. Generally, the order would be family at the top, then relatives, ethny, and race. Some children, siblings, etc. would be tied with other children, siblings, etc., but many would not be. <u>Back</u>

6. (Dawkins, 1976). Altruism as a reproductive strategy requires individuals to recognize in others the same traits that they have (and therefore probably the same alleles that they have, though the same traits may be coded for by different alleles that they do not have) and give those others preferential treatment, thereby assisting in the reproduction of copies of their own alleles. An allele may cause not only a noticeable trait but also a predisposition to be favorable to others having that trait, or an allele may be linked to another allele that causes such a predisposition. (*Wikipedia*, "Green-Beard Effect"; Hamilton, 1964; Dawkins, 1976, p. 89). Altruism, in the sense of putting the values of others ahead of one's own values, is not possible, since every action we take is to achieve values that we have made our own. Back

7. Since "normal" reproduction passes on only $\frac{1}{2}$ of one's alleles, not $\frac{3}{4}$, the worker bees' altruistic strategy is actually more reproductively successful than normal. The reason it is $\frac{3}{4}$ for the workers and not $\frac{1}{2}$ is that when a queen lays an egg she can fertilize it, so that it has a full set of 32 chromosomes and become a worker, or she can leave it unfertilized so that it has only 16 chromosomes and becoming a drone. The drone then makes millions of genetically identical sperm, each with the same 16 chromosomes, and mates with a queen from another hive. When that queen uses that sperm to lay a batch of fertilized eggs, all the resulting workers in that batch will receive identical 16 chromosomes from that drone plus 16 chromosomes from their queen, which are only $\frac{1}{2}$ identical (due to crossover). So, of the 32 chromosomes in the eggs that will become workers, three fourths are identical ($\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$), a strong motivation for their altruistic behavior towards siblings. Even some plants recognize their relatives and act to benefit them. (Yoon, C.K., "Loyal To Its Roots," *New York Times*, June 10, 2008). Back

8. (<u>Hamilton, 1975</u>; cited in Salter, 2003, p. 54). "<u>Relatedness</u>," is not the same as "<u>kinship</u>" or "<u>F_{ST} genetic distance</u>." (See <u>Chap. 12</u>, <u>FN 12</u>). Also, since kinship is $\frac{1}{2}$ of relatedness, the kinship between two random persons in the same ethnic group can be greater than the kinship between one of those persons and his grandparent or grandchild. <u>Back</u>

9. Not only that, but if a person is altruistic, then related people are also likely to have his altruistic alleles and may well reciprocate any sacrifices he makes for them. (Gardner, 2007). Back

10. In other words, Mother Nature is a racist! This is bad news for egalitarians but the blow can be softened by seeing genetically-based altruism as creating close, caring, and unselfish relationships with the genetically similar, instead of as hostility towards the genetically distant. Back

11. (<u>Nedelcu, 2006</u>). The genes responsible for altruism are just beginning to be identified. (<u>Knafo, 2007</u>). <u>Back</u>

12. Even microbes, e.g., bacteria, act cooperatively according to relatedness. (West, 2007; Griffin, 2004). Marmoset fraternal twins can be chimeras, each twin having some alleles of the other. Thus, when a chimeric mother has children "her" egg may have been made with the alleles of her twin. If that happens, somehow the parents know it, and the non-chimeric father of her children cares for them more, but the chimeric mother cares for them less as they have

fewer of her alleles. (Ross, 2007). Back

> 13. "Raising Your \$290,000 Dollar Baby," *MSN Money*, Aug. 10, 2007. <u>Back</u>

14. Your spouse may have given your child other alleles that you also have but did not pass on to your child. <u>Back</u>

15. If you help a person who is genetically distant from you, you may decrease your reproductive success if persons who do share your alleles have to compete with the person you help, e.g., you help genetically-distant immigrants enter the country. Similarly, if you mate with a genetically-distant person, your child may carry fewer of your alleles than a person your child competes with; in that case, you would be more reproductively successful if you had not had the child. Back

16. That ordering suggests a preference in the opposite direction, i.e., for one's own species over other species, one's own race over other races, etc. This is the basis for nepotism, favoring relatives over non-relatives. For the same reason, one favors those of his own ethny and race over those of other ethnies and races. <u>Back</u>

17. (Littlefield, 1986). One sees this even in the news and television crime shows, where white victims, especially children and women, draw more interest from white viewers than shows with black victims. Back

18. The extent of a male's inborn cuckold-preventing behavior is surprising. It includes jealous rage and deeper thrusts during intercourse after a long absence to "vacuum out" the sperm of other men. (<u>Shackelford, 2007</u>; <u>Baker, 2006</u>). It is so important to a male that <u>his</u> alleles be passed on, even versus those of a closely related male, that even circumcision (<u>Wilson, 2008</u>) and infanticide (<u>DeWaal, 1997</u>, pp. 118-123) have been attributed to it. <u>Back</u>

19. Another good example is the Moslem countries in the Middle East, such as Iraq, where nearly half of the married couples are first or second cousins. This creates an intense genetic interest in members of one's own clan, as they share so many of a person's alleles, which makes democracy difficult (Sailer, 2003) because democracy is clan against clan for the spoils of the state. Back

20. Because of this "parental uncertainty," men are much more concerned that their children look like them, which may be one reason why there is more miscegenation by white women than by white men. It is a common belief that children <u>do</u> look more like their fathers, especially when the the children are very young; evolutionary psychology implies that children who look like their fathers would receive more support from their fathers and would therefore have greater reproductive success. <u>Back</u>

21. (<u>Rushton, 2005a & 2005b</u>). Rushton has a hilarious collection of slides of people and their very similarly-appearing pets. Men are attracted to women who look like their mother, and women to men who are similar to their father (<u>Bereczkei, 2008</u>), thereby increasing the number of their own alleles in their children. <u>Back</u>

22. A person rates his own face, morphed into the opposite sex, as most attractive, even when he doesn't know it is his morphed face. (Penton-Voak, 1999). Back

23. The nucleus accumbens in our brain gives us pleasure to induce us to increase our fitness,

e.g., at the prospect of obtaining sex or money; conversely, we feel discomfort at the prospect of our fitness being reduced. (Knutson, 2008). Of course, sometimes maladaptive culture or psychopathology interferes with our programming, and we act contrary to our programming. Back

24. A "nation" was originally synonymous with an ethny; American Indian "nations" are good examples. Indeed, the word "nation" comes from the Latin "nationem," which meant an ethny or race. People in an ethny are not only genetically related, but are culturally similar, e.g., in language, religion, and traditions. "[A people constitute] a nation because they are conscious of being 'members one of another' and of being different from the peoples of other lands. They are, and always have been, an inbreeding people. They have a particular affection for their native land. . . . If their country or its people are in jeopardy . . . they rally to its defense; they would give their lives freely to preserve the integrity of the land and the liberty of its people... They are sharers in a common interest and in a common destiny; they hope and believe that their stock will never die out. They inhabit a sharply delimited territory and claim to own it." (Salter, 2002a, quoting Keith, A., *A New Theory of Human Evolution*, 1968/1947, pp. 316–17). Note that countries whose boundaries were not ethnically demarcated, e.g., the U.S.S.R., Yugoslavia, Iraq, and many African countries, are mired in violent conflicts. The genetic distance between races is greater than the genetic distance between ethnies within a race, so much of what applies to ethnies will also apply to races. Back

25. The reader who is interested in the evolutionary psychology of ethnic conflict dynamics is referred to the trilogy of Kevin MacDonald, his magnum opus, *A People That Shall Dwell Alone* (1994), *Separation and Its Discontents* (1998), and especially <u>The Culture of Critique (1998)</u>. <u>Back</u>

26. See the discussion of <u>Gause's Law of Competitive Exclusion</u>. <u>Back</u>

27. In a symbiotic relationship, individuals of different <u>species</u> cooperate for their mutual benefit, e.g., a clown fish and an anemone or us and the bacteria in our gut, but that occurs only because each species supplies to the other something that it cannot provide for itself. But within the same species, e.g., two human ethnies, it is difficult to think of a needed good that each ethny can supply to the other, but cannot make itself. The closest approximation might be manual labor, supplied by blacks, and intellectual labor, supplied by whites, but that was tried in slavery and apartheid and was not stable. <u>Back</u>

28. (William Engdahl) calls Great Britain a parasitic country because, when it was an empire, it exploited other countries (e.g., India, China, South Africa, the Middle East, and the United States), but it was militarily dominant and did not have to conceal its exploitation, so it was mostly a predator. Because a parasitic ethny has interests that conflict with the interests of its host ethny, a parasitic ethny-host ethny relationship can be considered to be "a nation within a nation." Although the parasitic ethny is a <u>net</u> parasite, not every individual in a parasitic ethny is parasitic; indeed, since there is a range of traits within an ethny, some members of a parasitic ethny may be very productive and beneficial to the host ethny. Nevertheless, productive members will sympathize and usually support parasitic members because they are more closely related to them than they are to members of the host ethny.

Parasitic ethnies will also differ in their degree of parasitism. The degree of parasitism could be determined by the net transfer of wealth, in dollars, between the two populations, but dollars do not capture the entirety of what individuals value (Fuerle, 1986, 2003) and the harm done to the host ethny by parasitism can far exceed the benefit to the parasitic ethny. That is why stopping the parasitism can cause an economic boom for the host ethny, e.g., Germany
and Japan in the 1930's. Like a thief who steals \$100 worth of copper piping from a house, causing \$40,000 in damage, the "parasite load" can cost the host ethny much more than the benefit the parasitic ethny obtains. That is why, when the parasite is removed, the recovery of the host can be dramatic. Germany and Japan boomed after they freed themselves of the Jewish-controlled usury banking system (i.e., a central bank creates money out of thin air, then loans it to the government, charging the government interest on their debt).

The degree of parasitism could also be determined by exposing all the activities of the parasitic ethny, including wealth transfers, then observing the extent of the action by the host ethny against them. Gypsies are usually expelled, though Great Britain has foolishly welcomed them. And if Jews were assets, they would not have been expelled from almost all European countries, sometimes more than once. (F. Roderich-Stoltheim, *The Riddle of the Jews Success*, pp. 25-28, translated from German in 1927 by C. Pownall). Blacks have so far been expelled only from England (edicts by Queen Elizabeth I in 1596 and 1601), though Lincoln wanted to send them back to Africa (Peoria, Illinois, Oct. 16, 1854), as did Francis Scott Key, John Randolph, Andrew Jackson, Daniel Webster, and Henry Clay. (Putnam, 1961, p. 62). Wealth transfers and "white flight" clearly show that the white-black relationship is host-parasite. It is not the white population as a whole that desires the presence of other ethnies in its midst, but individuals within the white population who benefit at the expense of the remainder of the white population. In the U.S., businesses benefit from low wage workers and the federal government has created a "refugee industry" that profits from subsidies for refugees. (Allen, T., "Time to Cap the Refugee Industry," *VDARE.com*, May 6, 2003). Back

29. A parasitic ethny gaining control of the government and media of the host ethny is analogous to animal parasites that gain control of nervous system of its host and cause the host to behave in ways that benefit the parasite, but are detrimental to the host. Here are a few examples: the Lancet liver fluke in ants; the Toxoplasma protozoa in rats and mice; "brain-jacking" in crustaceans by the thorny-headed worm; and a parasitic wasp that turns its host into a bodyguard. Back

30. The uncontrolled internet is now the primarily source of what is really going on, while the controlled media (TV, movies, big newspapers, magazines, and book publishers) is like a magician's beautiful assistant, distracting you so you don't look behind the curtain. <u>Back</u>

31. (Stout, 2005). Nor do sociopaths have any compunctions about defeating those within their own ethny, but sociopaths are intelligent enough to realize that they need their co-ethnics. Worse, although frustration creates anger in all of us, in a sociopath, whose goal is winning over and defeating others, frustration creates an intense need for revenge against and humiliation of the host ethny – it is not enough to just defeat the enemy. (Keeling, 1947). Conversely, a host ethny is selected by the parasitic ethny for the opposite qualities – wealth creating, trusting, altruistic, welcoming, and decent. Back

32. While a natural parasite that needs its host to infect another host usually become less deadly, because deadly parasites perish with their host (<u>Ewald, 1996</u>), for a parasitic ethnic group that would require restraint from their most sociopathic members out of concern for others in their ethny, behavior that requires the empathy they lack. <u>Back</u>

33. (<u>Chap. 4, Rule 3</u>). Virtually all large species have parasites that are specialized to that species, and there are even some species of parasites are specialized to live off another species of parasite. One may well expect that, like other parasites, a parasitic ethny will be too specialized to be successful once it is separated from its host ethny and, indeed, that is the case; all black-run territories are economic and political disasters (<u>Chapter 15</u>) and Israel

requires massive military and economic aid from the U.S. and Europe to stay afloat. Back

> 34. The Student Accountability in Community (SAC) program at Michigan State University forced students to pay for, attend, and "pass" brainwashing sessions if they make "sexist, homophobic, or racist remarks at a meeting" or else be kicked out of the University. (Lukianoff, G., "Thought Reform and Compelled Speech at Michigan State, Foundation for Individual Rights in Education, Dec. 14, 2006). In 2007, the University of Delaware had a "treatment" program for students with "incorrect" beliefs. A "racist" was defined as "one who is both privileged and socialized on the basis of race by a white supremacist (racist) system. The term applies to all white people (i.e., people of European descent) living in the United States. . . . By this definition, people of color cannot be racists,..." and two of the requirements were: "Students will recognize that systemic oppression exists in our society." and "Students will recognize the benefits of dismantling systems of oppression." (Unruh, B., "University defends teaching students all whites 'racist'," World Net Daily, Nov. 1, 2007). Back

35. Even different areas of the brain are used for people who are different and who are similar. (<u>Mitchell, 2006</u>). <u>Back</u>

36. Xenophobia and the avoidance of people outside one's own group may be an instinctual disease-avoidance mechanism as a person is likely to have antibodies to the diseases in his own population, but not to the diseases of other populations. (Navarrete, 2006; Fincher, 2008; Faulkner, 2004). Note how Native Americans in both North and South America were decimated by diseases brought over by the Europeans. (The reverse did not happen because the Indians were less concentrated and more migratory, making it more difficult for contagious diseases to become established.) Nevertheless, the most compelling reason for zenophobia and racism is that the "other" is a competitor who carries fewer of one's alleles than those in one's own ethny. Back

SECTION II Traits of Living Populations

"Who are you going to believe, me or your lying eyes."

Chico Marx, in Duck Soup

This section presents the case for race-realism, that there are real and important racial differences. The race-deniers insist that we believe "there is no such thing as 'race'," but in this section we examine what our lying eyes tell us. ¹ Sergeant Friday, on the old TV show "Dragnet," always wanted "Just the facts, ma'am," so let us examine the facts, as best they can be found, about living human populations, particularly the three major races. ² Egalitarians do not take kindly to this information, but no progress can be made without facing the facts and dealing with them. ³

Racial differences arise for the same reasons that different species do – populations become isolated and gradually change, and there is little or no inflow of alleles from other populations. Although it is widely taught and accepted that "race' is just a social construct," ⁴ the scientific evidence tells a different story. ⁵ The egalitarians may insists that a black person is no different than a white person with nappy hair and a sun tan ⁶ but, as this Section will document, there are actually hundreds (if not thousands) of racial differences besides skin color and hair and, to a scientist who studies racial differences, those are not even the most important differences. The focus of the race-deniers solely on skin color is an attempt to trivialize racial differences. Of far greater importance than skin color are differences in bone and tooth shape and structure, muscle size, brain size and intelligence, and behavior. All of the traits discussed in this section are heritable, which means that they are largely controlled by genes, not the environment.

Since any theory of human origins must account for the presence of living ethnic and racial groups and the differences between them, it is important to know exactly what those differences are. First, we will examine the three principal populations (races) indigenous to Africa, Europe, and Asia. Since races have mixed somewhat almost everywhere, we will limit the discussion primarily to those populations that have mixed less and better epitomize the three major races.

There are genetically different populations within each of those three races, ⁷ but the populations in s-S Africa ("Negroids") differ the most. For example, in the s-S Africans, ⁸ there are Capoids (Bushmen and Hottentots, who live around the Cape), Nilotids, who live around the Nile River basin, and the Congoids, who live around the Congo and Niger River basins (West Africa). The Capoids and Nilotids have some Asian and Caucasian features due to interbreeding, but the Congoids are less hybridized so they will be used as the prototypical s-S Africans (Fig. II-1; Coon, 1962, plate IV). Most African Americans came from the Slave Coast of West Africa ⁹ and their African ancestors were Congoids. Africans living north of the Sahara Desert will be "North Africans."



Figure II-1

"Blacks" will mean people of noticeable African heritage (e.g., tightly curled black hair, broad nose, large lips), regardless of where they are living or their degree of admixture with other races. "Europeans" or "whites" will mean Caucasoids who are of European heritage and have no obvious mixed heritage. "Mongoloids" or "East Asians" will refer to NE Asians who are at least somewhat cold-adapted.

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FOOTNOTES

1. "[T]he various [human] races, when carefully compared and measured, differ much from each other,—as in the texture of hair, the relative proportions of all parts of the body, the capacity of the lungs, the form and capacity of the skull, and even the convolutions of the brain. But it would be an endless task to specify the numerous points of difference. The races differ also in constitution, in acclimatization and in liability to certain diseases. Their mental characteristics are likewise very distinct; chiefly as it would appear in their emotional, but partly in their intellectual faculties." (Darwin, 1871, pp. 461-474). "[T]he people in 'race denial' are in 'reality denial' as well. ... Numerous individual methods involving midfacial measurements, femur traits, and so on are over 80 percent accurate alone [in determining race], and in combination produce very high levels of accuracy. ... I am *more* accurate at assessing race from skeletal remains than from looking at living people standing before me. ...The idea that race is 'only skin deep' is simply not true, as any experienced forensic anthropologist will affirm." (Gill, G.W., "Does Race Exist?," 2000). "In the context of forensic anthropology, the term race is unambiguous." (Rhine, S. "Forensic Anthropology"). Back

2. The egalitarians, who insist that we "celebrate diversity," have done their best to prevent anyone from determining just what that diversity is so that it can be celebrated. Thus, the reader will find that for many traits older data had to be used, if any data at all could be found. <u>Back</u>

3. Physical anthropology, the science which initially studied racial differences, has surrendered to the Equality Police and abdicated that role. Fortunately, the egalitarians have not yet persuaded the public that murderers should go free rather than admit that bones and other remains can be identified by race, and forensic science has filled in some of the gap. Forensic manuals and journals (e.g., <u>The Journal of Forensic Sciences</u>) provide techniques for determining what egalitarians insist does not exist – race. <u>Back</u>

4. One might wonder how adults can think race is just a social construct when babies as young as 3 months old prefer faces of their own race (<u>Bar-Heim, 2006; Kelly, 2005</u>), genetic analysis can identify the (self-identified) race of people with nearly 100% accuracy (<u>Tang, 2005</u>), and pathologists and forensic anthropologists can easily tell the race of a person from examining only a fleshless skull. Some egalitarians are even farther from reality: "Many social scientists have gone so far as to claim that kinship is a social construction with no connection to biology." (Steven Pinker, "<u>The Genealogy Craze in America: Strangled by Roots</u>," *The New Republic*, Aug. 6, 2007). <u>Back</u>

5. "Races differ in the extent and manner in which the fine subcutaneous muscles of the lips and cheeks have become differentiated from the parent mammalian muscle body; in the chemical composition of hair and of bodily secretions, including milk; in the ways in which different muscles are attached to bones; in the sizes and probably secretion rates of different endocrines; in certain details of the nervous system, as, for example, how far down in the lumbar vertebrae the neural canal extends; and in the capacity of individuals to tolerate crowding and stress." (<u>Coon, 1962</u>, p. 662). <u>Back</u>

6. The fact that many whites want darker skin, but do not want to be black, shows that race is not skin deep. <u>Back</u>

7. Europeans are sometimes divided into Nordic (northwestern Europe), Alpine (central and eastern Europe), and Mediterranean (southern Europe and northern Africa). (Boyd, 1955). Back

8. North Africans (north of the Sahara) have so much Caucasian heritage that they are usually classified separately from the s-S Africans. <u>Back</u>

9. See "Forest Negroes" in Figure 26-2. The Slave Coast is present day Togo, Benin, and western Nigeria. Slavery began on the east Coast of Africa, where Arabs went deep into the continent capturing mostly female slaves. On the Slave Coast, Europeans traded goods for slaves captured by other Africans and wanted workers, not concubines. (*Wikipedia*, "History of Slavery"). Back

Chapter 9 - Hard Tissue

First, let's look at skulls from different races of man. Although no two skulls are identical, here are skulls that are typical of the races; first an Asian skull (Figure 9-1) and a Caucasian skull. (Figure 9-2).



Figure 9-1

Figure 9-2

Overall, the dome of the Asian skull is round and the face is flat. ² Although the Caucasian skull is a bit longer (top to bottom), it is very similar to the Asian skull, indicating that the Asians and Caucasians did not separate into two races all that long ago, or that there was interbreeding between their lineages.

Figure 9-3 shows a male African-American skull. ³ Although this skull is described as being of an African-American, it has many African features. (The drawing of the "Negro" skull in Figure 9-9 may better epitomize the Congoid skull.)

The African skull is quite different from the Asian and Caucasian skulls, indicating a much greater genetic distance between Eurasians and Africans than between Europeans and Asians. Compared to Asian and Caucasian skulls, the African skull is narrower. The bones of the skull (and the rest of the body) are denser and thicker. The eye sockets are rounder and proportionately larger and the distance between them is greater. The slight bump at the top of the head suggests a "saggital keel," a ridge along the top of the head from the forehead to the back of the skull for attaching chewing muscles and strengthening the skull from blows received in fighting. ⁴ The opening for the nose is wider, the nose bones protrude less, and the teeth more massive, with the incisors meeting at an angle (also see Figure 26-11).

The most noticeable difference, however, is the protruding jaw, a condition known as "prognathism," a trait found in apes and in ancient human fossil skulls, even those not from Africa. The considerable gap between the cheekbones ("zygomatic arches") and the indentation on the sides behind the eye sockets ("post-orbital constriction") indicate that the more massive jaw was serviced by powerful chewing muscles that passed through the gap. Figures 9-4 and 9-5 provide a side-by side comparison of the skulls of an African of the Manbettu tribe in the northern Congo basin



Figure 9-3

and an Englishman. ⁵ The African skull has less prominent nose bones and chin, a deeper jaw and the bone that supports the jaw (the "ascending ramus") is wider; the shape of the skulls is also different.



Figure 9-4

Figure 9-5

Table 9-1 lists a number of the more significant hard tissue traits that differ between the races, including a few in Australian aborigines (AA), *Homo erectus (He)*, Neanderthals (Hn), chimpanzees (C), and gorillas (G). A hyphen indicates no data and the notes after the table explain the differences more fully.

Trait	Asians	Europeans	Africans	AA, <i>He</i> , <i>Hn</i> , C, & G
		Sku	ll .	
Endocranial Volume ⁶	1491 cc	1441 cc	1338 cc	AA: 1290 cc <i>He</i> : 1000-1200 cc C: 500 cc
Cranial bones (1)	Thinner and lighter (gracile)	Thin and light (less gracile)	Thick and dense (robust)	AA& <i>He</i> : Thickest and densest
Cranial sutures (2)	Complex	Complex	Simpler	He: Simpler
Permanently unclosed sutures (3)	1/13	1/7	1/52	-
Skull shape (Cephalic Index) (4)	>80 (brachycephalic)	<80 & >75 (mesocephalic)	<75 (dolichocephalic)	AA: 71 – 71.5
Saggital keel (5)	Usually absent	Usually absent	Sometimes present	AA&He: Present
Occipital bun (6)	Absent	Some individuals	Some tribes	<i>Hn</i> : Present AA: Present
Post-orbital constriction (7)	Average	Average	Larger	AA & <i>He</i> : Pronounced
Cheek bones (8)	Projecting	Average	Slightly projecting	-
Foramen magnum (9)	Center	Center	Farther back	-
		Fac	e	
Forehead	High	High	Less high	AA&E: Sloped C&G: very sloped
Brow ridge (10)	Small (except some Japanese men)	Medium	Small	AA: Prominent <i>He</i> : Prominent
Eye sockets (11)	Almost round,	slightly sloped, small	Rectangular, slightly sloped, small Square or rectangular, larger, and farther apart	AA: Rectangular C: Round and large
Nasal Index & shape (12)	48-53 Oval	<48 Tear-shaped	>53 Rounded, wide	He: Rounded, wide
Nasal Prominence (13)	Average	More	Less	He: Less C: None G: None
Two nose bones	-	Not joined	Sometimes joined	G: Joined (<u>Duckworth,</u> <u>1895</u> , p. 338).
Prognathism (14)	Little	Little	Pronounced	AA & <i>He</i> : More pronounced
Facial angle (15)	-	<u>80-82°</u>	68-70°	G: 50°
Chin (16)	Slightly projecting	Prominent and projecting	Slight and rounded	AA: Receding <i>He</i> : Smaller and rounded
		Mou	th	

Simian shelf (17)	No	Rare	Vestige	C & G: Yes <i>Hn</i> : Half size <i>He</i> : Little or none
Palate shape	Parabolic or horseshoe- shaped	Triangular	Rectangular	He: Rectangular
Teeth (18)	Medium	Smaller	Larger, wider apart	He: Large, wide apart
Shoveled upper incisors (19)	Present	Rare	Only Bushmen	In Asian <i>He</i> and a few African <i>He</i> <i>Hn</i> : Present
		Skele	ton	
Spine shape (20)	Three curves	Three curves	Less curved	C: One curve
Spine length	Long	Long	Shorter; chest rounder	-
Pelvic girth (21)	-	33 inches	26½ inches	-
Sacral Index (22)	-	Male: 102.9 Female: 112.4	Male: 91.4 Female: 103.6	C: 77 G: 72
Arms and legs (23)	Arms: shorter Legs: shorter	Average	Arms: longer Legs: longer	-
Heel Bone (24)	Short	Medium	Long	-

Table 9-1

(1) At birth, Africans have fewer cranial bones than Eurasians. ⁷ The skull bones (and other bones) in Africans (Schnitzler, 1993) and erectus are thicker and denser (higher mineral content; Ettinger, 1997; Hui, 2003; Pollitizer, 1989), even in the fetus, making them more difficult to break, which is an aid in head butting and fighting as blows to the head can easily be fatal. (Broca. 1858, cited in Rushton, 2000a, p. 106). Some anthropologists believe skulls got thicker about 1.6 to 1.8 million ya when erectus developed clubs as weapons, resulting in more cracked skulls. (Wrangham, 1996; Schulting, 2002). "Herodotus ... described how easily, in comparison to an Egyptian's skull, a Persian's skull cracked." (Schwartz, 1999, p. 48; Egyptians had interbred with Africans by that time.) Denser bones (and less fat) make Africans less buoyant and less capable swimmers, ⁸ but reduce their susceptibility to osteoporosis. Female bones are lighter than male bones.

(2) (Cull. 1850). The cranial sutures are the zigzag lines where the bones that form the skull cap join together. Less complex sutures may be due to an earlier fusion of the cranial bones.

(3) The unclosed sutures are the proportion of the total number of intersecting sutures at the top of the skull that are permanently unclosed. Unclosed sutures permit growth of the brain. An example is the retention of the metopic suture in adult Caucasians, but not adult Africans. (Figure 9-6).

(4) The numbers are the cephalic index, which is equal to 100 times the width of the head divided by its length. (Baker, 1974). The long, narrow skull of the Africans (dolichocephalic) loses heat the fastest and the more spherical skull of the Asians (brachycephalic) better retains heat. (Boyd, 1955). Compare these black, white, and Northeast Asian (Mongol) skulls (Figure 9-7) drawn by (Morton,

rounder and about the same size, but the cheek bones flair out more on the Mongol skull. There is

Figure 9-7 1839). The black skull is more simian as it is long and narrow. The white and Mongol skulls are Figure 9-6 a correlation of 0.37 between cranial capacity and the cephalic index, i.e., the long, narrow skulls of Africans have a smaller cranial capacity. (Beals, 1984).

Figure 9-8 is a tree showing the linkage between living human populations based on 57 measurements of male skulls. (DeAnza College, ČA). The African skulls are very different from the skulls of all the other populations, even the Australian aborigines. Figure 9-9 show a Negro skull profile superimposed upon a European skull profile. 9) The Negro skull is smaller, with less space in the forehead, but proportionately more at the back. (Hunt, 1864, p. 8).

Black

White

Mongol



(5) Notice the slight saggital keel (or crest) at the top of the head in the Homo habilis skull (Figure 9-10, 10) and in the picture of killer James Ealy (Figure 9-11). (Also see Fig. 9-17, 10-7, & 16-6.)



(6) The occipital bun (Figure 9-12) 11 is a bulge at the back of the skull, where the brain processes visual information. *Georgicus, antecessor*, Peking man (Figure 17-7b), Junniushan (Figure 17-9), and the Neanderthals had occipital buns and Heidi, too, may have had it. "They [occipital buns] do however occur fairly often among Australids [Australian aborigines], Khoisanids [Hottentots, Bushmen - see Chap. 26], and Lappids [Lapps (Sami) in Finland], and, interestingly, among inhabitants of Lancashire, UK." 12 Although the purpose of the occipital bun is not clear, it is associated most with the Neanderthals.





Figure 9-12

Figure 9-13

depression") in the top of the skull visible from the side. (Figure 9-13), ¹³ This "dent" is also seen the Hobbit skull, Figure 17-11 and some erectus skulls; note that even the otherwise-modern English skull in Figure 9-5 has a dent. It is a primitive feature that may be tied to important changes in the growth of the brain. (Coqueugniot, 2004; Figure 14-2).

Some African skulls are also characterized by a "dent" ("post bregmatic

(7) A post-orbital constriction is a pinching of the skull just behind the eye sockets. It allows more room for large chewing muscles, but indicates a smaller forebrain, the center of planning and abstract thought. Figure 9-14 shows a chimpanzee skull, and Figures 9-15 and 9-16 show, respectively, the skulls of a recently-deceased Australian aborigine and a Caucasian. (Also see Fig., 17-2, p. 145).



Figure 9-14

Figure 9-15

(8) Referring to Figure 9-17, the cheek bones ("zygomatic arches") extend outward the least in Caucasians, the most in Asians, and in between in Africans. (Beyers, 2007).

(9) The foramen magnum ("big hole," aka "occipital foramen") is the opening in the base of the skull through which the spinal chord exits the skull. The head is positioned on the spinal chord so that the eyes see horizontally to the ground. Because we walk upright, our spinal cord is vertical so it enters directly underneath the skull.

Chimpanzees and gorillas walk on knuckles with long arms and short legs, and their spinal cord is at an angle and enters farther to the back of the skull. Monkeys walk on four legs and their spinal cord is nearly horizontal and enters at the rear of the skull. In Figure 9-18, the foramen magnum is the large black hole. 14

Primate	Number examined	Maximum (%)	Mean (%)	Minimum (%)	Range (Max. – Min.)	114 A.
White	20	50.0	45.6	41.7	8.3	
Tsuktchi (Japan)	5	47.2	45.3	44	3.2	ATTEN DE BA
Negro	17	48.7	44.4	38.7	10.0	TARK ANTIN U
South Islanders	28	47.5	41.8	36.1	11.4	PADE STATIS
Hindoos (India)	19	45.3	41.4	5.6	9.8	
N. Am. Indians	45	47.8	40.9	34.8	13.0	
Adult gorillas	3	26.8	22.7	17.7	-	
Young gorilla	1	-	40	-	-	foramen magnum
Adult chimpanzee	1	-	21	-	-	
Young chimpanzee	3	39	35.3	32	-	Figure 9-18
		Table 9-2	2			

Table 9-2 gives the results of measurements of the position of the foramen magnum in primates: 15

Figure 9-16

Table 9-2 shows that the foramen magnum is farthest to the front in whites and farthest to the back in adult chimpanzees. The foramen magnum in Australopithecus is "located near the center of the skull base [i.e., not including the jaw], as far from the rear as in some human races" (Coon, 1962, p. 258); it is even farther to the front in *erectus* and, in living people, it is farthest to the front in the "Romano-British."¹⁶ Note that in the young gorilla and chimpanzees the foramen magnum is closer to the human range; thus, neoteny assists bipedalism by moving the foramen magnum towards the front. (Luboga, 1990) Although the Neanderthal is not listed Table 9-2, their foramen magnum is also "a little to the back." (Howells, 1948, p. 167). In Table 9-2 the Negro foramen magnum is only slightly farther to the rear. 17

(10) The brow ridges ("supraorbital ridges") are boney ridges over the eyes which strengthen the skull and protect the eyes during fighting. They are needed when the teeth are large, the jaws heavy, and the chewing muscles strong, characteristics of populations that eat mostly vegetable matter. Once man learned to hunt, control fire, and cook his food, large chewing muscles were no longer needed and brow ridges diminished. (See photos in Chap. 2).

(11) East Asians have the roundest eve sockets and Australian aborigines have the most rectangular.¹⁸ Neanderthal orbits are also round (Fig. 2-6 & 2-7) but African and European orbits are square or rectangular; European orbits slope more. Racial differences in eye sockets are not large and overlap due to intermixing. Except for the Neanderthals, the size of eye sockets, and therefore the size of the eyes, decreases slightly in the colder climates, which may be an adaptation to cold weather to help reduce exposure of the eyes. The eyes of blacks are also farther apart, as can be seen by comparing a "Black" skull (Figure 9-19, probably African American) to the front view of a Caucasian skull in Figure 9-20.



Figure 9-19 ("Black")

Figure 9-20 (Caucasian)

(12) Nasal prominence is a measurement of how far the nasal bones extend from the face. Figure 9-21 shows the distribution of nasal prominences in African and European skulls. (Howells, 1989). The curves that connects the bars show that Africans and Europeans have different means, with the European nasal bones being more prominent (Figure 9-21). The nostrils in Africans open higher on the face, closer to the eyes, but not as far as in apes. (Cartwright, 1857, p. 46). S-S Africans have "very flat nasal bones." (Hanihara, 2000).

(13) The nasal index is 100 times the width of the nasal cavity divided by its breadth. The nasal cavity is short and wide in Africans and long and narrow in Asians and Caucasians, but larger in Caucasians. The shape of the nasal cavity also differs between the races (Figure 9-17).

The difference between Eurasians and Africans in their nasal spines is dramatic. The anterior nasal spine is a small bone that extends outward from the middle of the base of the nasal cavity; it supports a nose that protrudes. The nasal spine is prominent in Caucasians (Figures 9-2, 9-5, 9-20, & 9-22), less so in Asians (Figure 9-1) and small or absent in Africans and African Americans (Figures 9-4 & 9-23). (Beyers, 2007). The race of a skull can be determined by placing a pen across the base of the nasal cavity. If the pen is held in place by the nasal spine, the skull is Caucasian; if it rolls off, the skull is African; chimpanzees and gorillas also lack a true anterior nasal spine. (Mooney, 2005, & Duckworth, 1895, p. 338).

In addition to the nasal spine, the base of the front of the nasal cavity also differs between the races. Referring to the arrows, in Caucasians (Figure 9-22), there is a sharp ridge along the edge of the base, in Asians the top of the ridge is rounded, and in Africans (Figure 9-23) there is no ridge. (Also see Figure 9-19, "Guttered Nasal Border.")

(14) Simian prognathism (a protruding jaw with a recessed nose) is a very primitive trait that is characteristic of apes. A jutting jaw is needed if the teeth are large, plus it is an advantage in fighting as it permits a bigger bite and makes the eyes less vulnerable. (Howells, 1959, p. 125). One is reminded of the 1997 title fight in Los Vegas where Mike Tyson bit a piece out of the ear of WBA champ Evander Holyfield.

Figure 9-24 (Nature, Vol. 228) shows a comparison of the lower jaw (mandible) of an orangutan, a Negro, and a white. The rectangles illustrate the width and length of the jaws. The numbers are the percentages of the length to the width. When there is simian prognathism the jaw is long and narrow, as in the orangutan, and when the face is flat, as the white jaw is, the length is actually less than the width; as expected, the Negro jaw is in between the jaw of the orangutan and the jaw of the white.

Figure 9-25 shows a subtle difference between Caucasian and African jaws. Looking outward from inside the mouth, the upward-directed bone that holds the jaw in place ("ascending ramus") shows an inward protrusion (inversion) on the ramus of the African jaw that is absent in the Caucasian jaws. There are many small racial differences like this that can be used to help determine race.







Figure 9-23 (African)



Figure 9-24



Figure 9-25

(15) Prognathism, the absence of "facial flatness" (<u>Hanihara, 2000</u>), can be measured by means of the facial angle, the slope of the face from the forehead to the jaws. Figure 9-26 is by Camper, who first used the concept. In his drawings, Camper gives the facial angle as 70° for the "Negro" (i.e., Congoids); *H. habilis* and *H. erectus* also have a facial angle of about 70°. ¹⁹ An angle of 60° has been given for the Hottentots and Bushmen, and 66.6° for the Australian aborigines below the nose. (<u>Baker</u>, <u>1974</u>, p. 281); orangutans have a facial angle of 58°. ²⁰ Camper regarded a facial angle of 100° as the epitome of beauty (<u>Etcoff, 1999</u>, pp. 42-43); s-S Africans have "remarkable prognathism." (<u>Hanihara, 2000</u>). Figure 9-27.

A protruding jaw is usually associated with a sloping forehead (Figures 9-9 & 9-26), which indicates a smaller prefrontal cortex, the area of the brain that handles planning, inhibition, and self control. ²¹ Thus, the absence of prognathism is seen as less bestial and an indication of higher intelligence. The owl, for example, with its perfectly vertical facial line, was the emblem of Athena, the goddess of wisdom. Other characteristics of the jaw can also be used to identify race. (Buck, 2004).

(16) The purpose of a chin is to strengthen the jaw. When the jaw is massive, there is no need for a chin, but a more modern gracile jaw requires a chin to prevent debilitating jaw fractures. Only *Hss* fossils have chins (but not all modern humans have prominent chins). European males have the most prominent chins.

(17) The lower jaw ("mandible") can be strengthened to withstand the stresses of chewing by making it thick and heavy, by adding a chin on the outside, or by adding a simian shelf (a bony horizontal ridge in the mouth behind the lower incisors) on the inside of the jaw. (Fig. 9-27). A simian shelf is found in all apes, Neanderthals, and archaic man, but is absent in *erectus* (<u>Coon, 1962</u>, p. 349) and most modern men. As jaws became less massive, the simian shelf appeared, then was later replaced by the chin. Africans may have a vestige of a simian shelf (Fig. 9-25).

(18) In Eurasians, the upper teeth usually overlap the lower incisors, but in Africans the upper incisors are mounted in the jaw at an angle and project forward so that they meet the lower at an angle. (Figures 9-3 & 9-4; in Figure 9-27, the gorilla's teeth meet at an even greater angle.) African teeth are more primitive than Eurasian teeth and there are many other differences in their structures. (Irish, 1998 & 2003; Edgar, 2005; Chap. 16, FN 9).

(19) A "shoveled" incisor (Figure 9-29) is an upper front tooth that has ridges reinforcing its two back vertical edges to resist back-to-front forces. This means that shoveled incisors were once used for another purpose in addition to cutting food, such as scraping objects (see wear in Figure 9-30).

The scraping must have been vital to survival and broken incisors must have made survival less likely. Otherwise, shelved incisors would not be so widespread among Asians today. Northern Europeans also frequently have moderate shoveling, possibly derived from the Neanderthal lineage. (Chap. 25). Because shoveled incisors first appeared about 2 mya, whatever the activity was, it was done by *erectus* or an earlier hominoid, and later generations are only gradually losing the trait as tools are used instead of teeth. Shoveled incisors may have initially been used in the Asian tropics to form points on bamboo spears, ²² then later proved useful in the north for scraping and softening animal skins. ²³ Asians also have single-rooted upper

proved useful in the north for scraping and softening animal skins. ²³ Asians also have single-rooted upper first premolars and triple-rooted lower first molars.

(20) The neck of Africans (i.e., Congoids) is described as shorter and thicker, but some Africans from other parts of Africa have long, slender necks. $\frac{24}{2}$

(21) A larger diameter pelvis will be selected for if baby head size, and therefore brain size, increases. Africans, with the smallest skulls, also have the smallest pelvis and give birth more easily. Pelvic measurements can be used not only to distinguish males from females, but even American white males from American black males, with about 75% accuracy. (<u>lscan, 1983</u>).

(22) The sacral index is the breadth of the sacrum (the five fused vertebrae that are connected to the pelvis) as a percentage of its length. (Hanson, 1998). Walking upright increased the sacral index, enabling the sacrum to better support the internal organs, so a low sacral index is more primitive and a high sacral index is more modern. Table 9-3 gives sacral indices from Turner and Borst.

As usual, the Negroes are closest to the apes. Note that the Negroes and the Andamenese are close together, especially for the females. As we shall see in Chapter 26, this may be due to early (perhaps pre-*Homo*) migration from India into Africa. The Egyptians are close to the Negroes because of significant admixture with Africans. The Australian

Table 9-5 gives sacial inu		anu <u>bu</u>	<u> 51</u> .	
Primate	(<u>Turner, 1886</u> , p. 317-323)	(<mark>Bors</mark> 42	t <u>, 1986,</u> -26)	Sexual Dimorphism
	p. 017 020)	Male	Female	(F minus M)**
Gorillas	72			



Figure 9-27

Figure 9-28



Figure 9-29







Figure 9-26

aborigines are close to Europeans in both sacral index and the sexual dimorphism of the sacral index because both descended from a generalized archaic human that lived in West Asia (Chap. 24 & 27). The hips of blacks are also narrower, which makes walking and running more efficient for them. (Himes, 1988). While Borst found a higher sexual dimorphism for blacks in the sacral index, overall Europeans have the highest sexual dimorphism, even before birth (Choi, 1970), and Asians the lowest.

Vertebrae can also be used to help determine race. (Marino, 1997). Baker, 1974, pp 300-301) refers to a "simian notch," a much narrower second sacral vertebra, that is much narrower laterally than the first or third vertebrae, "characteristic of pongids [apes]." "It occurs in nearly one-third of all Australid and Europid sacra, but is much more frequent in Negrids, among whom it appears to be a primary character."

Chimpanzees	77			
Orangutans	87			
Negroes	91.4	103.6	12.2	
Egyptians	94.3	99.1	4.8	
Andamenese*	94.8	103	8.2	
Australian aborigines	98.5	100.2	110.0	9.8
Japanese	101.5	107.1	5.6	
Europeans	112 (males)	102.9	112.4	9.5
Asian aborigines from the	e Andaman Island	ls, east	of India in	the Bengal Sea.

Table 9-3

(23) As primates went from swinging by their arms to walking on their legs, their arms grew shorter and their legs longer (*Wikipedia,* <u>Craniometry</u>," Figure. 9-31).

The "reach" is the distance between the fingertips when the arms are extended horizontally. Of the first 50 Heavyweight Champions, the 17 white fighters had an average reach of 76.13 inches and the 33 black fighters had an average reach of 78.23 inches. ²⁵ The increased reach of the black fighters is due to a longer forearm and longer fingers. Africans also have longer legs than Caucasians; Asians have the shortest legs.

The brachial index is the percentage that one of the lower arm bones (the radius) is of the upper arm bone (the humerus). (Aiello, 1990, pp. 249; Holliday, 1999). The crural index is the percentage that one of the lower leg bones (the tibia) is of the upper leg bone (the femur). The humerofemoral index is the percentage that the arm bones (humerus plus radius) are of the Gibbon Gorilla Chimpanzee Orangutan Man

leg bones (femur plus tibia). A high brachial and humerofemoral index indicates adaptation for

swinging by the arms and a low index indicates adaptation for walking. ²⁶ The brachial, crural,



on Gorilla Chimpanzee Orangutan Man Figure 9-31

and humerofemoral indices of Africans are closer to those of apes. ²⁷ From the length of only the femur, the height can be estimated using different equations for black and white males and females. (<u>Trotter, 1970</u>, pp. 71–83; <u>Trudell, 1999</u>). Blacks have longer legs but shorter torsos, i.e., a greater skelic index (length of legs x 100/length of trunk; <u>Meredith, 1976</u>).

African hands are larger and longer (Hunt, 1864, pp. 7-8), and the fingers of blacks differ from those of whites in a subtle and peculiar way. In the womb, the female sex hormone, estrogen, increases the growth of the verbal areas of the brain as well as length of the index finger (the second digit, "2D") and the male sex hormone, testosterone, increases the growth of the numerical area of the brain as well as length of the index finger (the second digit, "2D") and the male sex hormone, testosterone, increases the growth of the numerical area of the brain as well as the length of the ring finger ("4D"). ²⁸ Thus, more testosterone in the womb results in a lower index/ring finger length (the "2D:4D" ratio); in males, the ring finger ("4D") is usually longer, but in females the ring and index fingers are usually about equal. However, males who have a 2D:4D ratio that is higher than the average for males (and is therefore closer to the higher female 2D:4D ratio) have better numeracy, and males with smaller ratio than the male average have better literacy. (Brosnan, 2006). And, "In common with adults, the 2D:4D ratio of children shows sex and ethnic differences with low values found in a Black group [i.e., the male and female blacks have higher levels of testosterone (Chap. 10) and perform poorer at numerical tasks than they do at verbal tasks. Since there is less need for numeracy in the tropics, this is not unexpected.

(24) The heel bone projects more in Africans and differs in length, breadth, shape, and position, giving Africans a greater ability to sprint and jump. (Johnston, 1910). This is one reason why "White Men Can't Jump" and West Africans excel in sports that require jumping. African feet are flatter and there is more separation between the first and second toes.²⁹

Chapter 10

Table of Contents

FOOTNOTES

1. Figure 9-2 is a picture of a skull sold by Fossils.com. Back

2. A "flat face" means that the center of the face does not extend much farther forward than the cheekbones. (<u>Coon, 1962</u>, pp. 364-369). A simple test to see if a skull is Asian is to place it face down on a table. If it rests on the cheekbones and doesn't rock because the nose doesn't touch the table, it is probably an Asian. East Asians have very flat faces. (<u>Hanihara, 2000</u>). <u>Back</u>

3. The replica shown in Figure 9-3 is sold by France Castings. Back

4. "Early Neolithic Britons had a one in 20 chance of suffering a skull fracture at the hands of someone else and a one in 50 chance of dying from their injuries. " (Young, 2006). That was probably true elsewhere on the planet as well and even more true at earlier times. <u>Back</u>

5. (Johnston, 1910, pp. 13 & 15). The skulls have been rotated so that a line passes between their back molars to the base of their skulls. Back

6. Male only, home continent and U.S., not corrected for body size. (<u>Rushton, 2000a</u>, p. 283, from <u>Beals, 1984</u>: AA from (<u>Baker, 1974</u>), p. 279). White children have larger heads than black children, even though black children are taller. (<u>Rushton, 2000a</u>, pp. 40-41). <u>Back</u>

7. "The white infant comes into the world with its brain enclosed by fifteen disunited bony plates – the occipital bone being divided into four parts, the sphenoid into three, the frontal into two, each of the two temporals into two, which, with the two parietals, make fifteen plates in all –

the vomer and ethmoid not being ossified at birth. ... The negro infant, however, is born with a small, hard, smooth, round head like a gourd. Instead of the frontal and temporal bones being divided into six plates, as in the white child, they form but one bone in the negro infant." (Cartwright, 1857, p. 45). Back

8. (<u>Ama, 1997</u>). "Black children are 2½ times more likely to drown than white kids." (Park, D., *Chicago Sun Times*, June 22, 2007). Fewer blacks are in the Navy SEALs or win medals in Olympic swimming and diving events. <u>Back</u>

9. From (Pierce, R.V., The People's Common Sense Medical Adviser in Plain English: or, Medicine Simplified, 1895). Back

10. Figure 9-10 is a reproduction of KNM-ER 1813, available from The Evolution Store, NYC, NY. Saggital keels can be found in herbivores that require powerful muscles to grind up plant matter, e.g., the gorilla, and carnivores that need a powerful bite to kill larger prey, e.g., the bobcat. (Nickens, T.E., "Survivor," *National Wildlife*, Aug.-Sept., 2008). <u>Back</u>

11. ("An Introduction to and anatomical evidence supporting Neanderthal introgression (Part 1)," Anthropology.net, Nov. 14, 2006). Back

12. (SNPA Glossary of Physical Anthropological Terms [http://www.snpa.nordish.net/glossary.htm (no longer available)]; also Baker, 1974, p. 279). Back

13. From (<u>Rhine, 1990</u>). <u>Back</u>

14. (<u>McKie, 2000</u>, p. 19). <u>Back</u>

15. (Wyman, 1896). The distance from the front of the foramen magnum to the back of the head was divided by the distance from the front of the head to the back of the head, and expressed as a percentage in Table 9-2. The "front of the head" was a hole ("alveoli") in the upper jaw, not the end of the jaw. This may be why the North American Indian's foramen magnum is farther to the back than is the Negro's. Had the "front" been the front of the jaw, the position would have been farthest back in the Africans. Also, "Negro" is probably African American, not African. (Broca, 1858, cited by (Rushton, 2000a, p. 106; Coon, 1962, p. 258; Cartwright, 1857, p. 46; Johnson, D.R., "Retardation and neoteny in human evolution"; Burmeister, 1853). Back

16. (Luboga, 1990). Later in this book, it is suggested that man may have had no quadrupedal ancestors; if true, the position of the foremen magnum would be in the center for all human populations, except for populations whose ancestors had interbred with a quadrupedal ape. There was interbreeding between the chimpanzee lineage and the human lineage and although today chimpanzees live only in Africa, their ancestors may have lived in Eurasia and the interbreeding may have occurred there instead of in Africa. (Patterson, 2006; Arnold, 2006). "The close resemblance in DNA structure between humans and chimpanzees even suggests that a hybrid species would be viable – a chastening thought." (Corballis, 1991, p. 35, citing Lovejoy, 1981). Back

17. "The occipital foremen [foramen magnum], giving exit to the spinal cord, is a third longer [in the African] says Cuvier, in proportion to its breadth, than in the Caucasian, and is so oblique as to form an angle of 30 with the horizon, yet not so oblique as in the simiadiae [apes]," (<u>Cartwright, 1857</u>). <u>Back</u>

18. Note the small nasal spine in the African American skull (Figure 9-3), which is absent in the African skull (Figure 9-4). Back

19. (Ferguson, 1989; Curnoe, 2006). "... the Negro thus has a facial angle generally between 70 and 75 degrees, occasionally only 65 degrees." (Hunt, 1865). Back

20. (O'Flaherty, B. & Shapiro, J.S., "Apes, Essences, and Races: What Natural Scientists Believed about Human Variation, 1700 – 1900," Columbia University, Mar., 2002). Back

21. "This angle is now understood to be primarily related to the development of the frontal part of the brain ..." (Ferguson, 1989). Back

22. Chimpanzees have been found to make spears and sharpen them with their teeth. (New Scientist, Mar. 3-9, p. 16). Back

23. "Neandertals had unusually robust anterior [front] teeth that were worn down in a distinctive manner, suggestive of their use in the preparation of hides." <u>"The Cultural Modification of Teeth."</u> Also (<u>Hoffecker, 2002</u>, p. 60). <u>Back</u>

24. (Burmeister, 1853; Hunt, 1864, p. 7). A more muscular neck is consistent with a foramen magnum that is farther to the back. (Johnson, D.R., "Retardation and neoteny in human evolution"). Back

25. "... some races seem more arboreally constituted than others." (Coon, 1962, p. 154). Back

26. Referring to *H. habilis*: "Moreover, the arms are long relative to the legs, a characteristic that is more ape-like than human." (Corballis, 1991, pp. 39-40). Back

27. The explanation is probably <u>Allen's Rule</u>, that shorter limbs are selected in colder climates; legs in humans, however, got longer than ape legs due to our bipedalism. <u>Back</u>

28. The reason for this peculiarity is that Hox genes, which control differentiation of the digits, are expressed more in the gonads. Back

29. (Burmeister, 1853; see Fig. 4-1). "Darwin pointed to the foot of some 'savages' as still retaining some of the prehensility [grasping] characteristic of the ape foot." (Schwartz, 1999, p. 160). Back

Chapter 10 - Soft Tissue

In this chapter, we look at soft tissue (Table 10-1). Since soft tissue is not preserved in fossils, the last column in Table 10-1 uses Australian aborigines (AA), male chimpanzees (C), and male gorillas (G) for comparison.

Trait	Asians	Caucasians	Africans	AA, C, & G
		Brain		
Volume (cc) (1) ¹	1416	1369	1282 1270 (Bush-men)	AA: 122 C: 400 G: 469
Degree of fissuring (2)	High	High	Moderate	C: Less
Size of frontal lobes (abstract reasoning) (3)	Larger, more fissured, and more complex	Larger, more fissured, and more complex	Smaller, less fissured, and less complex	-
		Organs		
Testicles (4)	Small	Medium	Large	C: Larger
Apocrine glands (5)	Small and few	Medium and more	Large and most	-
Body odor	Very little	Medium	Strong	-
		Face and Neck		
Epicanthic fold (6)	Present	Absent	Absent, except Bushmen	C: Absent G: Absent
Eye color (iris) (7)	Dark brown, black	Blue, green, hazel, brown	Dark brown, black	AA: Dark brown, black C & G: Black
Eye color (sclera) (8)	White	White	White, but sometimes yellowish	C: Dark G: yellow
Lips (9)	Medium	Medium, thin in north	Large, thick, everted	AA: Medium C & G: Thin
Ears ²	-	Large, rectangular, thin	Small, round, thick, high; small earlobes	C: large G: small
Ear wax	Dry, brittle, grey or beige	Sticky, wet, brown	Sticky, wet, brown	-
Nose (10)	Low	Long, thin, and narrow	Short, flat, and wide	AA: Large, broad C & G: Flat and broad
Mouth (11)	Small	Usually small, some large	Large	C: Large

Voice pitch (12) -		M=117 Hz F= 217 Hz	M=110 Hz F=193 Hz	-
		Skin and Hair		
Skin thickness (13)	-	Thin	Thicker, outer horny layer	-
Fat distribution (14)	Uniform	Concentrates (buttocks, abdomen, etc.)	Concentrates (buttocks)	-
Skin color (15)	Yellowish	Flesh colored	Dark	C: Flesh until 10-12, then dark
Body hair (16)	Little body hair	More than Africans, especially in south	Less than Caucasians, more than Asians	AA: Medium C: High
Head hair, color (17)	Dark brown, black	Blond, red, brown, black	Dark brown, black	AA: Dark brown, black C: Black
Head hair, form (18)	Straight, long	Straight or wavy, long	Wooly, short.	AA: Curly C: Straight
Head hair, microscopic (19)	Circular, thick	Oval, thin	Flat, no central duct ³	-
Beard	Very little	Heavy	Little, except Pygmies ⁴	AA: Heavy
		Muscles		
Muscles (proportion of total body weight) (20)	Low	Medium	High	C: Higher
Calf muscle (21)	-	Large and low	Small and high	-
Buttocks (22)	Flat	Medium	Large	
		Blood		
Male testosterone level (23)	Low	Intermediate	19% higher than whites ⁵	-
Serotonin level (24)	-	-	Lower than Eurasians	-
Blood Type (25)	-	Fblb3	Ablb3	AA: CDe (R1)

Table 10-1

(1) Converting brain volume into the number of neurons, Mongoloids average more than half a billion more neurons than Negroids. ⁶ The East Asians (Chinese, Koreans, and Japanese) have the highest ratio of brain to body mass, but the record for brain size goes to Russian writer Ivan Turgenev, at 2012 gms. (Corballis, 1991, p. 66). The heritability of brain

size is about 0.9 (Lynn, 2006a, p. 67).

Until recently, when cranial capacity and brain volume could be measured by magnetic imaging, cranial capacity was determined by plugging the holes in a skull and filling it with small pellets and brain volume was determined by weighing the brain and dividing by its density. $\frac{7}{2}$ Due to the thickness of the membranes that surround the brain, brain volume is less than cranial capacity. (Fig. 14-8).

(2) The ridges ("gyri") between the groves ("sulci") at the surface of the brain greatly increase the surface area of the cerebral cortex, the outer layer of the cerebrum. Since the cerebral cortex processes information, increased brain fissures increases the percentage of the brain that is cerebral cortex and should increase intelligence without increasing the volume of the brain, although this is difficult to establish quantitatively. (Baker, 1974, p. 432).

Notice (Fig. 10-1) the fissures (and frontal lobes) in the brains of an orangutan, an African bushman, and the great German physicist and J.C.F. Gauss, the great German mathematician.⁸

Africans and some retarded people (Friend, T.,



"Brains of mice enlarged to help research," USA Today, July 19, 2002, citing Chenn, 2002) have fewer convolutions ("fissures") in the cerebral cortex of their brains, where abstract thought is performed. ⁹ Australian aborigines also have smaller and less complex brains. Figure 10-2 shows the back of the brains of an orangutan, an Australian aborigine, and a European. (Baker, <u>1974</u>, p 293).



brain. There

size

the

and

Figure 10-2

are many other physical properties of the brain that are also associated with greater intelligence. ¹⁰ The thickness of the three outer layers (the supragranular layer) of the cerebral cortex (the six outer layers), increases from lower animals to man. ¹¹ "The supragranular layers" in the dog are one-half the thickness of those in the ape, and the thickness of the ape's only three-fourths the thickness in man." ¹² The supragranular layer is 15% thinner in blacks than in whites. (Vint, 1934). Also see (Poynter, 1915¹³ The nerves in blacks are reported to be larger. (Burmeister, 1853). Many other comparative brain studies of blacks and whites can be found in (Putnam, 1967, footnote 17).

(3) "... the prefrontal area ... constitutes 3.4 percent of the cat brain, ... 16.9 percent of the chimpanzee's and 29 percent of man's." (Herrick, 1956, p. 385). The human neocortex is

over three times as large as expected for a primate matched for body size. ¹⁴ Compared to Eurasians, in Africans the back of the brain is more developed and the front less developed. ¹⁵ This is noticeable in the more sloping forehead of Africans and the length of their skull (Fig. 9-3). Vision is processed in the back of the brain, hearing at the side, and planning and abstract thought at the front. Thus, a brain that is more devoted to one of these functions than to others will have a greater mass of brain tissue in that area and the skull shape will be expanded in that area. ¹⁶

Racial differences in the relative sizes of different areas of the brain are suggested by the way smoking affects the races. Compared to white smokers, American black smokers absorb 30% more nicotine per cigarette and take longer to rid their bodies of the drug. ¹⁷ Since different neurotransmitters in the brain take up nicotine at different rates, this implies that blacks and whites have significant differences in the relative sizes of different areas of the brain. ¹⁸

Thus, in our journey to become human, our brain not only increased in size, but certain portions, such as the frontal lobes, the cerebral cortex, and its supragranular layer, increased disproportionately. Also, the sulci and gyri increased and deepened. Other parts, such as the olfactory bulb, devoted to smell, have increased less than proportionately. These changes were greater in Eurasians than in Africans.

(4) Large testicles indicate that females mate with more than one man. ¹⁹ When there is more promiscuity, men who have larger testicles, who produce more sperm in their ejaculates, are more likely to fertilize the egg and pass on their alleles for large testicles to their sons. ²⁰ All the sex organs (e.g., testicles, penis, clitoris, vagina, ovaries) are larger in Africans. ²¹

(5) Apocrine glands are scent glands in areas such as the armpits and groin. They produce secretions that, after they are degraded by bacteria, produce pheromones, chemicals that have sexually ²² and racially-distinctive odors. Not only are the secretions themselves racially different, but the species of bacteria that degrade them to produce the odors are also racially different. Thus, there is a distinct difference in body odor between the major racial groups, detectible by dogs ²³ and by some people. ²⁴ Asians have the least amount of body odor and find the odor of the other races, particularly blacks, objectionable. ²⁵ Odor may seem like a trivial matter, but odor is very important, both in identifying genetic similarity between individuals and, between the sexes, receptability towards mating, the suppression of menstruation, and even the identification of mothers and their babies. ²⁶ There is some evidence that women tend to be attracted to men whose odor indicates that they are genetically similar to theirs, but not too similar; a slight difference in odor indicates that the man's immune system is different from hers, thereby possibly giving their children a stronger immune system. On the other hand, (Roberts, 2005). ²⁷

Sweat glands and other glands also differ according with race, with black sweat containing more chloride than white sweat. "Races also differ in the size and weight of endocrine glands, and in the substances carried in the urine." (Coon, 1962, p. 116).

(6) The epicanthic fold, a fat-insulated upper eyelid, protects the eye from the cold. All children have them in the womb, which suggests that it was



Figure 10-3

the greater neoteny of the Asians that caused them to be retained in Asian adults. (Fig. 10-3;

Baker, 1974, pp. 208-209).

(7) Dark irises exclude more light than light irises, thereby making a sharper image in bright light. (Howells, 1959, p. 271). Blue, green, and hazel eyes are recessive, meaning that both parents have alleles for light eye color. Men are said to prefer women with blue eyes because blue eyes are recessive and if any of "his" children have brown eyes, he will know he is not the father (Laeng, 2007), though it is possible for blue-eyed parents to have a brown-eyed child; ²⁸ also, blue eyes are associated with youth and fertility (though lighter eye colors have an increased risk of macular degeneration).

It is easier to see the size of the pupil if the iris is light colored. Since dilated pupils signal happiness, which is attractive, happiness is easier to detect in blue-eyed people. (Belkin, 2006). The incidence of blue eyes is 3 to 5% greater in boys, and blue-eyed people are more intelligent. ²⁹

(8) A remarkable, but little remarked upon, difference between humans and apes is that humans have a white sclera (eyeball or cornea), but in other primates it is dark. Compare a chimpanzee's eyes with a human's. (Figure 10-4). ³⁰ Other animals hide their eyes and their gaze from prey and predators; we expose ours to our fellow humans.

A white sclera means that it is easier tell where a human is looking and know at whom speech or a facial expression is directed,





thereby facilitating communications and cooperation, particularly of subtle and personal information. ³¹ A white sclera suggests more complex social relationships and a larger brain that is capable of interpreting this additional information. It also indicates living among people trusted enough to reveal what one is thinking about and what actions one may take. ³² The slightly yellowish sclera that has been reported in some Australian aborigines (Baker, 1974, p. 298) and adult male Africans may be due to the presence of melanin in their sclera and a less complete conversion to a white sclera. ³³

The need to inform others of one's 1.0 emotional state, and the need for others to know it, may have affected not just the sclera, but also the cones in the eyes. In man, there 0.8 are three types of cones in the eve, one that detects blue light, peaking at 440 nm, a second 0.6 that detects green light, peaking at slightly less than 550 nm, and a third that detects red light, peaking at slightly more than 550 nm. (Fig. 10- 0.4 5). 34 In animals that can see colors, it is unusual to have two cones that detect light at 0.2 wavelengths that are so close together. The reason for this in humans may be that the wavelength of 550 nm is where skin color changes according to the amount of blood underneath it. Thus, the almost-identical



wavelengths enable the cones to more easily detect blushing and anger by means of small changes in skin color. If that explanation is correct, 35 close-together wavelengths would be less

useful for detecting changes in blood flow in the very dark skin of Africans; as yet no data has been published showing that the wavelengths in African cones are not so close together or that Africans make less use of these changes in skin color. $\frac{36}{2}$

(9) Table 10-2 gives the height norms for the red part of the lip of African Americans and American Caucasians. (Table 10-2; <u>Farkas, 1981</u>). Since African Americans are about 25% Caucasian, lips would be larger in Africans, particularly the Congoids (Fig. II-1) from which African Americans came. It has been suggested (Dr. Julian O'Dea) that the everted lips that

most Africans have were selected for as a signal of good health, a sexual attractant, since facial color cannot be used for that purpose due to their dark skin. Many white female Hollywood stars have

	Mal	Male		le
	Upper	Lower	Upper	Lower
African Americans	13.3 mm	13.2 mm	13.6 mm	13.8 mm
Caucasian Americans	8.0 mm	9.3 mm	8.7 mm	9.4 mm
5	T.L.L. 44	~ ~		

Table 10-2

collagen injected into their lips to make them larger, so large lips are a sexual attractant in women. But usually traits that are sexual attractants in woman are seen as feminine and undesirable in men. Another explanation is that the increased surface area of the lips helps to cool the brain. (Irmak, 2004). Still another possibility is that large everted lips are a retained simian trait that enabled the lips to be flipped backwards to expose the teeth when the mouth is opened wide, thereby intimidating male rivals.

(IP0)pul a	ation	Nasal Index
FacAtri	can Bushmen	103.9
1Mbuti	Pygmies	103.8
-Aborig ⊈(Austr	gines alia)	99.6
Eskim	0	68.5
	ean	66.0
-Iran		63.7
<u>7</u> ,	Table 10-3	
notice		
that		



Figure 10-6

Figure 10-7

nose of Paris Hilton is narrower, longer (eyes to bottom of nose), and protudes more than the nose of the African woman. Those differences in shape produce vertical ovals for the nostril openings of Caucasians and horizontal ovals for the nostril openings of Africans. Also, the tip of the nose over the septum between the nostrils extends farther down in Caucasians than in Africans.

Narrow noses warm and moisten the air, and evolve where the air is cold or dry, and broad noses evolve where the air is warm or moist. (<u>Coon, 1962</u>, p. 62). It may be the brain, more than the

more than the lungs, that requires cooling (<u>Irmak, 2004</u>) or warming. (<u>Coon,</u> <u>1962</u>, p. 533). Large nasal

the

openings can take in more air when bursts of energy are needed.

(Howells, 1959. pp. 92. 212). which may help explain the large noses of Neanderthals. (Chap. 25). Table 10-3 (from DeAnza College. CA) gives the nasal index (width of nasal opening divided by its length, multiplied bv 100).



Figure 10-8 (DeAnza College, CA) is a map of nasal indices; note that narrow noses are generally found in cool or dry climates and broader noses in warm or moist climates. In Section IV, we will see that northerners migrated south and pushed the southerners farther south. The distribution of nasal indices in Figure 10-8 can then be interpreted as early hominids, once living near the equator and having broad noses, being pushed south into Australia and southern and western Africa by the thinner-nosed northerners, who replaced them just north of the equator.

(11) Africans have larger mouths, but racial differences in mouth size have not been measured and published. Figure 10-9 shows an African with an exceptionally large mouth. There are also racial differences in the shape of the palate (roof of the mouth). (Byers, 1997).

(12) (<u>Hudson, 1982</u>). The lower pitch of black voices compared to white voices is probably due to higher testosterone levels in both black males and black females. (Note 23, which follows).

(13) Negro skin is "more resistant to infection from a variety of skin afflictions, including some skin-related or skin-implanted diseases like scarlet fever or diphtheria." ³⁷

(14) Subcutaneous fat benefits people in cold climates by retaining heat in the body. It is especially beneficial for new babies as



Figure 10-9

they have a higher ratio of surface area to volume than do adults. Uniform fat would retain too much heat in the tropics, but fat concentrated in the buttocks lowers the body's center of gravity and does not add to the weight of the legs when they swing forward, thus providing a way to store energy internally without impeding movement much (pp 222-223). Blacks have less body fat and more muscle than whites. (Wagner, 2000).

(15) Melanin is a pigment that darkens the skin, eyes, and hair; it comes in two varieties, phenomelanin, which is blond, and eumelanin, which is dark. African dark skin is due to an

African-specific allele for eumelanin. (Harding, 2000). The conventional view is that too little melanin lets in so much UV light that the skin burns, cancer may occur, ³⁸ the synthesis of DNA is disrupted, and folic acid may be destroyed, resulting in birth defects. Too much melanin lets in insufficient UV light for the body to make enough vitamin D, which is essential for building and maintaining bones. ³⁹ Thus, skin color evolves according to the amount of UV light that the skin is exposed to. (Jablonski, 2000). A more recent view is that melanin is a fungicide and bactericide, and therefore its amount correlates better with warmth and moisture, which is why it is found in tissues other than skin. (Mackintosh, 2001; see Gloger's rule in Glossary). The melanin in Africans can also be found inside the mouth and, to a lesser extent, throughout the body, except in the bones. (Cartwright, 1857, p. 47). Blacks are more resistant to skin diseases than whites. ⁴⁰ The heritability of skin color is estimated to be 63 to 72%. (Harrison, G.A., 1964). The yellowish color of Asian skin is due to the presence of more fat under their skin.

(16) Caucasians have the most body hair, Asians the least, with Africans in between, but closer to Asians. It is probable that our northern predecessors once had "fur," thick body hair for warmth, $\frac{41}{1}$ but today fur appears only as an occasional atavism (i.e., "generalized congenital hypertrichosis"), where the turned-off allele that codes for it is turned on again, resulting in a "werewolf." (See **KRT41P** gene, p. 103.)



Figure 10-10

(17) Some Australian aborigines have blond hair (Fig. 22-5, p. 177 & 27-4, p. 232) which may be more of an ash blond (Fig. 10-10). Unlike the golden blond hair of Europeans, ash blond hair lacks both the reddish (phenomelanin) pigment and the dark (eumelanin) pigment. ⁴² African hair is black, except certain diseases can make it reddish.

(18) African hair grows more slowly and is more fragile than European hair. Asian hair grows the fastest and has the greatest elasticity. Africans have the shortest hair, ⁴³ Asians the longest. African males, and even more so European males, are more prone to balding than Asian males. ⁴⁴ Some Africans, especially females (Fig. 10-11), have a receding hairline over the forehead, a characteristic of the bonobo chimpanzee and the orangutan. (Fig. 10-12). ⁴⁵ (Also see Fig. 25-8, p. 215 & 26-8, p. 226).



Figure 10-11



Figure 10-12

(19) The wooly hair of Africans is believed to be a specialized trait that evolved in their tropical bipedal ancestors to facilitate the evaporation of sweat, thereby keeping the brain cool. Similarly, pubic hair, which is curly in all the races, may serve to facilitate the evaporation of pheromones. Figures 10-13a, 10-13b, and 10-13c are transverse cross-sections (top) and longitudinal views (bottom) of the head hair of Caucasians, Negroids, and Mongoloids. ⁴⁶

Asian hair is coarser and thicker than Caucasian hair. "If the hair follicles of a Chinaman, a European, and a Negro are cut across transversely, it will be found that the diameter of the first is 100 by 77 to 85, the second 100 by 62 to 72, but that of the Negro

is 100 by 40 to 60. This elliptical form of the Negro's hair causes it to curl more or less tightly." "... the crispest, most closely curled hair ["peppercorn"] is found among the yellow Hottentots and Bushmen." (DuBois, 1915). "According to Professors Brown, Seidy and Gibbs, the negro's hair is not tubular like the white man's, but it is eccentrically elliptical with flattened edges, the coloring matter residing in the epidermis and not in tubes. In the place of a tube, the shaft of each hair is surrounded with a scaly covering like sheep's wool, and, like wool, is capable of being felled." (Cartwright, 1857, p. 47). The pigment granules are "sparse to moderately dense with fairly even distribution" in Caucasian





an Figure 10-13a Figure 10-13b Figure 10-13c

hair, "densely distributed (hair shaft may be opaque) and arranged in prominent clumps" in Negroid hair and "densely distributed and often arranged in large patchy areas or streaks" in Mongoloid hair. (Deedrick, 2004).

African hair exits perpendicular to the scalp, at random angles to their elliptical axes so that each strand curls independently. Eurasian hair exists at the same angle as adjacent hairs, so that strands curl together. (Howells, 1959, p. 271). Figure 10-14 (DeAnza College, CA) is a map of hair type, which

coincides well with the three major races. The curly hair indicated on some of the South Pacific Islands



north of Australia is for Negritos.

fibers (Types IIA - pink and IIB – white, almost all IIB in humans) tire quickly, but contract more rapidly. East Africans (e.g., the Nandi district in western Kenya; Entine, 2000, pp. 39-41) have more Type I red fibers and excel in marathons; West Africans (and most African Americans; id, p. 34) have more Type IIB white fibers, ⁴⁷ and excel in sprinting and jumping, which is why African Americans dominate the running back and cornerback positions in football and all but

six of the 500 fastest times for the 100-metre dash have come from sprinters of West African descent. West African sprinters have heavier fast-twitch muscles, as well as denser bones, narrower hips, thicker thighs, longer legs and lighter calves, all helpful in running. ⁴⁸ Eurasians have less fast twitch muscle fiber than Africans, suggesting a greater reliance upon tools and weapons, and the intelligence needed to make and use them, and less reliance on athletic ability. ⁴⁹

(21) Africans have slenderer calves with longer tendons. ⁵⁰ Kenyans (from East Africa) dominate world records in long distance races. They have birdlike legs (400 grams less flesh on each calf), so they need less energy to swing their legs.

(22) The gluteal (buttocks) muscles in Africans and Caucasians are "stacked," but they are "offset" in Asians, making Asian buttocks flatter. These muscles are thicker in blacks.

(23) Higher testosterone levels correlate with a more masculine body, an earlier sexual maturity, a higher fertility, manual labor instead of intellectual labor, a higher crime rate, ⁵¹ a higher sexually transmitted disease rate, a shorter lifespan, and lower intelligence. ⁵² There is convincing scientific evidence suggesting that testosterone is the primary hormonal element of aggression in both sexes. ⁵³ The severity and violence of the crime for which female prison inmates were incarcerated is in direct proportion to their plasma (blood) levels of testosterone. (Dabbs, 1997). Asians have lower testosterone levels, but the level in females is closer to the level of males (i.e., less sexual dimorphism). Other hormone levels also differ between blacks and whites. (Wright, 1995). Testosterone levels decline when a male pair bonds, suggesting that such males had greater reproductive success. (Shur, 2008).

(24) Low levels of serotonin, a neurotransmitter, have been linked to impulsive violence, suicide, alcoholism, and depression. (Brown, 1982). Serotonin levels are 20 to 30% lower in men than in women, and men are more prone to impulsive violence. Serotonin levels are high in newborns, low in adolescents (who are more prone to impulsive violence), then rise again with age. Blacks have lower levels of serotonin, but *if socioeconomic status (SES) is controlled for* there is no correlation between race and serotonin level; ⁵⁴ low serotonin levels are genetic as they have been tied to specific alleles. ⁵⁵ However, the egalitarians fear that the races may differ genetically in their propensity towards violence (they do) and have stifled research in this area.

(25) Blood types overlap quite a bit between the races, though most of the world is Rh positive while about half of Europe is Rh negative. (Sykes, 2001, p. 41). The races differ significantly in the percentage of their populations that fall into the different categories of the various systems for classifying blood. (Baker, 1974, pp. 185-187). Some blacks have rare blood types found only in blacks and, to avoid incompatibility, they may be advised to receive blood transfusions from blacks having the same type. Treating a person of one race as though he were a member of a different race can lead to serious medical problems or even death. "The number of red corpuscles and the amount of haemoglobin in the blood [Nicklas, 1987], the pulse-rate, the vital capacity [lung capacity], the muscular strength, the amount of urea in the urine, are different in different races." ⁵⁶. "Most populations below the Sahara average 60 percent of the Rho subtype found in only 2 percent of whites. Absence of the Duffy factor (Fy) in blacks, common in other people, is responsible for their immunity to vivax malaria." (Pollitzer, W.S., *The Gullah People and their African Heritage*, 1999, p. 15).

There are scores of different tissue types that have a genetic component and differ

among the races. (<u>Sykes, 2001</u>, p. 91). The races have different bacteria in their bodies (<u>Caufield, 2007</u>), e.g., different vagina flora and fauna, and different parasites, e.g., a different species of body mite inhabits the bodies of East Asians and Europeans.

There are racial differences in reactions to foods, drugs (<u>Bailey, 2005</u>), and other substances. In June of 2005, the Food and Drug Administration (FDA) approved the sale of BiDilTM, a drug that reduces damage to the heart in African Americans, but has little effect on Eurasians. (<u>Liggett, 2008</u>). The FDA specifically permitted its sale to be directed at blacks. GenSpec Labs, LLC is even marketing race-tailored vitamins, specially designed to meet the needs of African Americans, Hispanics, and Caucasians.

There are racial differences in susceptibility to various diseases, even neuroses and psychoses, but especially debilitating diseases, such as cancer, and genetic diseases. (Holloway, A., 1996). For example, whites have much more melanoma (skin cancer) than blacks, but far more blacks have a deadlier form of it. (Hu, 2006). African Americans are more than twice as susceptible as whites to developing prostate cancer by age 55, and that is due, at least in part, to a gene variant in chromosome-8. (Freedman, M.L., 2006). Blacks are also more susceptible to tuberculosis. (Stead, 1990). Northern Europeans, on the other hand, are more susceptible to cystic fibrosis. Two well-known racial genetic diseases are sickle-cell anemia in Africans and Tay-Sachs disease in European Jews, ⁵⁷ but there are many others.

In fact, the number of medical differences between the races is so great that it would take an entire book just to describe them all. A black medicine specialty is arising and there is even a journal, *Ethnicity and Health*, devoted to medical differences between the races. Blacks at Howard University have started a program to identify genes unique to blacks so that medical treatment can be specifically tailored for blacks. To argue that "race" is just a social concept when the human body reacts differently to chemical and biological substances and infectious organisms depending upon race, illustrates perfectly how nonsensical that position is.

Chapter 11

Table of Contents

FOOTNOTES

1. (Lynn, 2006a, pp. 210 – 211) for human data and (Aiello, 1990, p. 193) for chimpanzee and gorilla data. Different measuring techniques give somewhat different data. (Rushton, 2000a, pp. 130, 133) gives a brain volume of 1364 cc for Mongoloids, 1347 cc for Caucasoids, and 1267 for Negroids. Back

2. Blacks have better hearing than other races. (Murphy, 2006). Back

3. (<u>1911 *Encyclopedia Britannica*</u>; Baker, 1974, p. 308). <u>Back</u>

4. The Pygmies live in forests around the villages of the Congoids. Unlike the Congoids, they "sometimes have beards and body hair, especially on the back..." (<u>Howells, 1948</u>, p. 277). <u>Back</u>

5. (Ross, 1986). Back

6. (<u>Rushton, 2000a</u>, p. 133; <u>Broom, 1918</u>, p. 63-79; <u>Howells, 1948</u>, p. 118; <u>Galloway, 2005</u>, pp 31-47). <u>Back</u>

7. Brain volume in cc = 1.038 x (brain weight in grams). (<u>Rushton, 2000a</u>, p. 126). <u>Back</u>

8. Drawings by Pierre Louis Gratiolet. The drawings are not to the same scale. The front of the brains is to the left. See (<u>Connolly, 1950</u>). "With regard to convolutions there is unanimous testimony that the convolutions of the brain of the Negro are less numerous and more massive than the brain of the European." (<u>Hunt, 1864</u>, p. 10). <u>Back</u>

9. (Broca, 1858, cited by Rushton, 2000a, p. 106). The brain of the Hottentot Venus, Fig. 26-5, and the brain of another Sanid were examined and found to have simpler sulci. (Baker, 1974, pp 319, 321; Tiedemann, 1836; Bean, 1906; Connolly, 1950, pp. 146, 203-204, 360). Back

10. "More intelligent brains show faster nerve conduction, less glucose utilization in positron emission tomography [PET scans], faster reaction times, faster inspection times, faster speeds in general, greater circumference and volume, smaller standard deviation in reaction times, greater variability in EEG [electroencephalogram] measures, shorter white matter T2 relaxation times, and higher gray-white matter contrast with magnetic resonance imaging [MRI]." (Miller, 1994d). Back

11. As a percentage of the brain, the cerebral cortex is about 80% in man, about 74% in apes, about 68% in monkeys, and about 50% in prosimians. (<u>Corballis, 1991</u>, p. 67). It develops some time after birth. <u>Back</u>

12. (Putnam, 1967, p. 51, quoting Bolton, 1914). Back

13. (<u>Simpson, 2003</u>, p. 712). " ... the grey substance of the brain of a Negro is of a darker color than that of the European, that the whole brain is of a smokey tint, and that the pia mater [the innermost membrane covering the brain] contains brown spots, which are never found in the brain of a European." (<u>Hunt, 1865</u>, p. 10). <u>Back</u>

14. (<u>Passingham, 1982</u>). "... imaging studies have shown the prefrontal cortex to be activated when subjects plan or solve the sorts of problems that make demands on general intelligence. Furthermore, there is a significant correlation between the volume of frontal grey matter and intelligence as measured on such tests." (<u>Passingham, 2002</u>). <u>Back</u>

15. (Broca, 1858, cited by Rushton, 2000a, p. 106; Bean, 1906; Levin, 1997, p. 105). Back

16. A frontal lobotomy, which removes the anterior frontal area of the brain, leaves a person conscious and seemingly normal, but unable to plan and take initiative. (Penfield, 1957, p. 226). That is why Africans have been compared to lobotomized Europeans. (Simpson, 2003, p. 705). Back

17. (Dr. Nora Volkow, <u>"News Release</u>," National Institute on Drug Abuse, Jan., 20, 2006). "Numerous studies have demonstrated significant racial differences in the metabolism of tobacco-related products." (Wilson, S.E., <u>"Study Examines Racial Differences Among Children</u> <u>To Environmental Tobacco Smoke Exposure Cincinnati Children's Center for Environmental Health</u>," Mar. 15, 2005). <u>Back</u>

18. African Americans have much lower slow wave brain activity during sleep than do Caucasians, which also suggests structural differences in the brain. ("<u>Slow Wave Activity During</u> <u>Sleep Is Lower In African-Americans Than Caucasians</u>," *Science Daily*, June 13, 2007). <u>Back</u>

19. When female chimps come into heat, they are "famously promiscuous" and mate with a

large number of males, who have the largest testicles of any primate. Back

20. Females may then choose men with larger sex organs so that their sons will have more offspring. <u>Back</u>

21. (Library of Excerpts, "<u>Menopause and Menstruation</u>," *neoteny.org*). The sperm of promiscuous primates also swim faster (<u>Nascimento, 2007</u>), and one would expect that to also be true of Africans. <u>Back</u>

22. (<u>Matchock, 2006</u>). "Dancers made about \$70 an hour [in tips from lap dancing] during their peak period of fertility, versus about \$35 while menstruating and \$50 in between." (Hutson, M., "<u>The Stripper's Secret</u>," *Psychology Today*, Oct. 2, 2007, online). <u>Back</u>

23. (<u>Baker, 1974</u>, pp. 174, 176; White, S. & Tieken, T., (1999), "Scent – K9's Reason For Being"). <u>Back</u>

24. (<u>Prichard, 1836</u>, p. 292). Chemical analysis can already identify individuals and their sex just from their odor. (<u>Penn, 2007</u>). <u>Back</u>

25. (<u>Baker, 1974</u>, pp 173-177; <u>Hall, 1960</u>). <u>Back</u>

26. The retention of arm pit hair, even among very hairless humans, is believed to be for the dissemination of pheromones (odors to attract the opposite sex) - until modern times, people did not bathe regularly and some of us still don't. (Baker, 1974, p. 165). The scent glands of the genital region become functional only at puberty. (Baker, 1974, p. 169). "Mothers can recognize their babies by smell alone within six hours after birth, and within days babies can recognize their mothers' distinct smells." (Etcoff, 1999, p. 241). Individual mice, and probably individual humans as well, can be identified by their genetically controlled odor. (Kwak, 2008). There is evidence that the odors (pheromones) that women living together emit cause them to menstruate at about the same time of the month. (Weller, 1993). Back

27. (Jacob, 2002; Wedekind, 1995). Women may be unfaithful or may mate with men of a different race for this reason. (Garver-Apgar, 2006). Back

28. (New Scientist, "The Color Code," Mar. 10-16, 2007). Back

29. Blue eyes are associated with strategic thinking and achievement, which would be more selected for in men. ("Blue-eyed people better off, say scientists," News.com.au, Aug. 20, 2007; Clerkin, B., "Why blue-eyed boys (and girls) are so brilliant," London Daily Mail, Aug. 20,2007). Also see (Worthy, M. "Eye Color, Sex, and Race, 1974). Since light pigmentation is neotenic and blue eyes are less pigmented, neoteny may also play a role: "Most [human] babies have blue eyes but they usually darken as the pigment melanin builds up in the iris." (Id). "Negro infants at birth and for a short time afterwards have not infrequently a dark, grayish-blue iris." (Johnston, 1910). Puma kittens have blue eyes, which later become brown. (*MSN Encarta Encyclopedia*). Blue eyes, blond hair, and light skin are produced by the HERC2 gene (p. 102); all three traits are associated with youth, which suggests that the neoteny that occurred in the Caucasian lineage was not the same as the neoteny that occurred in the Asian lineage. Blue eyes can transmit up to 100 times as much light as dark eyes. (Mogk, 2003). While this may lead to macular degeneration, the additional light may have stimulated the pineal gland, giving blue-eyed people a fertility advantage. Back

30. (Kobayashi, 2001). Unlike anywhere else on the body, muscles on the face are attached directly to the skin. (Etcoff, 1999; Schmidt, 2001). Back

31. High intelligence is selected for in animals that have complex social interactions; the smartest animals are also the most social. Even consciousness may be a social adaptation, so that we are aware of how others see us and can behave accordingly. <u>Back</u>

32. (Tomasello, M., "For Human Eyes Only," New York Times, Jan. 13, 2007). Back

33. "Their [Pygmies of central Africa] eyes are dark brown, but the sclera is white, not flecked with melanin patches as it is among many Negroes and Australian aborigines." (Coon, 1962, p. 654). "The white of the eye has, in all negroes, a yellowish tinge." (Burmeister, 1853). "... the sclera [of Australian aborigines is] somewhat yellowish." (Baker, 1974, p. 298). Referring to the Nilotids (Africans near the Nile River), "The cornea of the eye is somewhat brownish ..." (Baker, 1974, p. 329). The eleventh edition of the *Encyclopedia Britannica* (1911, p. 344) reports that the Negritos of the Pacific (aborigines) have "eyes dark brown with yellowish cornea." (It is unfortunate that such an old edition of that encyclopedia must be cited, but the Equality Police do not permit frankness on racial matters.) Back

34. (*Wikipedia*, "<u>Color vision</u>"). The peaks of the detectors are in the center of the blue, green, and red ranges. <u>Back</u>

35. (<u>Changizi, 2006</u>). Here is another explanation. Vertebrates have cones in their retinas for seeing in color and rods for seeing in black and white, but with more detail. The progenitors of mammals had four types of cones, enabling them to distinguish subtle differences in color. When the dinosaurs ruled the earth, early mammals became nocturnal. They lost two types of cones, which were replaced by more rods, enabling them to see better at night. When, 65 mya, the dinosaurs were wiped out, most mammals became diurnal (active in daylight), but still had only 2 types of cones. Birds, however, evolved from dinosaurs and retained the four types of cones. The early primates, from which man evolved, had a mutation that gave them a third cone, which helped them find ripe fruit, and humans today have those 3 types of cones. (Goldsmith, 2006). Back

36. If the wavelengths for the cones in the eyes of Africans are the same (and they very likely are) that would suggest that Africans acquired alleles for those wavelengths from Eurasians, and therefore man migrated into Africa, not out of Africa. <u>Back</u>

37. (<u>Howells, 1959</u>, p. 267). "The skin is also much thicker, especially on the skull, the palm of the hand, and the sole of the foot." (<u>Hunt, 1864</u>, p. 10). <u>Back</u>

38. Whites with less melanin are several times more likely to develop skin cancer than darker whites. (Dwyer, 2002). Back

39. Eskimos and the Inuit, who eat mostly vitamin D-rich foods such as seal, walrus, and fish, don't need vitamin D made from sunshine, and their darker skin protects them from the increased cosmic radiation in the Arctic and from ultraviolet light reflected off snow and ice in the summer. <u>Back</u>

40. <u>Gloger's Rule</u> states that the more humid the environment, the darker the skin. The reason is that eumelanin is more difficult for bacteria and fungi to attack than phenomelanin. <u>Back</u>

41. Although human babies are hairless, as fetuses they have a fine body hair, "lanugo," suggesting the fetuses of their long-ago ancestors were hairy; see "Biogenetic Law." Back

42. Of the two main hair pigments, eumelanin and phenomelanin, both yellow blonds and ash blondes have very little eumelanin pigment in their hair, but yellow blonds have more phenomelanin. (<u>Birdsell, 1993</u>). Some people in Melanesia (Brouganville, the Aita) have very dark skin and hair that looks ash blond, but their features are more Negroid and less Caucasian than the Australian aborigine blonds. (Razib, "<u>Blondism in Melanesia</u>, *Gene Expression*, Oct. 12, 2007). <u>Back</u>

43. "It [Negro hair] is rarely more than three inches long and, generally not nearly so long. (<u>Hunt, 1864</u>, p. 10). (Emma Freeman, London's Natural History Museum). <u>Back</u>

44. (Emma Freedman, London's Natural History Museum). 45. "The superfices of the face [forehead] at puberty exceeds that of the hairy scalp both in the negro and the monkey, while it is always less in the white man." (<u>Cartwright, 1857</u>, p. 45). Orangutan picture from <u>Aravind B</u>. <u>Dev's Animal Talks</u>. <u>Back</u>

46. (Houck, M.M., "Forensic Hair Comparisons,">). The Caucasian cross-section is enlarged. East Asian cross-sectional area is about 30% greater than African hair and about 50% greater than European hair. Back

47. And, compared to whites, they have 30 to 40% more of the enzymes needed to activate fast twitch muscles. (<u>Ama, 1986</u>). <u>Back</u>

48. The psoas major muscle, which lifts the legs, "is markedly larger in black than in white subjects." (<u>Hanson, 1999</u>). <u>Back</u>

49. The earliest European modern humans were nearly as robust as Neanderthals. About 30,000 ya they began to lose muscle and bone mass. Modern oarsmen could not power a Greek trireme as fast or as long as Greeks did in 500 BC. (Pain, S., "<u>Histories: When men were gods</u>," *New Scientist*, Issue 2590, Feb. 10, 2007). <u>Back</u>

50. (Cartwright, 1857, p. 46). Back

51. ("High Testosterone Linked to Crimes of Sex, Violence," Crime Times. 1(2): 2). Back

52. (<u>Nyborg, 1987; Rushton, 2000a</u>, p. 272; <u>Dabbs, 2001</u>). Gifted children have lower salivy testosterone levels. (<u>Ostatnikova, 2000</u>). <u>Back</u>

53. (Potischman, 2005; Harris, J.A., 1996). "... the same hyperaggressive monkeys that kill each other are also hypersexual ..." (Casual remark by Frederick Goodwin, director of the Alcohol, Drug Abuse, and Mental Health Administration, at the Feb., 1992 meeting of the Mental Health Advisory Council; the Congressional Black Caucas was offended and had him fired). Back

54. Here is an example of academic deception. Since SES (socioeconomic status) correlates with race, by "controlling for" SES, i.e., comparing whites and blacks of the same SES, the researchers removed the correlation between serotonin level and race. The fact remains that a black is more likely to have low serotonin than a white. <u>Back</u>

55. (<u>Williams, 1994</u>). The levels are not completely genetic – abusing a child may lower his serotonin level, even after he becomes an adult. (<u>Maestripieri, 2006</u>). <u>Back</u>

56. (Seal, B. "Meaning of Race, Tribe, Nation," in *Papers on Inter-Racial Problems, First Universal Races Congress*, 1911). <u>Back</u>

57. ("Natural Genius?" The Economist, June 2, 2005). Back

Chapter 11 - Reproductive Strategy

"Nobody will ever win the battle of the sexes. There's too much fraternizing with the enemy." Henry A. Kissinger

There are two strategies that living things can use to create the next generation with the limited amount of energy they have available for reproduction: (1) They can invest that energy in a large number of progeny, putting only a little energy into each one so that, although most will not survive, there will be so many of them that a few will survive (an "r" strategy), or (2) they can invest that energy in only a few progeny, putting more energy into each one (e.g., as food in an egg, larger size at birth, body fat, milk, or care after birth), so that each one has a better chance of surviving (a "K" strategy). ¹ Salmon, for example, have an "r" strategy, laying millions of eggs that are then abandoned; most die, but enough survive to make the next generation. An elephant, on the other hand, has a "K" strategy, having only a single 170 to 250 pound baby after 22 months of pregnancy, which is then nursed by the mother for three to five years. Most living things are in between the extreme "r" and the extreme "K" strategies. All humans have a very "K" strategy, but the races differ considerably in how "K" they are. ²

J. Philippe Rushton has done a superb job of documenting racial differences in reproductive strategy (<u>Rushton, 2000a</u>), concluding that blacks are the least "K," Asians the most "K," and Caucasians in between, but close to Asians. ³ This racial order of reproductive strategy is a direct consequence of our evolution from a more "r" orientated ape. All the races descended from an ape; Asians evolved the most away from that ancestor, Africans the least, and Caucasians in between, but close to Asians. Table 11-1 presents a few of the traits that demonstrate racial differences in reproductive strategy. ⁴

Trait	Northeast Asians	White Europeans African- Americans		A: Africans C: Chimp	
Cranial sutures (1)	Close late	Close late	Close earlier	C: Still earlier	
Eruption of wisdom teeth 5	of wisdom teeth 1-2 yrs late (Japanese) Average Earlier		Earlier	A: 1-2 yrs early	
Mean age of puberty (2)	Later	Later Pubic hair: 10.5 Breasts: 10.3 Menarche: 12.7 Pubic hair: 9.5 Breasts: 9.5 Menarche: 12.7		-	
Gestation period (3)	-	Week 39: 33% born Week 40: 55% born	Week 39: 51% born Week 40 70% born	-	
Twins (per 1000 births) ⁶	<4	8	-	A: >16 (e.g., 57) <u>7</u>	
Triplets (per million)	10	100	-	A: 1700	
Quadruplets (per million)	0	1	-	A: 60	
Total fertility rate ⁸	1.6 (China)	1.5 (Can., all races)	-	A: 5.5	

Table	11-1	
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(1) The sutures are where the bones of the skull meet. In a child, they are open and moveable but by adulthood they have fused. The sutures of Africans close earlier. ⁹ Late fusing sutures indicate greater neoteny (Schwartz, 2005, p. 131) and a more prolonged period of brain growth; sutures that close early indicate faster maturation. The sutures in Africans close earlier than in Eurasians. (Broca, 1858). The cessation of brain growth is consistent with IQ testing that shows increases in the intelligence of Negro children until about age 3, when they begin to lose ground (Chapter 14, FN 37 & FN 12, below); 2 year old Africans have an average IQ of 92, but it falls to 67 as they mature. (Lynn, 2006a, p 45).

(2) (Wu, 2002). By age nine, 49.4% of African American girls start developing pubic hair or breasts, but only 15.8% of Caucasian girls. (Wu, 2002). Environment can affect the onset of menstruation; for example, vigorous exercise can delay it and obesity can accelerate it. (Kaplowitz, 2001). Growing up in a stressful home (e.g., no father, 10 violence, abuse) can lower the age of puberty and make girls more promiscuous. (Allman,

<u>1994</u>, p. 120).

(3) (<u>Rushton, 2000a</u>, p 147). This is a large difference and is strong evidence that blacks have a less Korientated reproductive strategy than whites. Black women have 3 times as many premature births as white women, even after adjusting for SES, and their median gestation period is two weeks earlier (31 vs. 33). (<u>Kistka</u>, <u>2007</u>).

Race	Age under 18 (2000)		Births Under 19 (1999)		Rate	
	(A) % of Population	% of Race	Number	(B)%	(B)/(A)	
White	44.0	60.9	214,971	44.3	0.9	
Black	11.4	15.8	122,175	25.2	2.2	
Hispanic	12.4	17.2	127,402	26.2	2.1	
Other	4.5	6.2	20,556	4.2	0.9	

In Table 11-2, the age of mother at birth is based on data from the National Center for Health Statistics.

The last column shows that white and "other" teenagers have slightly fewer births than do adults of those races (0.9), but black and Hispanic teenagers have more than twice as many births as do black and Hispanic adults (2.2 and 2.1, respectively).

Tab	Accomplishment	African babies	European babies
3	Being drawn up into a sitting position, able to prevent the head from falling backwards	9 hours old	6 weeks
sho	Mith head held firmly, looking at the face of the examiner	2 days old	8 weeks
that	Supporting herself in a sitting position and watching her reflection in a mirror	7 weeks	20 weeks
fror	Holding herself upright	5 months	9 months
birt	Taking the round block out of its hole in the form board	5 months	11 months
bab	Standing against the mirror	5 months	9 months
are	Walking to the Gesell box to look inside	7 months	15 months
mu moi	Climbing the steps alone	11 months	15 months

mature

Table 11-3

than

European babies. ¹¹ Although the author of Table 11-3 was attempting to show that blacks are superior because they mature faster, all of the activities in the table show faster maturation of the brain, which is associated with lower intelligence at maturity. ¹²

Figure 11-1 (Geber, 1958, p 185-195) shows two of the tests:

Faster maturation is also associated with faster population growth, and Africans have the highest population growth in the world, ¹³ now that Eurasians provide them with food and medical care. Despite wars, famines, AIDS, and the theft and waste of hundreds of billions of dollars, the population of Africa continues to explode. "In the United States the average woman will be a source of 14 children, grandchildren, and great-grandchildren; the comparable figure for an African woman is 258." (<u>Rushton, 2000a</u>, p 161). This is exactly what one would expect from an examination of African reproductive traits.

African men have a stronger sex drive due to higher testosterone levels, a higher sperm count due to larger testicles, and behaviorally they have well-honed and fairly indiscriminate seduction skills. African women have a shorter gestation period, produce more multiple births, have fewer complications giving birth (due to fetus' smaller head size and elongated skull), and African children become

sexually mature at an earlier age and thereafter are considerably more sexually active than other races. Nigeria's population, for example, doubled in just 25 yrs from 65 million in 1980 to 144.4 million in the middle of 2007 and is projected to reach 281.6 million by 2050, a 95% increase; only 4% of married women in Nigeria in 2003 with 2 living children said they did not want any more. (Population Reference Bureau, 2007 World Population Data Sheet 7). In the West, educated women have fewer children, 14 but educated women in Kenya who have already had 12 children have a 50% chance of having a 13th

woman and Niger at 6.83. Meanwhile, the United States is just below replacement





child. (Popp, 2000). The two global fertility Nine hours old, head doesn't fall Two days old, holds head and looks winners are Somalia at 6.91 children per backwards (white child, six weeks) at adult (white child, eight weeks) Figure 11-1

level (2.1) with 2.07, and a large proportion of those are not white. Figure 11-2 (Wikipedia, "Total Fertility Rate") shows the fertility rates around the world. The rate is clearly highest in Africa, which is consistent with the more "r" reproductive strategy of Africans.



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FOOTNOTES

1. (Rushton, 2000a, p 203; Levin, 1997, pp. 136-137). Back

2. While the reproductive strategy is genetically determined, culture, the availability of food, and other factors can cause individuals to choose a more "r" or a more "K" strategy. For example, in the West, people are making a greater investment in their children (e.g., braces, medical treatment, college, keeping up with peers), necessitating a reduction in the number of children they have, a more "K" reproductive strategy. ("Increased Life Expectancy May Mean Lower Fertility," ScienceDaily, Feb. 17, 2008). Although individuals will vary in how "r" or "K" they are,

the mean "r-K" strategy of a population will tend to move towards the optimum for its environment. (<u>Chapter 4</u>, <u>Rule 10</u>). <u>Back</u>

3. An "r" strategy correlates with low IQ, tropical adaptations, poverty, and other traits, and a "K" strategy correlates with their opposites. (Andreev, 2004). Back

4. Data from (Rushton, 2000a, pp. 147-152) and elsewhere, as indicated. Back

5. (Olze, 2004). Also see (Harris, E.F., 1990; Davidson, 2001). Back

6. Normal fertilization, not implanted fetuses or hormonally-induced multiple births. It is the mother's race, not the father's, that largely determines the rate of twinning. (<u>Rushton, 2000a</u>, p. 165). <u>Back</u>

7. (Rushton, 2000a, p. 165) citing (Bulmer, 1970). (Allen, 1987; Nylander, 1975). Back

8. Average number of children born to a woman during her lifetime. (Population Reference Bureau, <u>2006 World</u> <u>Population Data Sheet</u>, "Demographic Data and Estimates for the Countries and Regions of the World"). The European rate includes a significant number of non-European immigrants. In most countries, fertility peaks among women between ages 20 to 24, but in nearly half of the surveyed countries of sub-Saharan Africa the peak extended to age 29 and sub-Saharan African women continue to have children at older ages than elsewhere. (INFO Project, Center for Communication Programs, The Johns Hopkins University Bloomberg School of Public Health, Volume XXXI, Number 2, Spring, 2003). <u>Back</u>

9. "The bones of the head are not only disunited, but are more or less overlapped at birth, in consequence of the largeness of the Caucasian child's head and the smallness of its mother's pelvis, giving the head an elongated form, and an irregular, knotty feel to the touch. The negro infant, however, is born with a small, hard, smooth, round head like a gourd. Instead of the frontal and temporal bones being divided into six plates, as in the white child, they form but one bone in the negro infant. The head is not only smaller than that of the white child, but the pelvis of the negress is wider than that of the white woman – its greater obliquity also favors parturition [childbirth] and prevents miscarriage." (Cartright, 1857, p. 45). The large number of bones and their overlapping permit more growth after birth. (Broca, 1858, cited in Rushton, 2000a, p. 106; also see Chap. 11). Back

10. The absence of a father can lower the age of puberty by 3 months, perhaps due to the absence of the father's pheromones, but the onset of puberty in African Americans is not affected by the presence or absence of a father, possibly because the presence of fathers was not common in Africa. (<u>Matchock, 2006</u>). <u>Back</u>

11. (Wilson, 1978). Also see (Levin, 1997, p. 113; Freedman, 1969). "... the kinesthetic maturation rate [control of bodily movements] of native African infants was two or three times that of European children." (Simpson, 2003, pp. 712-713). Faster maturation goes along with a shorter life span; both are a more of an "r" reproductive strategy. In 2002, African-Americans had 40.5% more deaths than they would have had with the white mortality rate. (A 2005 report by former U.S. Surgeon General David Satcher). The bodies of blacks mature faster. (Iscan, 1987). Back

12. (Shaw, 2006). Blacks are born shorter, lighter, and with smaller head perimeters; by age 7 they have caught up, but not in head perimeter. (Rushton, 1995). On the other hand, Chinese babies are also born with smaller brains, as Chinese women are petite, but the brain grows rapidly after birth, though the baby matures slowly. The gap in performance between Negro and white children increases with chronological age; the gap is largest at high school and college levels. (Shuey, 1966). "Young monkeys and young negroes are superior to white children of the same age in memory and other intellectual faculties." (Cartwright, 1857, p. 45). "Young Negro children are nearly as intelligent as European children; but the older they grow the less intelligent they become." (Hunt, 1864). "The monkey infant is better than the ape, and the ape better than the human, on such skills as grasping an object, reaching for an object, or sitting up unassisted. After 10 or 11 months, the superiority of the human infant begins to assert itself." (Corballis, 1991, p. 69, citing Premack, 1988). "The intellectual progress of the Negro is rapid during the first ten or twelve years, next it slows down, becomes stationary, then proceeds slowly, diminishing during some fifteen years. Finally a rapid enfeeblement occurs." (Professor H.V. Vallois, quoted in (Putnam, 1961, p. 52)). Quotes from (Hunt, 1864, p. 17): "Up to fourteen years of age black children advance as fast as whites." (Sir C. Lyell). "[W]hen young, he [the modern Egyptian] is remarkably precocious in intellect, and learns with facility. As he grows up, his intellect seems to be dulled or diminished." (Elliot Warburton). "[Africans] have a guick apprehension of the ridiculous, often surpassing the intelligence of the whites, and only drop behind them about the twelfth year, when the reflective powers being to have their assendency." (Colonel Hamilton Smith). It's not how fast you can go, it's how far you can go. Back

13. For sub-Sahara Africa, there are 40 births, but only 16 deaths, per 1000 people per year. (Population Reference Bureau, *2006 World Population Data Sheet*, "Demographic Data and Estimates for the Countries and Regions of the World"). <u>Back</u>

14. Because educated women earn more, the amount of money they lose by having children, their "opportunity cost," is greater. <u>Back</u>

Chapter 12 - Behavior

"Man is man because he has no instincts, because everything he is and has become he has learned, acquired, from his culture, from the man-made part of the environment, from other human beings."

Anthropologist Ashley Montagu 1

The subject of this chapter is genetically-induced (inherited) racial differences in behavior. Some (above quote) may question whether behavior is inherited in humans, ² though it is clearly inherited in other mammals as well as birds, insects, crustaceans, fish, etc., ³ and even plants. Indeed, the argument has been made that without inherited emotions that motivate at least some behavior, a living thing would have no motivation to do anything. (Damasio, 1994).

We humans do not find ourselves just doing something that we did not intend to do, but rather we feel an urge to behave in a certain way, then give in to the urge when it is convenient to do so or it is so intense that it is hard to resist. Throughout the day we have urges to eat, urinate, sneeze, etc., all of which are genetically-caused feelings that induce us to engage in certain behavior. We may feel horny, nauseous, or tired, inducing us to seek sex, throw up, or take a nap. Feelings of pain and pleasure induce us to move away from heat or to take drugs. ⁴ Not only do we inherit most of the urges that guide our behavior, but those urges did not arise with the first man – they arose many millions of years before Homo was here.

Even very specific urges can be genetically-induced in humans. A pregnant woman's craving for odd foods, perhaps needed for the health of her fetus, has provided laughs for many sitcoms. ⁵ Normal human children are born with a fear of snakes and spiders. ⁶ Women are attracted to high status men and men are attracted to young, healthy women. The similar idiosyncrasies of identical twins, even when they have been raised apart in different environments, can be explained only as inherited behavior. ⁷ Our environment may accentuate or diminish the extent to which we give in to our innate urges, but it may never entirely remove them.

When we deal with other people it is more difficult to determine whether our behavior is environmentally-acquired or genetically induced. The behaviors compared in Table 12-1, however, are so universal, both in location and time, that there should be a significant genetic component to them.

Trait	Asian	Caucasian	African- Americans	Africans
Self-esteem (1)	Average	Average	High	-
Preparing for the future (2)	High	High	Low	Very Low
Work ethic (3)	High	High	Low	Low
High school non-dropout rate ⁸	79%	72%	51%	-
Promiscuity (number of sexual partners) (4)	Low	Medium	High	High
Pair bonding (5)	High	High	Low	Low

Intercourse position (6)	Most face- to-face	Most face-to- face	?	?					
Sexually transmitted diseases (STD) (7)	Low	Norm	High	High					
Illegitimate births	<10%	23%	66%	High					
Father involvement (8)	Norm	Norm	Low	-					
Welfare dependency	Low	Norm	4½ times greater than whites	-					
Altruism (9)	High	Very high	Lower	-					
Social conformity (10)	Higher	High	Lower	-					
Full chattel slavery (11)	Rare	Not since 1865 in US	Not since 1865 in US	Still reported					
Cannibalism (12)	No	No	No	Incidents still reported					
CRIME (13)									
Murder	Low	Norm	13 times higher than whites	High					
Rape	Low	Norm	10 times higher than whites	High					
White collar crimes	Low	Norm	3 times higher than whites	High					

Table 12-1

(1) In their opinion of their own attractiveness and competency in reading, science, and social studies (but not math), blacks score higher than whites and Asians, despite their actual lower scores. ⁹ Ethnic pride, prohibited to whites by the Equality Police, increases happiness and, presumably, self-esteem. (Kiang, 2006).

(2) Forethought, the ability to plan and prepare for the future (preferring increased future benefits to immediate gratification), is closely related to the absence of impulsiveness. ¹⁰ The savings rate among Asians is high, indicating increased planning and willingness to defer gratification. ¹¹ Drug addicts, children, low IQ people, and blacks prefer pleasures now rather than later, ¹² and typically have little or no savings. ¹³ In a classic experiment, children were offered a small candy bar now or a large one later; most whites chose the large one later and most blacks chose the small one now. ¹⁴ A number of observers of Africans have commented that their behavior is "child-like" – that they are similar to children. ¹⁵

The inability to defer gratification leads to renting instead of saving and buying, theft rather than working and waiting, and rape instead of courting and seduction. The ability to plan ahead and defer gratification is critical to creating and maintaining a civilization, where the rights of others must be respected even if it means not getting something immediately when you want it.

(3) Asians students are known for the extra hours of study they put in, Caucasians less so, and African-Americans still less. Eurasians become self-motivated as they mature, Africans
less so. Black unemployment is typically significantly higher than for Eurasians, even when jobs are available. "Hard work pays off in the future; indolence pays off now." ¹⁶

All populations of all living things all over the planet, animal or plant, expand their numbers to meet the resources available. (Populations that failed to do this simply went extinct long ago as the inevitable drops in numbers in bad times would not have been compensated for by increases in good times.) This means that, a great deal of the time, every population bumps up against the limits of the carrying capacity of its territory and, during those difficult times, there will be intense competition, physical conflicts, and starvation. ¹⁷ Only those individuals who are prepared for the bad times will survive them.

In the colder north, the bad times come every winter when food is difficult or impossible to find. Man is not made to hibernate, ¹⁸ so he must store enough food to survive the winter, either as provisions or by fattening up. His body fat will not feed his children and children cannot store enough fat on their own bodies to make it through the winter, so there is no alternative but to store provisions; fortunately, the cold weather helps preserve food. The amount that a family needs to store will depend upon the severity of the winter and, since that cannot be predicted, man will, like squirrels, store an excess of food if he can.

In contrast, an African in the tropics has no winter to worry about, but he does have changes in rainfall and other factors that affect his food supply. Unlike winter, however, these changes are unpredictable and preparing for them is likely to be a waste of time and resources. And, even if he acquires extra food, it is nearly impossible to store it for long at the high temperatures of the tropics. ¹⁹ Hunting for extra food that cannot be easily stored not only wastes his future food supplies, but could result in injury and death; he is better off doing nothing until he must. ²⁰

(4) Blacks have the most sexual partners. ²¹ The sex drive of non-Hispanic blacks is 1.19 standard deviations (SDs) or 37% greater than whites, but that of Asian/Pacific Islanders is 0.124 SDs or 4% lower. ²² The proportion of adults who first had sex before age 15 was highest for non-Hispanic blacks (28%), compared to 14% for both Mexican-Americans and non-Hispanic whites. Only 6% of blacks abstained from sex until age 21 or older, fewer than Mexican-Americans (17%) or non-Hispanic whites (15%); 46% of black men and 13% of black women reported having at least 15 partners in a lifetime, more than other racial or ethnic groups. ²³ According to the CDC (National Statistics Reports, Preliminary 2006, Table 1), 70.7% of the births of non-Hispanic blacks were out of wedlock, compared to 26.6% for non-Hispanic white mothers. Africans have a high frequency of fraternal twins (up to 49 per 1000 births) ²⁴ which indicates high promiscuity and low pair bonding.

Promiscuity in a population correlates with larger testicles because females have sex with many males and the male that produces the most sperm is more likely to fertilize the egg. ²⁵ There is a tradeoff between testicle size and brain size because both are costly organs – if more resources are invested in larger testicles, then there are fewer resources available for a larger brain. Also, brains and testicles support different strategies for the male to pass on his alleles; large testicles rely on sperm competition and a large brain relies on "meat for sex," i.e., supplying the female with the resources she needs to reproduce and support her offspring. ²⁶ If females need male resources, big brains beat big balls. Of the three major races, blacks have the largest testicles and the smallest brains. (Chap. 10).

(5) (Jaynes, 1989). Pair bonding is related to monogamy, the extent to which men and women limit their sexual activity to a single partner. ²⁷ Pair bonding supports a family structure for raising children, a more "K" reproductive strategy. Since the burden of provisioning fell more

heavily upon men in the cold north than in the warm tropics, where women gathered most of the food for themselves and their children, it was more difficult for a man in the north to support more than one wife. Monogamy is more typical of the colder climates, while polygamy is more typical of the tropics. ²⁸ In sub-Saharan Africa, a woman is more likely to have children by different fathers, and the children are raised, not by a family, but by the village. ²⁹ Monogamy was induced by females when they evolved to hide obvious indications that they were fertile (e.g., bright red genitalia or rumps), so that males stayed around for sex all the time and helped raise the kids instead of chasing after other females. (Rodriguez-Girones, 2001). Unlike female apes, who give obvious signals when they are in estrus (i.e., capable of conceiving), it is not obvious when a human female is ovulating. Concealed ovulation in females leads to "copulatory vigilance" in males, i.e., males had to stay close to the female as much as possible to keep other males away and be certain that other males did not father her children; that would also promote pair bonding. (Lovejoy, 1981). Pair bonding was an important step toward becoming human (Chapais, 2008) and, since there is less of it in Africa, that suggests (Chapter 4, Rule 11) that it did not originate in Africa and that man's lineage became human outside of Africa.

The hormone-driven feeling of falling in love is clearly an adaptation that induces pair bonding. ³⁰ Thus, the feeling should have been absent prior to pair bonding and should be diminished in Africans, who pair bond less. Male deception can be expected when females rely upon their mates being in love with them in order to ensure long-term pair bonding. Men, even those who pair bond, seek sex with other women to maximize their fitness because having sex a thousand times with one woman will produce fewer progeny than having sex once with a thousand women. Each sex tries to maximize its fitness, only because those individuals whose alleles did not induce maximizing behavior did not leave descendants.

Prior to agriculture (about 12,000 ya) our hunter-gatherer ancestors pair bonded only as long as it took to wean a child, 4 or 5 yrs. After that, the couple would find other mates if they wished to. (Fisher, 1992). However, when the hunter-gatherer lifestyle gave way to agriculture, splitting up was no longer feasible because survival was tied to farming a particular piece of land. As the percentage of farmers in the U.S. has declined from about 97% to less than 3%, couples have reverted to man's original lifestyle of short term pair bonding (Allman, 1994, p. 130), aka "serial monogamy."

(6) "Most animals [female primates] have brightly colored and fleshy rumps, and they mate from behind." (Etcoff, 1999, p. 188). Only man, orangutans (usually), bonobos (commonly; De Waal, 1997, p. 102; Coppens, 2004, p. 13; though Schwartz, 2005, p. 155, says it is mostly during homosexual encounters), Japanese macaques (30% of the time, Wolfe, 1984), gorillas ("sometimes") ³¹ and porcupines (wisely) mate front-to-front. When man shifted to front-to-front mating, women's breasts and nipples became a more prominent visual display to the male. (Morris, 1967). The large fleshy rumps of Andaman Islanders, Hottentots, and Bushmen (Fig. 26-4, 26-5, & 26-6), suggest front-to-back mating, but data on the sexual positions of Africans is hard to come by. "We travel in packs and we do it from the back." (Lyric from the album "Doggystyle" by African American rapper "Snoop Dogg.") The popularity of "down low" (anal homosexuality) in African American men, which has been responsible for the spread of AIDS to African American women, ³² also suggests front-to-back mating, as does the high level of AIDS in Africa. Unprotected receptive anal intercourse is 20 to 500 times more infectious than vaginal intercourse (Leynaert, 1998) and people frequently lie about their sexual activities. (Brody, 1997). While the female genitals in Orientals are "front and high," in Africans they are "back and low": erections in Orientals are "parallel to the body and stiff" but in blacks are "at right angles to body and flexible," which also suggests front-to-back mating. 33

(7) Blacks have the highest incidence of sexually transmitted

diseases (STDs), a consequence of their promiscuity and impulsiveness. Of the roughly 1 million people estimated to be living with HIV in the United States, 47% are African-American (CDC, 2005) and they were 56% of the newly diagnosed HIV cases in 2005. African Americans represent about 12.8% of the U.S. population (U.S. Census, 2005), but black men are diagnosed with HIV at more than seven times the rate of white men, and black women at 20 times the rate of white women. (Kalb, 2006; Hall, 2008). The prevalence of the AIDS virus doubled from 1% to 2% of American blacks while white rates held steady at 0.2 percent. 34 Non-Hispanic blacks between 19 and 24 yrs of age are 20 times more likely to be infected with HIV than young adults in any other racial or



ethnic group in the U.S. Figure 12-1 gives the percentage of HIV/AIDS cases in Washington, D.C. (60% black) by race. ³⁵ All the top 15 countries for HIV/AIDS in 2005 were African. ³⁶

Blacks have higher rates for other sexually transmitted diseases as well, which can also be attributed to their promiscuity and failure to practice safe sex (which requires anticipating future consequences of current acts). In 2006, the U.S. African American chlamydia rate was 8 times the white rate, the African American gonorrhea rate was 18 times the white rate; the black congenital syphilis rate in 2005 was 15.1 times the white rate. 37 About 40% of U.S. black adults have genital herpes, compared to 14% of whites. (Centers for Disease Control and Prevention, Aug., 2006). Nearly half of black girls age 14 to 19 have at least one STD, compared to 20% for white girls. (CDC, 2003-2004 data).

(8) Africans are more likely to be cads than dads (more "r" orientated, see previous chapter). Low father involvement (e.g., illegitimacy, divorce) is tied to promiscuity in girls and aggression in boys (Blain, 1988; Heatherton, 1972), both of which are higher in African Americans. Africans and African Americans have similar family structures, suggesting it is genetic. (Wilson, 2002).

(9) A desire to help other people, even strangers ("altruism") appears to be a geneticallyinduced behavior as it has been observed in children as young as 18 months. ³⁸ No studies of racial differences in altruism have been found but, in terms of donations of money, blood, and human organs, Caucasians are far more generous than other races, and they do so less in accordance with kinship.

(10) (Allik, 2004; Lynn, 2002c & 2003). Social conformity and less deviancy may contribute to a lower Asian level of achievement, despite a higher IQ. (Chap. 14.)

(11) Full chattel slavery (the buying and selling of people as though they were animals), either legally or tolerated, has been practiced by all three races against members of their own race and other races. ³⁹ but it is practiced openly today only by Africans. ⁴⁰ In the U.S. prior to 1865, some black slaves who had been freed even purchased their own black slaves. (Grooms, 1995, pp. 17-21; Robson, 2006; Koger, 1985). Had whites not purchased African slaves from Africans, the slaves would most likely have been slain and eaten because they were enemies and had little value unless they could be sold as slaves. Thus, being purchased by non-Africans was a successful reproductive "strategy" for African slaves. 41

(12) Cannibalism occurs under a number of very different circumstances. In its least unacceptable form people find the behavior abhorrent, but the choice is eat or die. "Desperation cannibalism" occurred, for example, when the Donner Party was trapped in the Rocky Mountains in 1846, when a plane crashed in the Andes Mountains in 1972, and when the Allies starved the German people after WWII. (Keeling, 1947, p. 65). Next, there is cannibalism that is not necessary to live, but it is part of the culture. "Cultural cannibalism" occurred on Papua New Guinea in the South Pacific, kuru, a brain disease caused by prions, was passed on to people who ate the brains of dead relatives. It has also been reported in China. (Chong, K.R., *Cannibalism in China*, Longwood Academic, 1990, <u>excerpted</u> *Dienekes'Anthropology Blog*, Feb. 9, 2004).

Last, there is "homicidal cannibalism," deliberately killing people for the pleasure of eating them, either in secret by psychopathic individuals or in the open by groups of seeminglynormal people. From cut marks on fossilized human bones, cannibalism is believed to have been widespread among early man, ⁴² but it is difficult to determine the circumstances from fossils. However, given that man competed group-against-group, with groups expanding in times of plenty and starving the rest of the time, killing people in other groups for food would not be surprising. Before contact with the outside world, killing people for food was common in Africa and there are still occasional reports of it today. ⁴³ It was also practiced by indigenous natives in Ecuador as recently as the 1970's and is still being reported in New Guinea. (Raffaele, 2006).

Homicidal cannibalism is a good indicator of psychopathy because it requires the complete absence of empathy for the victim. It is likely that early men were homicidal cannibals and would be judged pychopathic today. When man moved north, cooperation, trust, and honor were required for survival. Since psychopaths lacked the empathy needed for those qualities psychopathy would have become maladaptive and would have been selected against and minimized. Thus, we should expect tropical primitive populations to have a higher percentage of psychopathic individuals. (Lynn, 2002c).

(13) The crime ratios in Table 12-1 are for African Americans living in the U.S., ⁴⁴ but similar ratios are found in other countries that have a high percentage of blacks, such as Great Britain, ⁴⁵ France, and Canada. Indeed, go to any city or country in the world that has a significant black population, and blacks will be overrepresented in the criminal population. ⁴⁶ In Great Britain, 3 out of 4 black men are in the DNA criminal database (i.e., they were arrested; *Telegraph*, Nov. 5, 2006). Using data from international surveys of crime, (Rushton, 2000a), pp. 158-160) found that violent crime was twice as common in Africa and the Caribbean as in predominantly white countries. In the U.S., the crime rate of black high school dropouts between ages 26 and 30 is so high that more are institutionalized (34%) than are employed (30%). ⁴⁷ Although blacks are only about 12.8% of the U.S. population (U.S. Census, 2005), "Among the 1.4 million inmates sentenced to more than one year at year-end 2003, an estimated 44 percent were black, 35 percent white, 19 percent Hispanic and 2 percent of other races." (Bureau of Justice Statistics, Nov. 7, 2004, on About.com).

African American crime has long been a fixture in the U.S. In 1954, for example, the Negro/white ratio was 16:1 for murder, 13:1 for robbery, and 6:1 for rape, despite Negroes being only about 10% of the population at that time. (Dept. of Justice, Vol. 25, No. 2). More recently, the death from murder rate in 2003 per 100,000 for non-Hispanic males aged 20 to 24 was 6.5 for whites but 10 times higher, 64.5, for blacks. (*National Vital Statistics Reports*, Vol. 55, No. 10, Mar. 15, 2007). Compared to non-blacks, blacks are seven times more likely to commit murder, ⁴⁸ eight times more likely to commit robbery, and three times more likely to use a gun in a crime. ⁴⁹ In the United States, 18.71 blacks were killed per 100,000 blacks and 2.97 whites were killed per 100,000 whites. ⁵⁰ During the 10 year period from 1975 to 1985, spousal homicide among blacks was 8.4 times higher than that of whites. ⁵¹ Since blacks discourage blacks from cooperating with the police ("Don't Snitch") and black juries frequently refuse to convict black defendants, even when they are obviously guilty, e.g., O.J. Simpson, the real

black crime rates are higher than the reported rates.

Blacks and white egalitarians may say that higher black crime rates are just a stereotype, but even they are betrayed by their amygdala, a part of the brain that serves as an "alarm" that activates a cascade of other biological systems to protect the body in times of danger. The amygdala alarm "goes off" in about two-thirds of both blacks and whites, even egalitarian whites, who are shown pictures of black faces, but not when shown pictures of white faces. (NCF, 2005). As the statistics show, people, e.g., Barack Obama's white grandmother, correctly believe that the primitive features of blacks indicate a more violent and dangerous person. African American male murderers of whites who have "black-looking" features are more than twice as likely to be executed as those who look less 'black," i.e., less primitive and therefore less dangerous. (Eberhardt, 2006). Other primitive people also have a high crime rate. 52

A tendency towards criminal behavior is heritable (Wright, 1997, p. 23). A 1999 Justice Department survey found that 46% of jail inmates had at least one sibling, parent, or child who had been incarcerated at some point. "Research consistently places the average IQ of convicted lawbreakers at 92, some 8 points below the population average and 10 points below the average for law-abiding folks. Available data also suggest that offenders who get away with their crimes fare no better on intelligence tests than those who get nabbed and convicted. IQ scores often dip most sharply for serious, repeat offenders, a small set of primarily young men who commit a majority of all crimes." (Bower, B., "Criminal Intellects," *Science News*, Apr. 15, 1995).

Crime increases as IQ decreases in both whites and blacks, but blacks commit more crime than whites who have the same IQ. Lynn suggests that this is because blacks are more likely to have a psychopathic personality, as evidenced, for example, by their inability to work consistently, unlawful behaviors, aggressiveness, failure to pay debts, impulsiveness, deception, recklessness, poor parenting, absence of remorse, and disruptive childhood behavior. ⁵³ The Minnesota Multiphasic Personality Inventory (MMPI) is used to measure psychopathic personality. Blacks and American Indians have the highest psychopathic scores, then Hispanics, followed by whites, then ethnic Japanese and Chinese, who have the lowest scores. ⁵⁴ Consciousness and character are concentrated in the frontal lobe of the brain, which is a recent evolutionary development and therefore not yet completely stable. Europeans have the most developed frontal lobe and Africans the least. ⁵⁵

Black on White Crime

There is so much more black-against-white crime than white-against-black crime (Figure 12-2), despite blacks having more contact with other blacks and blacks constituting a smaller percentage of the population, that it is clear that blacks are targeting whites. Between 1964 and 1994 there were over 25 million violent interracial crimes. overwhelmingly black offenders and white victims. (Justice Department and FBI statistics). "Black Americans have committed at least 170 million crimes against white Americans in the past 30

years." 57 "Blacks commit more violent crime against whites than blacks," against and are "an estimated 39 times more likely to commit violent crime against a white person than vice versa, and 136 more likely times to commit robbery," despite whites doing their best to stay away from blacks. (NCF, 2005). This is clearly seen in Figure 12-2 (La Griffe du Lion, 1999a), which explains "white flight." In Figure 12-3, the probability (" Φ ," left vertical axis) that a white is violently victimized within a year exponentially as the increases proportion of blacks in а neighborhood increases, i.e., blacks target whites as soon as they start to outnumber whites. 58





Figure 12-2

Black rap "music" and black leaders encourage blacks to commit crimes against whites. At least one prominent black leader, Khallid Muhammad (a personal assistant of Louis Farrakhan and an event organizer with Al Sharpton), has openly called for blacks to kill whites, even women and babies. ⁵⁹

Not only is the black-on-white crime rate much higher than the white-on-black crime rate, but it differs from white crime in that it is more impulsive, more savage, ⁶⁰ and often involves more attackers, ⁶¹ sometimes even black females, who are more-or-less "normal." ⁶² Examples, typically ignored by the mass media, ⁶³ include the December, 2000, "Wichita

<u>Massacre</u>," where the Carr brothers raped, sodomized, and murdered five young whites (three men and two women), and the January, 2007, Knoxville, Tennessee, torture, sexual mutilations, rapes, and murders of <u>Channon Christian and Christopher Newsom</u> – five blacks, including one female, were charged. ⁶⁴

Rape

African men have a high crime rate for rape, regardless of what country they are in. ⁶⁵ There is little punishment for rape in Africa and therefore, it would be maladaptive <u>not</u> to rape. It is a good reproductive strategy for a male who is unable to obtain a female any other way. ⁶⁶

In a 2005 survey on "rape and sexual assault" in the United States, ⁶⁷ 37,460 white women were victims of blacks, but white-on-black rape was too low to show up in the statistics. ⁶⁸ "What this means is that every day in the United States, over one hundred white women are raped or sexually assaulted by a black man." ⁶⁹

Between 2001 and 2003, there were, on average, 15,400 black-on-white rapes per year, while whites averaged only 900 white-on-black rapes per year, a black-white ratio of 17.1:1.

(U.S. Department of Justice's National Crime Victimization Study (NCVS)). Since there are fiveand-one-half times as many whites as blacks in America, that means that blacks rape whites over ninety times as frequently as whites rape blacks. The actual difference is much higher because the "white" figure (900) includes Hispanics, who are counted as white. Thus, the real black-white ratio is likely 200:1 or higher. (NCF, 2005). The number of white men raped by blacks in prison may be even greater than the number of white women raped by blacks. (Taylor, J., "<u>Hard Time</u>," *American Renaissance*, Apr., 2002, **13**(4), a review of Mariner, J. <u>No Escape:</u> <u>Male Rape in U.S. Prisons</u>, Human Rights Watch, 2001).

Although "blacks committed 10,000 gang-rapes against whites between 2001 and 2003, the NCVS samples did not pick up a single 'white' [includes some Hispanics]-on-black gang rape." (NCF, 2005). Blacks also have a higher rate than whites for child molestation. ⁷⁰

Chapter 13

Table of Contents

FOOTNOTES

1. "Ashley Montagu" was born as Israel Ehrenberg. He corrupted anthropology for political goals, but his 1989 book on neoteny, "Growing Young" has many good ideas in it. (Putnam 1967, pp. 24-27). Back

2. (<u>Pinker, 2002</u>). For saying that genes influenced human behavior, E.O. Wilson, the father of sociobiology, was picketed with placards bearing swastikas, and a woman poured cold water over his head. But, as we saw in Chapter 8, humans do inherit behavior. Children's behavioral problems are largely genetic (<u>Harden, 2007</u>), and there is evidence that even facial expressions are inherited. (<u>Peleg, 2006</u>). <u>Back</u>

3. There are basic structural and functional similarities between the brains of all animals, including even insects so, since they inherit behavior we might expect humans to also do so. Back

4. Our brains have evolved to give us pleasure when we engage in behavior that increases our fitness, e.g., sex. Recreational drugs short-circuit the brain so that we receive pleasure even if we reduce our fitness; using contraceptives also lets us have pleasure without increasing fitness. <u>Back</u>

5. Morning sickness and disgust at certain foods is inherited behavior that keeps a fetus protected from infection during the first trimester, when it is most vulnerable. (<u>Holland, 2003</u>). <u>Back</u>

6. ("Built-in brain templates may clue tots to threats," World Science, Sept. 18, 2007; LoBue, 2008). Back

7. (<u>Rushton, 2000a</u>, p. 46; <u>Bouchard, 1990</u>; <u>Martin, 1986</u>; <u>Hamilton, 1964</u>; <u>Segal, 1999</u>; "Square Peg in a Round Hole," *The Realist* (internet), Jan. 1, 2007). Emotions, such as falling in love, lust, and sexual jealousy, serve a reproductive purpose. Emotions such as gratitude and the desire for revenge ensure that others will know that we will reciprocate their kindnesses and punish them for perceived misdeeds. (<u>Barkow, 1991</u>, pp. 122-123). <u>Back</u>

8. (Greene, 2003). "Blacks nearing the end of their high school education perform a little worse

than white eighth-graders in both reading and U.S. history, and a lot worse in math and geography. In math and geography, indeed, they know no more than whites in the seventh grade." (<u>Thernstrom, 2003</u>). <u>Back</u>

9. (<u>Rushton, 2000a</u>, p. 154-155) citing (<u>Tashakkori,1993</u>). Also (<u>Levin, 1997</u>, pp. 74-76). The self-esteem of blacks is fragile and insecure and must be constantly defended; this is the reason that perceived "dissing" so often triggers a violent response. <u>Back</u>

10. (Levin, 1997, pp. 77-78, 116-119; Hunt, 1865, p. 18). Back

11. Of 500 Blacks and 500 Whites earning more than \$50,000 annually, blacks saved less than half the median amount that Whites saved. (Tenth <u>Annual Black Investor Survey</u> by Ariel/Schwab). An interesting example of planning is the summer solstice fertility ritual on June 21, practiced by Europeans in northern latitudes to ensure that most babies are born in the Spring when food is plentiful and the weather is mild; this ritual survives today as June weddings. <u>Back</u>

12. Much of man's progress is due to his ability to visualize the future and act now to ensure a better future, "temporealization." Asians do it the most, Africans the least, and Caucasians in between, but close to Asians, with overlapping bell-shaped curves describing individuals within those races. Like all traits, there is an optimal amount of temporealization; having too much of it means one does not live to see the future, while too little means one makes no progress. In Rhodesia and South Africa, white farmers taught Africans farming and herding for four years; the black farmers produced 10 times as much as before. The whites left and returned two years later to find the farmers had reverted to their previous behavior. (Mes, 1964 & 1965). Back

13. Impulsiveness is related to criminality and drug addiction. Addicts have fewer D2/3 receptors in their brain, though information on racial differences in the number of these receptors is not yet available. (Dalley, 2007). Back

14. (<u>Mischel, 1961</u>, p. 6), who said, "Negroes are impulsive, indulge themselves, settle for next to nothing if they can get it right away, do not work or wait for bigger things in the future." <u>Back</u>

15. E.g., "...the Negro is a child..." (Albert Schweitzer, *On the Edge of the Primeval Forest*). "[M]entally the African Negro is childlike, normally affable and cheerful, but subject to fits of fierce passion." (East, E., Harvard geneticist). Kenyan pathologist (F. W. Vint, 1934) described the cortex of an adult African brain as equivalent to the brain of a European child of 7 or 8. <u>Back</u>

16. "Ours is one continued struggle against degradation sought to be inflicted upon us by the European, who desire to degrade us to the level of the raw Kaffir [African], whose occupation is hunting and whose sole ambition is to collect a certain number of cattle to buy a wife with, and then pass his life in indolence and nakedness." Gandhi. (Ahmedabad, *The Collected Works of Mahatma Gandhi*, Vol. II, p. 74, 1963). "[Negroes] hold labor as an evil inferior only to death." (Consul Burton, in Hunt, 1864, p. 18). "There is abundant evidence to show that the Negro will not work without a considerable amount of persuasion." (Id., p. 25). Back

17. Females reduce their fertility in times of famine and increase it and accelerate their maturation rate in times of plenty, but changes in the abundance of food can easily overwhelm those measures. <u>Back</u>

18. Man did not evolve to hibernate, perhaps because he would have to compete for caves

with more powerful animals, such as the cave bear, though hibernation can be induced in man. (*Discover* magazine, May, 2007, p. 43). <u>Back</u>

19. "In tropical environments where food is available all year round, hunter-gatherers rarely store food even overnight..." (Haywood, 2000, p. 90). Back

20. The metabolic rate of resting black women is lower than resting white women, which conserves their energy. (<u>Albu, 1997</u>). A lower metabolic rate generally means a longer life span, but blacks have a shorter life span, suggesting that they are even more "r" orientated than indicated by their life span. (<u>Conti, 2006</u>). <u>Back</u>

21. (Rushton, 2000a, Chapter 8). Back

22. (<u>La Griffe du Lion, 2000e;</u> "La Griffe du Lion" is the pseudonym of Dr. Robert Gordon of Johns Hopkins). <u>Back</u>

23. National Health and Nutrition Examination Survey data collected from 1999 to 2002 for the National Center for Health Statistics, a branch of the Centers for Disease Control and Prevention. In 1991, basketball player Wilt Chamberlin estimated that he had had sex with 18,000 different women over the previous forty years (an average of 1.2 per day). <u>Back</u>

24. (<u>Diamond, 1986</u>, pp 488-489), quoted in Variation in *Library of Excerpts*, "<u>Sexual Organs</u> and <u>Heterocronic Theory</u>. <u>Back</u>

25. However, just as more children means less investment per child, more sperm means less investment per sperm, and quality decreases. (<u>Blumenstiel, 2007</u>). <u>Back</u>

26. (<u>Pitnick, 2006</u>). Increased brain size and intelligence advanced along with acquiring higher energy foods, e.g., meat, and cooking, which permitted a large decrease in the size of the gut. (<u>Aiello, 1995</u>; <u>Pennisi, 1999</u>). <u>Back</u>

27. Usually, the most monogamous primates have the most devoted fathers. Even when the females mate with multiple males, a male will take special care of a baby if he can identify it as his own, as baboons do by odor. Monogamy is also tied to brain size. "...the largest relative brain sizes among primate species are associated with monogamous mating systems ..." (Schillaci, 2006). Back

28. "The question, as it presents itself in practice to a woman, is whether it is better to have, say, a whole share in a tenth-rate man or a tenth share in a first-rate man." (George Bernard Shaw). <u>Back</u>

29. (<u>Rushton, 2000a</u>, p 156). "It takes a village to raise a child." (First Lady Hillary Clinton, speech to Democratic Convention, Aug. 27, 1996, and book title). The pattern of men having children by several women, married to none of them, and women raising the children is common in all African and mulatto populations. (e.g., "<u>Cape Verde</u>," *eDiplomat.com*, Feb. 16, 2008). An African American woman tells a census taker that her five boys are all named "Jamal." Astounded, he asks how they know who she is talking to. "It's easy," she says. "I call them by their last names." <u>Back</u>

30. Falling in love causes pair bonding and reduces the attractiveness of others. (Gonzaga, 2008). Back

31. ("Unique Mating Photos of Wild Gorillas Face To Face," Science Daily, Feb. 13, 2008). Back

32. According to the Center for Disease Control, 64% of the women with HIV/AIDS in the U.S. are black. <u>Back</u>

33. <u>Library of Excerpts</u>. (Also, <u>Baker</u>, <u>1974</u>, p. 311). Africans are less neotenic than Eurasians; "... the frontally oriented vulva [of the bonobo] is considered a neotenous characteristic, also present in our own species." (<u>De Waal</u>, <u>1997</u>, p. 27). <u>Back</u>

34. (*National Health and Nutrition Examinations Surveys*, Centers for Disease Control and Prevention, Comparing 1988-1994 data to 1999-2002 data). <u>Back</u>

35. (Levine, S. "<u>Study Calls HIV in D.C. A 'Modern Epidemic'</u>," *Washington Post*, Nov. 26, 2007). Nationally, in 2005, 66% of diagnoses of HIV/AIDS in women were African Americans and 17% white, despite the much greater number of whites. (CDC HIV/AIDS Fact Sheet). <u>Back</u>

36. (Population Reference Bureau, *2006 World Population Data Sheet*, "The Top 15 HIV/AIDS Prevalence Countries (2005)"). <u>Back</u>

37. ("Trends in Reportable Sexually Transmitted Diseases in the United States, 2006," and "Serveillance, 2006," CDC). Back

38. (<u>Warneken, 2006</u>). Empathy for the suffering of others activates the pain centers of the brain, motivating people to help others to relieve the discomfort. (<u>Jackson, P.L., 2005</u>; <u>Tankersley, 2007</u>). <u>Back</u>

39. The British forced men to labor on ships ("impressment"), the Allies enslaved Germans after WWII (Keeling, 1947), and the slavery of the Russian concentration camps in the 1920's and 1930's was far worse than any black slavery in the United States. (Greife, 1999). Also see (Hoffman, M.A., *They Were White and They Were Slaves: The Untold History of the Enslavement of Whites in Early America*, 1993; Davis, R., *Christian Slaves, Muslim Masters: White Slavery in the Mediterranean, the Barbary Coast, and Italy, 1500-1800*, 2003). Back

40. ("<u>Scale of African Slavery Revealed</u>," *BBC News*, April 23, 2004). Some American black slaves were permitted to work for others, paying their master a portion of what they earned. If a "slave" is someone whose earnings are seized for the benefit of his master then, due to government redistribution (e.g., taxes and welfare), today more white Americans are slaves of African Americans than the reverse. <u>Back</u>

41. (<u>Cartwright, 1857</u>, p. 47-48). "Unlike other tribes, the Fang had few slaves, partly because they were accustomed to eat prisoners taken in war; but they bought the bodies of slaves from other tribes for eating, paying ivory for them." (<u>Baker, 1974</u>, p. 391). The demand for slaves by non-Africans no doubt increased the number of Africans that were enslaved by other Africans. <u>Back</u>

42. (<u>Arsuaga, 2001</u>, p. 58). Cannibalism has been reported in chimpanzees (<u>Goodall, 1977</u>) and the presence of 500,000 year old alleles in modern humans of genes that give protection against diseases caused by prions, such as Creutzfeld Jacob disease and kuru, which can be caused by eating human brains, suggests that early humans were cannibals. (<u>Pennisi, 2003</u>). Cannibalism may have accelerated man's evolution as it nourished the more capable at the

expense of the less capable. Back

43. (Baker, 1974, pp. 364-365). "Cannibalism is found in its simplest form in Africa. In that continent the majority of cannibal tribes eat human flesh because they like it, and not from any magical motive or from lack of other animal food. In fact it is noticeable that the tribes most addicted to this practice inhabit just those districts where game is most plentiful." (1911 *Encyclopedia Britannica*, p. 345). "This phase began on 26 June 1952 when Dr. Mary Quinlan, a White Sister who for many years had worked among the poorest Blacks in the port of East London [South Africa], emerged from a hovel where she had been tending a mother just confined in childbirth, and ran into a raving mob of several hundreds who tore her to pieces and ate her in the street." (Reed, D., "The Siege of Southern Africa," Chapter 7, 1974). Also, (Onyango-Obbo, 2003). (www.YouTube.com, "Founded by Americans, Liberia was once the shining star of Sub-Saharan Africa. Now cannibals rule the streets"). Other *YouTube* videos show cannibalism in Liberia and New Guinea. Cannibalism of slaves in Africa may have functioned as a substitute for the domestication of animals as a source of fresh meat. For ritual killing in Africa, see (Oke, I., *Blood Secrets*, 1991). Back

44. (<u>Rushton, 2000a</u>, p 157-160). Also see (<u>NCF, 2005</u>). <u>Back</u>

45. Britain is 2% black, but about 1/3 of the shooting victims are black. (Thompson, T., "<u>The truth about black on black crime</u>," *Independent*, Apr. 15, 2007). <u>Back</u>

46. "Interestingly, of all the foreign groups living in Japan, Africans are the most crime prone, ..." (Jared Taylor, "In Praise of Homogeneity," *American Renaissance*, Aug., 2007, Vol. 18, No. 8, p. 3). <u>Back</u>

47. (<u>Raphael, 2004</u>, based on the 2000 U.S. Census). And, in case you're wondering, the high black incarceration rate is not due to discrimination. (MacDonald, H., "<u>Is the Criminal-Justice System Racist?</u>" *City Journal*, 2008, 18(2)). The high crime rate of blacks is partly responsible for the poverty of black neighborhoods as crime lowers property values and increases living costs, i.e., crime causes poverty, rather than the reverse. Also, people usually do what they have an incentive to do. Black disfunctionality is rewarded by more white guilt and capitulation, a wonderful incentive for more disfunctionality. <u>Back</u>

48. Between 1976, when the Feds began keeping track, and 2005, blacks committed 52.2% of the homicides in the U.S., despite being less than 12.5% of the population. (Sailer, 2008a, Bureau of Justice Statistics). By under-reporting black crime, the media has led the public to believe that most serial killers are white, but between 1945 and 2004, "African Americans were overrepresented in the ranks of serial killers by a factor of about 2." (Walsh, 2005). That is less than their over-representation in all homicides, but since serial killers have an average IQ of 110, that is understandable. (Bourgouin, 1993). Back

49. (<u>NCF, 2005</u>). <u>Back</u>

50. ("Black Homicide Victimization in the United States: An Analysis of 2004 Homicide Data," *Violence Policy Center*). <u>Back</u>

51. (Mercy, 1989). Spousal killings are discussed from the viewpoint of evolutionary psychology in (Buss, 2005). The killer, if caught, reduces his reproductive success because he ends up in jail or dead. However, his anger leads to killing his wife as a way of enhancing his reproductive success. If his wife leaves him, for example, it is a sign of disrespect, which lowers his status

and tells other women that he is undesirable, reducing his chances of mating with them. That is why, especially among blacks and Hispanics, fighting and even dying over "dissing" (disrespecting) happen so frequently. A man who is "dissed" and does not retaliate will not get the women. Somewhat counterintuitively, white women are the most desirable women and yet they are more likely to be killed by a black spouse than is a black wife. Because possessing a white woman increases a black's status more, if she rejects him it is a greater threat to his status, e.g., O.J. Simpson. (Mercy, 1989). Back

52. The remote Australian aborigine community of Wadeye was racked by sexual abuse, gang wars, crime, and poverty. ("<u>Aboriginal township clean-up urged</u>," *Taipei Times*, May 24, 2006, p. 4). The Maori, the New Zealand aborigines, have a high rate of child abuse. ("<u>Suffer the Little Children</u>," *American Renaissance*, Oct., 2007, **18**(10):15). <u>Back</u>

53. (Lynn, 2002c & 2003; Lynn, 2002e; Levin, 1997, p. 74). "... the criminality of Negroes in the northern states is considerably higher than in the sourthern states, actually three to one." (Bonger, 1948, p. 44). That is true despite northern blacks having a higher IQ (Chapter 14, FN 43), perhaps due to stronger social controls in the South. Back

54. Jews, particularly Zionists, may have the highest psychopathic score, but data is not available. Also see (<u>Stout, 2005</u>). <u>Back</u>

55. (Viding, 2005). "African Negro mentality is comparable to that of the lobotomized European," i.e., a European with his frontal lobes removed. Quoted in (Simpson, 2003, p. 705). Attributed to J.C. Carothers. (Putnam, 1961, p. 53). Back

56. "In 2005, there were more than 645,000 victims of cross-racial violent crimes between blacks and whites in the U.S. In 90 percent of those crimes, black offenders attacked white victims." (Witt, H., *Chicago Tribune*, "What Is a Hate Crime?" Aug. 24, 2007). Black leader Jesse Jackson admitted that when he worked as a waiter in a Greenville, South Carolina hotel he spat into the soups and salads of white customers. (Pekkanen, J., "Jesse Jackson? Black Hope, White Hope: His Style is Militant but Nonviolent," *Life Magazine*, Nov. 21, 1969, p. 67). Blacks also target cops. From 1994 to 2005, 40% of the cop killers were black. (MacDonald, H. "Cop Killers in High Places," *Front Page Magazine*, July 23, 2007). Back

57. (Sheehan, P., "The Race War Of Black Against White," The Sydney Morning Herald, May 20, 1995). On the other hand, one might wonder why blacks are 20 times as likely to be a victim of a hate crime as a white. Part of the explanation is that when Hispanics commit a hate crime they are classified as "white," and when they are the victim of a hate crime they are classified as "Hispanic." Also, there are about 6 times as many whites as blacks (La Griffe du Lion, 2000b), but the best explanation is that authorities relish prosecuting whites for hate crimes, but are very reluctant to prosecute blacks for them. Thus, if the perpetrator is white and he said anything derogatory about the black race, even in anger, or there is any evidence that he does not like blacks, it is a hate crime, but in the reverse situation, unless there is overwhelming evidence of hate, it is not a hate crime. Back

58. (La Griffe du Lion, 1999a). The right vertical axis gives the number of times a white person's risk of being violently victimized increases over what it would have been had the neighborhood remained all white. Note that if blacks were not targeting whites, the blue curve in Figure 12-2 would be a straight diagonal line from the lower left to the upper right and, if the black crime rate was also the same as the white crime rate, the blue line would a straight horizontal line that coincided with the red line. "... houses in districts with mostly white and Asian students often

sell for tens or even hundreds of thousands of dollars more than in districts populated mostly by black and Hispanic students." (Sailer, 2007d). Back

59. ("Banned From YouTube,") Also see (*Wikipedia*, "Yaweh Ben Yaweh" in <u>Robert Rozier</u>). "The death of over 120 white people is a very beautiful thing." (Speech by Malcolm X in Los Angeles on June 3, 1962, upon learning of a plane crash). "We have to exterminate white people off the face of the planet to solve this problem." (Dr. Kamau Kambon, former NC State visiting professor of African Studies, speaking to a forum at Howard University; see Adams, M.S., Townhall.com, Oct. 21, 2005). "... why not have a week and kill white people?" (<u>Rapper</u> <u>Sister Souljah</u>, *Washington Post*, 1992). In the red-black-green "pan-African flag," the green is for "our land," the black is for blacks, and the red is for the blood of whites. <u>Back</u>

60. "Is it conceivable that human beings actually ran other humans through rotary saws?" (James Burnham, an editor of *National Review*, "<u>The Seige of Southern Africa</u>,".) Also, (<u>Levin, 1997</u>, pp. 178-179, 291-332; citations in <u>Simpson, 2003</u>, pp. 722-724). Another difference: during natural disasters and the collapse of civil authority, whites tend to come together to help each other; blacks see it as an opportunity for looting and rape. ("<u>Rape</u> '<u>Epidemic' in African conflict zones: UNICEF</u>," *Reuters*, Feb. 13, 2008). <u>Back</u>

61. Comparing the "Jena Six," i.e., six black teenagers who kicked and stomped an unconscious white teenager, with her brother, who was killed by five black teenagers in the same manner, black author Carol Swain said, "Do people of other races behave in this way? No. This sort of murderous pack savagery is characteristic of blacks and blacks only." ("When teens aren't taught value of life, it can have deadly consequences," *Tennessean.com*, Sept. 28, 2007). (*Wikipedia*, "Sarah Kraeger"). Back

62. When the percentage of blacks in schools reaches 10-15%, blacks become a problem. (Putnam, 1967, p. 129). Horrendous white criminals, e.g., Jeffrey Dahlmer, have severe mental problems, but most of the blacks that commit such crimes are ordinary people, sometimes picking up friends or acquaintances on the spur of the moment to participate in their crimes. (Francis, S. "Diversity Disaster: The Censored Truth about the 'Fat Tuesday' Riots," *VDARE.com*, Mar. 20, 2001). Also, (*Wikipedia*, "Los Angeles riots of 1992"). Back

63. Although these were among the most horrifying crimes ever committed in the United States, the media have almost completely ignored them; had the races been reversed, they would be described in high school history books and Congress would pass stronger "hate" crime laws. (Buchanan, P.J., "<u>The Jena Six – and Other 'Hoax' Crimes</u>," *VDARE.com*, Feb. 14, 2008). <u>Back</u>

64. (Stix, N., "The Knoxville Horror: The Crime and the Media Blackout," American Renaissance, Vol. 18, No. 7, July, 2007). There are many other examples of black "gang" attacks on one or a few white victims, e.g., 1999 in North Charleston, S.C. where seven blacks attacked two white bicyclists, leaving one permanently disabled, the Halloween, 2006, attack in Long Beach, CA, where 11 black teenagers severely beat three young white women, and the April, 2005, attack on 4 white girls by 30 blacks in Marine Park, Brooklyn, NY. Gang attacks by blacks on white females often include black females, who resent white females taking the diminishing number of black men who are not in prison. (Manzer, T. "Victim Describes Beating," *Press Telegram*, Dec., 1, 2006; Hernandez, M. "Non Bias Attack," *Brooklyn Skyline*, Apr. 11, 2005). There are many more EXAMPLES. Back

65. The Union of South Africa is the rape capital of the world. (<u>News 24</u>," Nov. 22, 2005). The South African rape rate is estimated at at least 1.69 million females per year, 40% of which are

of children; more than 65% are gang rapes. (Clayton, J. <u>Anti-rape device must be banned, say</u> <u>women,</u>" *Times Online*, June 8, 2005). Also, (Gettleman, J., "<u>Rape Epidemic Raises Trauma of</u> <u>Congo War</u>," *The New York Times*, Oct. 7, 2007). <u>Back</u>

66. A high black rape rate is to be expected because women in Africa are self-supporting. Thus, rape is likely to result in living children, so a rapist passes on his genetic predisposition to rape. In the cold north, women were not self-supporting and the children of rape were not likely to survive; men who supported a woman and did not resort to rape were more reproductively successful. Rape is a good example of how behavior that was once adaptive (in the tropics) can become maladaptive when the environment changes (people migrate north); culture becomes more compatible with the requirements of new environment. Back

67. (Department of Justice, *Criminal Victimization in the United States*, Table 42, 2005). Back

68. Black-on-white rape is 115 times more common than white-on-black rape. (NCF, 2005). When white-on-black rape is reported, it is trumpeted in the media, though the most prominent cases have turned out to be fake, e.g., the 1987 <u>Tawana Brawley hoax</u> and the 2006 <u>non-rape of a black stripper</u> by white members of the Duke University Lacrosse Team. <u>Back</u>

69. (Auster, L., "<u>The Truth of Interracial Rape in the United States</u>." *Front Page Magazine*, May 3, 2007). "I became a rapist. To refine my technique and 'modus operandi,' I started out by practicing on black girls in the ghetto – in the black ghetto where dark and vicious deeds appear not as aberrations or deviations from the norm, but as part of the sufficiency of the Evil of the day – and when I considered myself smooth enough, I crossed the tracks and sought out white prey." (Eldridge Cleaver, *Soul on Ice*, 1968). <u>Back</u>

70. ("<u>Recidivism of Sex Offenders Released From Prison in 1994</u>," Table 2, U.S. Department of Justice). Some prominent blacks now argue that black behavior, including misbehaving in class, failing to learn from books, and even crime, is authentic black behavior and should be accepted. (MacDonald, H., "<u>Poisonous 'Authenticity'</u>," *City Journal*, Apr. 29, 2008). <u>Back</u>

Chapter 13 - Genes

"Whatever advantage these genes [<u>ASPM</u> and <u>MCPH1</u>] give, some groups have it and some don't. This has to be the worst nightmare for people who believe strongly there are no differences in brain function between groups."

Anthropologist John Hawks

The race-deniers, who say there is no such thing as "race," have a difficult time explaining why, when genetic differences of native populations across the world are mapped, the result is almost exactly the same as a map of the races. (Fig. 7-4). Thus, there is little doubt that genes differ among different populations.

All of the traits discussed in the previous chapters are caused, at least in part, by genes and, to that extent, "biology is destiny." (Sigmund Freud). Only recently has genetics advanced to where some of the genes responsible for those traits have been identified, and only still more recently have racial differences in some of those identified genes been published. Although all humans have the same genes, the percentage of each population that has any given allele of a gene can vary from 0 (no one in the population has that allele) to 100% (everyone in the population has that allele, i.e., it is "fixed").

It would be enlightening to present a table giving the world wide frequency of every important human allele that differs significantly between different populations, but that information is not yet available. Here are some genes for brain size and intelligence (Weiss, 1992; Plomin, 2004), behavior, skin, hair, and eyes, and diseases that are either already known to differ between populations or are very likely to differ.

The Brain and Intelligence

NBPF15 ("neuroblastoma breakpoint family, member 15," aka **MGC8902**), Chromosome 1. This gene encodes multiple copies of the protein DUF1220, which is expressed in brain regions associated with higher cognitive function. Moreover, sequences of the gene are specific to different primates and, as the species become closer to humans, the number of duplicate copies increases to 212. (Popesco, 2006). Individual and racial differences in the number of copies have not yet been published.

DAB1 ("disabled-1"), Chromosome 1. This gene is involved in organizing the layers of cells in the cerebral cortex, the site of higher cognitive functions. A version of the gene has become universal in the Chinese, but not in other populations. (Williamson, 2007).

ASPM ("abnormal spindle homolog, microcephaly associated"), Chromosome 1. Its alleles affect the size of the brain; defects in the **ASPM** gene lead to small brains and low IQ. (Evans, 2004). A new ASPM allele arose about 5800 ya in Eurasia and that allele has been suspected of increasing intelligence in Eurasia; it is common in Eurasians but absent in Africans and chimpanzees. People who speak tonal languages (e.g., Chinese) are more likely to carry two newer alleles of **ASPM** and **MCPH1** than people in non-tonal regions. (Dediu, 2007; Mekel-Bobrov, 2005).

SSADH ("NAD(+)-dependent succinic semialdehyde dehydrogenase"), Chromosome 6. The C form increases intelligence and lifespan; the T form is 20% less efficient. (<u>Plomin, 2004</u>; Binghom, J., "<u>Clever people could live 15 years longer</u>," *Telegraph* (UK), Aug. 23, 2008).

MCPH1 ("microcephaly, primary autosomal recessive 1"), Chromosome 8. The alleles of this gene, commonly called "microcephalin," at least partly determine brain size and/or organization. (Wang, 2004). A new allele of this gene that increases intelligence arose about 37,000 ya (the confidence limit is very wide -- 60,000 - 14,000 BP; Evans, 2005). This allele is common in Eurasians but rare in Africans and absent in chimpanzees.

Both the newly-discovered **ASPM** and microcephalin alleles were strongly selected for

and spread rapidly through the Eurasian populations. These genes have been associated chronologically with two of the most revolutionary changes in human affairs - an explosion of hand-crafts in the Upper Paleolithic era (40,000 ya), and the development of sophisticated cities and the beginning of major trade routes. ¹ However, so far a correlation between IQ and the presence of these alleles has not been found. (Woods, 2006; Rushton, 2007a).

DCDC2 ("double cortin domain containing 2"), Chromosome 6. This gene affects the formation of brain circuits that make it possible to read. (Weiss, 2005). One allele can result in dyslexia.²

<u>NQO2</u> ("*Homo sapiens* quinone oxidoreductase2"), Chromosome 6. This gene clearly has effects on brain activity and might affect IQ, but that information and its population distribution are not vet published. 3

IGF2R ("insulin-like growth factor 2 receptor"), Chromosome 6. This was the first gene discovered for intelligence; possession of one of the alleles of this gene increases IQ by about 4 points. (<u>Chorney, 1998</u>).

<u>DTNBP1</u> ("dystrobrevin binding protein 1"), Chromosome 6. It is associated with schizophrenia and has recently been linked to intelligence. (<u>Burdick, 2006</u>).

<u>CHRM2</u> ("cholinergic receptor, muscarinic 2"), Chromosome 7, activates signaling pathways in the brain; some alleles can increase IQ 15 to 20 points. (<u>Dick, 2007; Gosso, 2006</u>).

FoxP2 ("forkhead box P2"), Chromosome 7. This gene affects language skills, including grammar, as well as IQ. Although many animals also have the gene, humans acquired an allele within the last 200,000 yrs that was strongly selected because the superior communications and creativity it made possible were a major advantage.

EMX2 ("Empty spiracles-like protein"), Chromosome 10, codes for the development of the cortex into specialized areas. Mismatched areas lower performance. (Leingärtner, 2007).

FADS2 ("fatty acid desaturase 2"), Chromosome 11, is involved in processing omega 3 fatty acids to produce nutrients for the brain. An allele of this gene raises the IQ of children by about 6 to 10 IQ points if they are breast-fed. (<u>Caspi, 2007</u>).

DARPP-32 ("dopamine- and cyclic AMP-regulated phosphoprotein"), Chromosome 17. One allele of this gene optimizes the brain's thinking circuitry, but increases the risk of schizophrenia. (Meyer-Lindenberg, 2007).

MAPT ("microtubule-associated protein tau"), Chromosome 17. Mutations in this gene can cause neurodegenerative disorders. The H2 haplotype of this gene may have come from the Neanderthals. (Hardy, 2005). Also, physicist and mathematician Roger Penrose proposed that consciousness is a quantum effect that arises in these microtubules. (*Shadows of the Mind*, 1996).

PDYN ("prodynorphin"), Chromosome 20. It codes for a precursor molecule for neuropeptides, which affects perception, behavior, and memory. (<u>Balter, 2005</u>).

HAR1 RNA ("human accelerated region 1"), Chromosome 20. This gene codes for an RNA protein that develops neurons in the neocortex of the brain. This gene is different in the brains of humans and chimpanzees and is rapidly evolving in humans. (Pollard, 2006). Also see **HAR1F**, which is active in special cells that appear early in embryonic development and help form the human cerebral cortex; **HAR1** produces RNA that does not produce protein. (Smith, K., 2006; Pollard, 2006).

EST00083 ("expressed sequence tag") is an mtDNA polymorphism found more often in high IQ groups. It is particularly common in Europe (less so in Asia), where it is associated with a lineage that dates back 35,000 yrs. (Thomas, 1998).

Behavior

PER2 (period homolog 2, Dosophila), Chromosome 2, "is a key component of the mammalian circadian clock machinery." "[A] high and significant difference in the geographic

distribution of PER2 polymorphisms was observed between Africans and non-Africans." (Cruciani, 2008)

ADH ("alcohol dehydrogenase"), Chromosome 4. Mutations in this gene cause Asians to have a more intense response to alcohol, including facial flushing. (<u>Duranceaux, 2006</u>).

PAX6 ("paired box gene 6"), Chromosome 11, controls development of the iris. A mutation of this gene is linked to impulsiveness and poor social skills, which is discernable by the appearance of the iris. (Larsson, 2007).

<u>DRD4</u> ("dopamine receptor D4"), Chromosome 11, controls sex drive. (Zion, 2006). Some studies found that an allele is associated with novelty-seeking personality traits in two European populations (<u>Benjamin, 1996</u>), but other studies did not confirm this.

ACTN3 ("alpha-actinin-3"), Chromosome 11, codes for fast twitch muscle fibers. The R allele encodes a functional copy of the protein but the X allele does not produce the protein; 25% of Asian populations are deficient, 18% of Europeans, but less than 1% of the African Bantu population. (<u>Yang, 2003</u>).

<u>AVPR1a</u> (arginine vasopressin 1a receptor), Chromosome 12, influences social bonding and altruism in humans and some animals. People with a long promoter of the RS3 allele are more altruistic than persons with a short promoter. (<u>Knafo, 2007</u>).

<u>ACE</u> ("angiotensin I-converting enzyme"), Chromosome 17. It converts angiotensin I to angiotensin II, but is also involved in athletic ability. Racial differences are not yet known.

MAOA ("monoamine oxidase A"), X Chromosome. This gene codes for an enzyme which sits on mitochondrial membranes in neurons and degrades several important neurotransmitters, including several believed to be important in the regulation of aggression and impulsivity. (Moran, 2006). People with the short version of **MAOA** were found to be more violent and generally more antisocial than those with the long version. Also, people with low levels of the enzyme who were mistreated as children have significantly higher crime rates. (Moffitt, 2005; Meyer-Lindenberg, 2006). Different ethnic groups have different alleles. (*Wikipedia*, "Monoamine Oxidase").

Skin, Hair,& Eyes

EDAR ("ectodysplasin A receptor"), Chromosome 2, controls hair thickness. East Asians have two copies of an allele that gives them thick hair. (*Am. Soc. of Human Gen.*, Annual Meeting, Oct. 23-27, 2007).

MATP ("melanoma antigen transporter protein"), Chromosome 5, affects skin color. "The L374F mutation was present at an allele frequency as high as 0.96 in the German population, whereas it was completely absent in the Japanese population." (Yuasa, 2004). There are at least 118 genes associated with skin pigmentation (Lao, 2007).

<u>AIM1</u> ("absent in melanoma 1"), Chromosome 6, influences skin color. The 272K allele is common in Asian populations, such as Chinese (43.4%), Sinhalese (20.4%), and Tamils (12.1%), but is rare in Europeans (2.5%), Xhosans (Bushmen, 3.4%), and Ghanaians (4.1%). The 374F allele is exclusively found in Europeans (91.6%), but not in the other five populations (0%–1.9%). (Soejima, 2006).

TYR ("Tyrosinase"), Chromosome 11. This gene and the **MATP** gene have a predominant role in the evolution of light skin in Europeans but not in East Asians, who evolved light skin independently. (Norton, 2006).

<u>KITLG</u> ("KIT legand"), Chromosome 12. About 20% of the differences in pigmentation between people of African and northern European descent is due to different alleles of this gene. (<u>Miller, 2007</u>).

OCA2 ("oculocutaneous albinism II"), Chromosome 15. This gene can cause albinism, but the genetics are different in Caucasians and African Americans. (Lee, 1994). It also affects eye color. (Duffy, 2007).

HERC2, ("HECT domain and RCC1-like domain-containing protein 2"), Chromosome

15, can reduce the production of dark pigment (melanin) by adjacent gene <u>OCA2</u>, resulting in blue eyes, blond hair, and light skin; 97% of blue-eyed people have the same allele. The high frequency of the blue-eyed allele in Scandinavia implies that allele significantly increased reproductive success. (Eiberg, 2008).

SLC24A5 ("solute carrier family 24, member 5," aka the "golden pigmentation gene"), Chromosome 15. An allele of this gene that changes a single amino acid in a protein plays a major role in giving Eurasians lighter skin than Africans. (Lamason, 2005). The European allele is not the same as the Asian allele. (Norton, 2006). This gene is also expressed in the brain. ⁴

<u>MC1R</u> ("melanocortin-1 receptor"), Chromosome 16. There are over thirty alleles for this gene. The gene helps determine hair and skin color, but not eye color. (<u>Mueller, 2006</u>). Africans (and tropical indigenous people in general) have an ancestral allele for this gene and only synonymous alleles (i.e., alleles that code for the same amino acids) of this gene; the alleles are ancient and code for eumelanin, which results in black skin and hair. (<u>Harding, 2000</u>). Europeans have alleles for blond, red, brown, and black hair.

KRT41P, aka **KRTHAP1** ("keratin 41 pseudogene"), ⁵ Chromosome 17. This gene is present in chimpanzees, gorillas, and man, and codes for body hair. It was turned off in man about 240,000 ya. (Klein, 2002, p. 203).

EYCL1 ("eye color 1" aka "gey"), Chromosome 19, codes for green and blue eye color; **EYCL2** ("bey1"), Chromosome 15, codes for brown eyes, and **EYC3** ("bey2"), Chromosome 15, codes for brown and blue eyes. (*Wikipedia*, "<u>Eye Color</u>"). Five to ten genes may be involved in eye color.

ASIP ("agouti signaling protein"), Chromosome 20. The 8818G allele is associated with darker skin color in Africans and African Americans; since the allele also is found in African apes, it is "ancestral" in Africans. (Norton, 2006.).

Health & Disease

LCT ("lactase gene"), Chromosome 2, codes for lactase, an enzyme that catalyzes the digestion of lactose, milk sugar. An allele that enables adults to digest milk sugar arose in northern Europe only recently, between 5480 BC and 5000 BC. The allele was strongly selected and its possession by over 90% of northern Europeans may help explain how Indo-Europeans were able to spread so suddenly about 4000 ya. The vast majority of Asians and Africans do not have it, but the Tutsis more recently independently evolved a lactose-tolerant allele. (Burger, 2007). Since all children are lactose-tolerant and most adults are not, "lactose tolerance may be considered a form of neoteny." (*Wikipedia*, "Lactose Intolerance").

<u>CCR5</u> ("chemokine (C-C motif) receptor 5"), Chromosome 3. The delta 32 deletion of this gene appeared more than 5,000 ya in southern Finland and may have provided some protection against smallpox. Today, only a small percentage of Europeans have this deletion (1%, though 10% of European Jews have it), but it protects them from the AIDS virus (Zimmer, 2001, p. 222-225), though it increases their risk of illness from flaviviruses, such as West Nile virus; it is not found in Asians or Africans. (Smith, 1997; Stephens, 1998).

PDE4 ("pyridoxine-dependent epilepsy"), Chromosome 5. An allele of this gene is involved in cardiovascular disease and lung cancer susceptibility. Blacks who smoke up to a pack a day are far more likely to develop lung cancer than whites who smoke similar amounts. Blacks may have less protection against lung cancer because they were subjected to less smoke, as fire is not needed as much in the tropics. (<u>Garte, 2001</u>).

<u>CYP3A5</u> ("cytochrome"), Chromosome 7, acts to retain salt in the kidneys. It is common in Africans, who live in a hot climate where salt is lost through sweat and is not easily available. The CYP3A5*3 allele, which is non-functional, is far more common in Eurasians (96% for the Basques in the Pyrenees Mountains) than in Africans (6% in Nigeria). Thus, Africans who live in white civilizations retain too much salt, leading to cardiovascular problems. Another gene, <u>AGT</u> <u>M235</u>, which is also involved in salt retention, has a similar distribution. (<u>Thompson, 2004; Roy</u>,

<u>2005</u>).

<u>CASP12</u> ("cysteinyl aspartate proteinase"), Chromosome 9. Having the non-functional version of this gene better prevents sepsis (infection of the blood and tissues by bacteria). The loss of function occurred 51,000 to 74,000 ya. (Wang, X., 2006). This gene <u>HBB</u> ("hemoglobin beta chain") on Chromosome 11, codes for the beta strand of hemoglobin. A single copy of an allele of this gene protects against malaria, but two copies cause sickle cell anemia; ⁶ it is found mostly in people living in malarial regions of Africa and India.

CD4 ("cell development"), Chromosome 12. The 7R allele was probably very ancient in Neanderthals, but may be only 30,000 yrs old in Hss. It is a receptor for HIV. (<u>Hanna, 1989</u>).

BRCA1 ("breast cancer"), Chromosome 17. This gene has an allele that is involved in breast cancer. Of Ashkenazi Jewish women, 1 in 40 carries alleles of the **BRCA1** and the **BRCA2** gene that give them a 4 out of 5 chance of having breast cancer.

LTA4H ("leukotriene A4 hydrolase"), Chromosome 17. An allele of this gene increases the risk of a heart attack in African Americans by more than 250%, but only by 16% in whites and Asians. The gene boosts inflammation as a way to fight infections and is generally not found in Africans. Although 30% of whites have the allele, they have evolved other genes to counteract it, but the 6% of the African Americans, who acquired it by breeding with whites, have not. (Helgadottir, 2006).

APOH ("apolipoprotein H"), Chromosome 17. This gene is a major autoantigen for the production of antiphospholipid antibodies (APA) in autoimmune diseases. The APOH*3B allele is present only in blacks and is identical to the wild type **<u>APOH</u>** in chimpanzees. (<u>Kamboh</u>, <u>2004</u>).

NOS2 ("nitric oxide synthase"), Chromosome 17, encodes an enzyme that produces nitric oxide. An allele possessed by Africans in malaria areas causes increased production of nitric oxide, which protects against the symptoms of the disease. Caucasians do not have that allele. (Keller, 2004).

<u>CNDP1</u> ("carnosine dipeptidase 1"), Chromosome 18. A trinucleotide repeat sequence on this gene protects Caucasian Europeans, white Americans, and Arabs, but not blacks, from diabetic end-stage kidney failure. (Freedman, B.I., 2007).

APOE ("apolipoprotein E"), Chromosome 19. This gene plays a role in transporting cholesterol and is involved in Alzheimer's disease. It is possible that some people may not have this gene at all which, if true, would raise some interesting questions. (<u>Miller, 2006</u>).

PDHA1 ("pyruvate dehydrogenase (lipoamide) alpha 1"), X Chromosome. The tree for this gene is estimated as 1.86 mya and the split between Africans and non-Africans as 200,000 yrs. There are no haplotypes shared between the Africans and the non-Africans and one site (544) is fixed in the non-African lineage (i.e., every non-African tested has the same allele, which suggests it is advantageous and ancient). (Harris, 1999.).

The reader may have noticed that genes that code for one trait may affect other, seemingly unrelated traits (e.g., <u>PAX6</u>, <u>CCR5</u>, and <u>PAX6</u>) and that some alleles ("ancestral" alleles) are found in blacks and chimpanzees, but not other races (<u>NQ02</u>, <u>ASIP</u>, <u>APOH*3B</u>, <u>MC1R</u>) or, vice versa, (<u>ASPM</u>, <u>MCPH1</u>).

Men and women differ by only a single chromosome (Y in men, X in women), yet the differences in that chromosome extensively affect their anatomy, physiology, and behavior. Figure

13-1 (Yang, 2006) shows how genes are expressed in the livers of female (top) versus male mice. Red corresponds to more expression, Females gene green to less. Even though one might think that the differences between males and females would be limited to reproductionrelated differences on the Х and Y chromosomes. this map shows that the differences have а large effect on genes that are expressed in the liver, which has little do with Outliers to reproduction. Thus, we should not be



Figure 13-1

surprised if racial differences in genes affect much more in the body than the obvious differences in appearance.

At the present time, studies of racial genetic differ-ences have been mostly limited to mtDNA and coding nuclear DNA. Yet humans have more "junk" DNA than any other animal, and the functions of junk DNA are just beginning be discovered. Important racial differences can also be expected to be found in it as well, in the number of copies of genes, and in the gene regulators, the genetically-inherited "switches" that determine whether and when a gene is read.

Chapter 14

Table of Contents

FOOTNOTES

1. See (Evans, 2005) for Microcephalin and (Mekel-Bobrov, 2005) for ASPM. Back

2. (<u>Meng, 2005</u>). "The allele frequency of the A allele rs2274305 of the dyslexia-gene DCDC2 is about 0.28 among Eurasians and 0.99 among Yorubas from Nigeria, about 0.80 among African-Americans." (<u>Weiss, 2005</u>). <u>Back</u>

3. "If we align the genetic code of Homo sapiens and the chimpanzee, Pan troglodytes, in both species NQO2 is coded by 231 amino acids. However, at the position 47 of rs2756081 [a particular allele] human Blacks are coding FF (phenylalanine) [the same] as chimps and a number of other mammals, and Eurasians with an above average IQ are coding LF or LL (leucine), [and] below IQ 100 FF." "The allele frequency of the C allele rs2756081 of NQO2 is

about 0.25 among Eurasians (0.41 in Tokyo in a sample, which is not in Hardy-Weinberg equilibrium) and 0.00 among Yorubas from Nigeria, about 0.02 among African-Americans." (<u>Strassburg, 2002</u>). <u>Back</u>

- 4. (GeneCard for protein coding SLC24A5 GC15P046200). Back
- 5. A pseudogene is an inactivated gene. <u>Back</u>

6. When having two copies of the same allele, "AA" or "BB," is disadvantageous compared to having one of each, "AB," it is called "heterozygote advantage." Right-handedness may be another example. (Corballis, 1991, p. 95). Back

Chapter 14 - Intelligence

"There is absolutely no question of any genetic differential: Intelligence potential is distributed among Negro infants in the same proportion and pattern as among Icelanders or Chinese or any other group."

> **Regression Plot** 4000 Norway Bermuda 3500 Ireland 3000 2500 Z 2000 1500 Eq. 1000 500 0 -500 60 70 80 90 100 110 50 National IQ Figure 14-1

U.S. Moynihan Report, Department of Labor (March, 1965)

Chimps have fingers with an opposing

The single most important trait that man

has is his intelligence and therefore its absence

is the single most important primitive trait. A

population could have primitive bodies, but if

they have a high average intelligence they can

nevertheless build a great civilization and have

a relatively high standard of living. It is anyone's

guess what the minimum average intelligence required today for a population to create and

maintain a modern civilization might be, but it can be safely said that 67, the average for

today's sub-Saharan Africans (Lynn, 2006a, p

37), is way too low. ¹ In Figure 14-1 (Lynn, 2006b) plots national IQ against PPP-GNI

(purchasing power parity - gross national

income). The "UAE" (United Arab Emirates) has a higher GNI due to oil income and China has a

lower GNI due to socialism. National IQ does

not begin to really "pay off" in terms of living

standards until it is at least in the mid 80s.²

thumb, can walk on two legs (poorly, and for only short distances), are omnivores, have a social organization, can make simple tools and weapons, ³ have culture, communicate by hand signals (Pollick, 2007), and can even understand language and teach it to their children, ⁴ but no other animal can engage in abstract thought to the extent that man can. We dominate all the other animals on the planet and alter not only the planet Earth (drastically), but have made contact with its moon, asteroids, comets, many of the planets, and even the sun! None of man's great accomplishments would have been possible without his intelligence, particularly his ability to engage in abstract reasoning.

Paleoanthropologists have long conceded that from monkey to ape to archaic man to modern man, both brain size (Lee, 2003, Fig. 2) and intelligence increased. 5 The correlation is so strong that no one disputes that, in the context of different animals, more brain (in proportion to body size) equals more intelligence. In proportion to his size, man has the largest brain of any large animal. ⁶ Figure 14-2 shows the increase in man's brain size as he evolved. 7 Note the two sharp increases in intelligence that began at about 2 million and 500,000 ya, suggesting mutations and/or strong selection.

1500 1300 1100 900 900 700 500 500 500 500 500 5 4 300 Figure 14-2

There is also Figure 14-2 considerable evidence that brain size and intelligence correlate strongly between human populations, as both

CC



increase from Bushmen to Australian aborigines to s-S Africans to Caucasians to NE Asians. ⁸ But some of the same people who think the brain size-intelligence correlation is obvious in animals will vigorously argue that it is not true of different human populations or of different individuals. ⁹ And, indeed, it is not difficult to find people with average-sized brains who are unusually intelligent, and it is even easier to find people with large brains who are not intelligent at all. After all, by injury, disease, or genetic defect, you can always take a person with the brain of a genius and turn him into a dummy, but there is no way you can take a person with the brain of a dummy and turn him into a genius. ¹⁰ At any rate, there is a correlation of 0.44 (Lynn, 2006a, p 214) between human brain size and intelligence for individuals, as measured by IQ. ¹¹

Figure 14-3 ¹² shows this relationship for the major races, where the "ecological" correlation between cranial capacity and IQ for the three major races is an extremely high 0.998. (Jensen, 1998).

and

intelligence is approximately 42% for 4 to

6 year olds and 55% for the age group 6

to 20, but increases to 80% for adult

Europeans 13 and 72% for adult African

The

multiple genes

environment.

Americans. 14

Intelligence is determined by

also

heritability

Heritability

by

the

of

110 100 90 80 Negroid 70 1250 1300 1350 1400 Caucasoid 1400 Cranial Capacity (cc) Figure 14-3

As environments become more equal, the "remaining differences in

intelligence are increasingly determined by differences in genes" (<u>Herrnstein, 1994</u>, p. 91) and the heritability of intelligence increases. Thus, as the egalitarians make the environments of blacks and whites more equal, the remaining IQ differences between blacks and whites will become more controlled by genes and therefore more intractable.¹⁵

If people "sort" themselves according to their IQ, so that more intelligent people go to one place (i.e., college, technical occupations) and less intelligent go to another (i.e., inexpensive housing or manual labor jobs), then the heritability of intelligence will increase since people tend to marry those they associate with ("assortative mating"), who are then similar in intelligence. There is a correlation between the IQs of men and women who mate of about 0.45, higher than for any personality traits, ¹⁶ so if the heritability of IQ is initially low, it will increase in magnitude over several generations. The correlation between the IQs of spouses is 0.4. (*Wikipedia*, "IQ").

Researchers have found that certain regions of the brain responsible for intelligence are highly heritable, including language areas (Broca's and Wernicke's areas) and the frontal region, which plays a large role in abstract reasoning. ¹⁷ In identical twins, these areas showed a 95 to 100% correlation between one twin and the other, a correlation as high as for fingerprints (identical twins have similar, but not identical, fingerprints). Fraternal twins were nearly identical in Wernicke's area of the brain (language comprehension), but less similar in other areas, with about a 60 to 70% correlation. (Thompson, 2001).

The correlation of the IQs of identical twins is a high 0.86, even when they have been reared apart (<u>Crew</u>, <u>F.A.E.</u>, <u>1927</u>), while fraternal twins and siblings correlate only 0.6. (*Wikipedia*, "<u>IQ</u>"). When the same IQ test was given to the same people at ages 11 and 77 (<u>Deary</u>, <u>2000</u>), the correlation between the two test results was a strong 0.73, showing little environmental influence on intelligence during the intervening 66 yrs. A test for the intelligence of babies predicts their later intelligence, further indicating its heritability. <u>¹⁸</u> "In other words, the odds are 2 to 1 that an individual's adult IQ will fall within 3 points of his IQ at age 8." (<u>Levin</u>, <u>1997</u>, p. 62).

Measuring Intelligence

General intelligence, the ability to comprehend, understand, catch on, make sense of, or figure out (<u>Gottfredson (1997a</u>), is known as "g," and "g" is what IQ tests strive to measure. ¹⁹ But IQ tests today are so suspect in some quarters that they are no longer given to school children unless specifically requested. ²⁰ Although it might seem obvious that knowing what a child is capable of learning would be highly useful in deciding what to try to teach him, egalitarianism trumps reason; determining children's IQ and, even worse, making use of that information to decide whether they are learning up to their capabilities, would expose the lower intelligence of blacks, so <u>that</u> information *ist verboten*.

All innovations, including IQ tests, are improved as their usefulness becomes apparent; early IQ tests were

inaccurate in determining intelligence, and some even obviously biased. (Blacks actually do better on tests that are culturally biased. ²¹) Today, however, psychologists go to great lengths to make their IQ tests as accurate and unbiased as possible. (Levin, 1997, pp. 62-73; Jensen, 1980). They know full well that their work will not be accepted, and may even be ridiculed, unless the tests meet the strictest possible standards.

Moreover, modern science has just about eliminated any bias by using Raven Matrices to determine IQ. (Penrose, 1936). In a Raven Standard Progressive Matrices test, a person sits in front of a monitor screen. As quickly as he can, he is required to extract a pattern implied by a set of geometric pictures, which become increasingly more complicated; the faster he reacts, the higher is his IQ and a computer, not a person, calculates his score. ²² One might reasonably ask what 'how fast a decision is made' could possibly have to do with intelligence, especially since not much abstract reasoning is involved other than examining drawings for similarities and differences. Before answering that question, let us note that it works – these tests have correlations with conventional IQ tests that "reach 0.50 and higher." ²³ They work because high intelligence requires a brain that can perform certain physiological functions well, one of which is the rapid transmission of information across synapses in the part of the brain that makes decisions.

At any rate, children quickly learn how to take a Raven test, whether they are literate or illiterate, educated or uneducated, poor or rich, white or black. And, since the tests are typically given to school children, and children who go to school, especially in Third World countries, tend to be more intelligent than those who do not, any bias will result in IQ scores being higher than they would have been had all children been tested.

While IQ scores are information that the people who run our schools don't want to know, the U.S. Army, whose generals apparently value winning wars more than obeisance to egalitarianism, has been testing prospective recruits for IQ since 1950 (Armed Services Qualification Test) and continues to do so because it is so valuable in determining what jobs soldiers are capable of learning to do. Needless to say, mistakes made by unintelligent soldiers can cost lives and lose battles. In or out of the military, there is no other indicator that predicts success as well as IQ.

Correlations

"The Bell Curve" (<u>Herrnstein, 1994</u>) catalogued intelligence and a variety of other indicia, such as education and socioeconomic status, to determine how well they positively correlate with socially desirable outcomes (<u>Shurkin, 1992</u>), such as job success and income, and negatively correlate with socially undesirable outcomes, such as welfare dependency, illegitimacy, and crime; none correlated as highly, positively or negatively, as IQ.

Higher IQ correlates well with job performance (r = 0.54), $\frac{24}{10}$ increased wealth, $\frac{25}{10}$ increased income, $\frac{26}{10}$ economic growth, $\frac{27}{10}$ livability in a U.S. state (0.80), $\frac{28}{10}$ cooperation, $\frac{29}{10}$ and even life expectancy (0.85) and infant mortality (-0.84), $\frac{30}{10}$ so one might reasonably expect that average IQ will determine economic success for an entire population. And, indeed, that is the case. Nations whose citizens have a high average IQ usually also have a high average living standard; $\frac{31}{10}$ the correlation is strong, 0.73. (Fig. 14-4). $\frac{32}{100}$



Figure 14-4

As Figure 14-4 shows, high IQ usually equals a high living standard. For example, the United States (average IQ = 98) has a GDP that is 58 times that of s-S Africa (average IQ = 67). ³³ It is not wealth that makes people intelligent, as the egalitarians sometimes claim, but intelligence that enables people to better acquire their material desires, just as one would expect. Each 10 point increase in IQ approximately doubles economic growth, provided the country has a market economy – socialism has strangled the economies of China and Eastern Europe.

The IQ results Table 14-1 (Lynn, 2006a) were "normed" so that an IQ of 100 is set at the average for Britain. Note the drastic drop in IQ that occurs for s-S Africans, Australian aborigines, and the Bushmen. This drop suggests significant genetic differences and that those populations are much more primitive. Also note that the worldwide average IQ is 90 and that all the average IQs over 90 are in northern populations. Lynn (2002a, Table 4) gives IQs for 185 countries.

The Mysterious Black-	.		Equivalent Age	Page
White Gap	Population	Median IQ	of White Child	(Lynn, 2006a)
I rillions of dollars have been spent	Jews (1)	107-115		94
white and black academic achievements.	East Asia (2)	105		173
36 All have failed. 37 After each program	Europeans (all races)	98	16	173
fails, the egalitarian chattering classes get	Inuit (Eskimos)	91		151
this Mysterious Gap. IQ differences are never mentioned, and another program costing even more money is started, only to fail several years down the road, and the Mysterious Gap remains, or even	Worldwide	90	14	(Lynn, 2002a)
	South East Asians (3)	87		98
	Native Americans (4)	86		159
	Pacific Islanders (5)	85		168
increases. 38 "Insanity is doing the same	African Americans 34	85		44
thing over and over again and expecting different results." (Albert Einstein)	South Asians (6)	84		80
As discussed in Chapter 13, geneticists are identifying the genes responsible for intelligence and are finding the incidence of those genes in people	North Africans (7)	84		80
	s-S Africans	67	11	37
	Australian Aborigines	62	10	104
around the world. To no one's surprise, the	Kalahari Bushmen	54	8	76
incidence in Africa is much less than in				

Europe or Asia. It is difficult to argue that blacks fail to achieve for lack of education or because of white racism when they do not have the genes required for learning. (1) European J 39

Figure 14-5 shows the IQ frequency distributions of Africans, blacks (African Americans) and whites (European Americans). ⁴⁰ The distributions of blacks and whites are of equal population size. The African distribution is a normal bell curve having a population approximately equal to the black curve. The mean of the African distribution is 67 (Lynn, 2006a, p 37) and "the black mean is commonly given as 85, the white mean as 100 ..." ⁴¹

The IQ difference between blacks and whites is observable by age 3, indicating that it is genetic. (Levin, 1997, p. 103). At age 8 months to 12 months blacks, due to their faster maturation (Chap. 11) have IQ scores that are almost identical to whites, while Asian scores are slightly lower due to their slower maturation; as blacks become older, their IQ gap with whites increases and, with Asians, increases even more. ⁴²

The egalitarians argued that the IQ scores of Africa Americans were depressed by slavery and therefore the IQ



scores of Africans would prove to be much higher than the scores of African Americans; instead, they were much lower. (<u>Herrnstein, 1994</u>, p.565). In Figure 14-5, the black curve would be much closer to the African curve had whites not interbred with African slaves and given their children genes for higher intelligence. ⁴³

Note that in Figure 14-5, the peak of the black distribution is higher and the left end ⁴⁴ is less spread out than the ends of white curve, even though both curves include the same number of people; the narrower black curve means that the black standard deviation (SD) is less than the white SD. Although the SD "is commonly given ... as 15" for everyone (Herrnstein, 1994, p. 276), the black SD for the data used in Figure 14-5 was 12.4. According to Jensen, the SD for whites is 16 (18 for males and 14 for females) but is 10 or 11 (some say 14) for NE Asians and about 12 for blacks. ⁴⁵ A group that has a larger SD will have both more geniuses and more dummies than another group that has the same mean but a smaller SD; white males have the largest SD, which may explain their greater achievements (see next chapter).

In Figure 14-5, people with IQs below the left vertical yellow line (IQ<70) are considered to be retarded and people with IQs above the right vertical yellow line (IQ>130) are considered to be gifted. As Figure 14-5 shows, over half of S-s Africans are in the retarded range. About 37% of American blacks have an IQ below 80, just above retarded, but only about 9% of whites do, ⁴⁶ but blacks are 6.1 times as likely to be retarded (IQ<70) as whites (i.e., about 12% of African Americans and 2% of non-Hispanic whites have an IQ less than 70; La Griffe du Lion, 2000d).

Even though the percentage of blacks with IQs under 70 is about 6 times the percentage of whites, in one study only 4% of those blacks were actually classified as "retarded," i.e., as behaviorally impaired, while 15% of the whites were! ⁴⁷ The reason is not that whites are being discriminated against, but that in whites a low IQ is usually due to a genetic abnormality such as Down's syndrome, which causes obvious physical deformities, but low IQ blacks usually do not have a genetic defect and are normal in behavior and appearance; in Africans and aborigines these low scores are normal. ⁴⁸ "Black children of IQ 70 routinely learn to speak, to play games, learn names, and act friendly with playmates and teachers. They appear quite normal, whereas White children with similar IQs 'look' abnormal." ⁴⁹

Referring now to the right tail "gifted" region of Figure 14-5, we see that the lower average IQ of blacks means not only that the left tail "retarded" region has disproportionately more blacks, but also that the right tail "gifted" region has disproportionately fewer blacks; ⁵⁰ a much greater percentage of whites have high IQs than

blacks. Although half of all whites have an IQ over the white average, only 16% of African Americans do (i.e., 5 out of 6 blacks have an IQ below the white average) and only 1.3% of Africans would be expected to have an IQ above the white average. ⁵¹ The higher the IQ, the greater is the difference between the percentage of blacks and the percentage of whites. Only 1% of the black (African American) population has an IQ over 120, but 9% of the white population does. 52 About 2.3% of whites have an IQ of at least 130 (gifted), 20 times greater than the percentage of blacks who do; 53 only 0.00044% of Africans would be expected to have an IQ over 130. (Id.).

The large differences in the percentages of blacks and whites IQs in the right tail of the curves account for the small number of blacks in high-IQ professions, such as physicians and attorneys. ⁵⁴ Note in Figure 14-6 (Gottfredson, 2004a) how IQ relates to occupation and how the lower IQ of blacks limits them to less well-paying occupations (U.S. in 1981).



Figure 14-6

The black-white gap will increase as more and more African refugees, with an average IQ of only 67, are brought into the United States and are counted as part of the black population.

For African Americans, skin color, which is a surrogate for European ancestry, correlates highly (r = 0.92)with intelligence 55 so the blacks at the right tail of the black IQ curve (Fig. 14-5 & 14-6) have lighter skin (and more of other Caucasian features) than those in the left tail. The IQ of Africans is estimated to increase by 0.2 IQ points for every 1% of Caucasian heritage. (Lynn, 2006a, p 70).

The latest attack on the massive amount of data that shows that blacks are less intelligent is the "stereotype threat," which asserts that blacks do worse on IQ tests because they fear that they will confirm the white stereotype $\frac{56}{5}$ of them – that they are less intelligent; this fear makes them so nervous that they don't do well on the tests. (Steele, 1995). Steele demonstrated experimentally that blacks perform worse on a test when it is called an "IQ test" than when it is described as a "research tool." The egalitarians were, of course, overioved at this news and both academics and the popular press exulted in the Tinker Bell Theory of Intelligence, that blacks would be just as smart as whites if only they believed they were. Belief may increase motivation, but our belief does not create reality. Steele's experiment disguised racial differences in IQ, but did not eliminate them, i.e., the gap between white and black IQ scores remained. (Sackett, 2004; Sailer, 2004a; Murray, 2005; La Griffe du Lion, 2003). Nor does the "stereotype threat" explain how stereotypes get started in the first place. 57

The very fact that Africans were so extensively enslaved for centuries, not only by other Africans, but also by people from many other countries, and were unable to stop their own exploitation, despite their often superior physical abilities, strongly suggests that mentally they were, and are, incapable of competing with other races.

The Male-Female Gap

Another "gap" is between the accomplishments of white men and white women, which also suggests a difference in intelligence. (Lynn, 2006a, p. 219) gives white men about a 5 point IQ advantage over white women and (Jackson, 2006) gives a 3.63 point IQ advantage to men. 58 This is consistent with men having a brain that is about 100 cc larger, even adjusting for body weight. ⁵⁹ Although this difference is only a few IQ points, because of the difference in male and female means and the greater SD of white men, the small difference in IQ makes a large difference between the number of white men and white women at the higher IQ levels. 60 Figure 14-7 clearly shows both the higher average IQ of males and their greater SD,



and how much those differences affect the male/female ratio at higher IQs (dotted line). 61

Among Africans, however, the women may have an IQ advantage over men, ⁶² probably because African women are less dependent on men and therefore need not select males who are good providers (and good providers are typically more intelligent, see Chap. 5).

The Flynn Effect

A major anomaly in IQ research, the Flynn Effect, was discovered by Richard Lynn (Lynn, 1982), but was named for James R. Flynn (<u>1984, 1987</u>), who gathered a great deal of data to support it. The Flynn Effect is a world-wide <u>increase</u> in IQ scores of about 3 IQ points every ten years since about 1950. Some researchers (<u>Rushton, 2000a</u>, p. 284; <u>Lynn, 2006a</u>, p. 6) believe that >U>real (i.e., genetic) intelligence has increased and suggest that it may be due to improved nutrition. (With all the junk food eaten today, one wonders whether nutrition has really improved.) The author believes, ⁶³ however, that the increase in scores is not an increase in real intelligence, but is because the IQ test score comparisons are made between people of the same chronological age, but of different maturities. To give an example, if you give the same IQ test that 10 year olds took 50 ya to today's 10 year olds, you will find that today's 10 year olds do much better on the test. But children today mature at an earlier age (probably due to increased calories, which accelerates maturation), and therefore are actually, perhaps, 12 yrs old in terms of maturity. Thus, the Flynn Effect is due to comparing years-ago children who were 10 yrs old in maturity to today's children who are 12 yrs old in maturity (but 10 yrs old chronologically) and, of course, the more mature children do better.

It was always unbelievable that people are becoming more intelligent, given all the welfare subsidies for lower IQ people to have more children and the immigration of low IQ people into the West from Mexico, Africa, and the Middle East. ⁶⁴ "Literacy among college graduates declined between 1992 and 2003, with less than one-third of all graduates at the highest 'proficient' level in 2003, and less than half of all graduates with advanced degrees at this level." ⁶⁵ If real intelligence (i.e., the genetic potential for high intelligence) were increasing, we would not see grade inflation, falling SAT scores, a dumbing down of SAT tests, ⁶⁶ courses, textbooks, and our culture, the publication of studies such as "<u>A Nation at Risk</u>," ⁶⁷ the <u>Darwin Awards</u>, ⁶⁸ and the series, "[insert almost any subject] for Dummies." ⁶⁹ American "music" consists of endless repetition and pounding drums and less and less Beethoven and Prokofiev, or even Richard Rodgers and George Gershwin, and art is urination and feces rather than Rembrandt and Michelangelo. New research in England has confirmed common sense, finding, "The intelligence of 11-year-olds has fallen by three years' worth in the past two decades." ⁷⁰

There is evidence not only for declining intelligence in the United States, but that the intelligence of blacks is declining faster than the intelligence of whites. ⁷¹ This conclusion is based on data showing that for both whites and blacks, the less intelligent are more fecund, and that is truer of blacks than whites. (Chap. 11 and Table 32-1, p. 262).

According to the U.S. Census Bureau, International Data Base (2005), the world population, which was at a little over 6 billion in 2000, is expected to grow to 7 billion by 2013 and to surpass 9 billion by 2050. The U.S. population is also growing, from about 280 million in 2000, to a projected 310 million in 2010, to a little under 400 million by 2040. Given that high IQ white and East Asian population numbers are falling while low IQ population numbers are increasing, world-wide average intelligence has to be declining.

Selecting for Intelligence

Intelligence increases significantly with distance from the equator. ⁷² Although high intelligence appears to

be an adaptation to the cold, it is not cold weather, per se, that selects for intelligence, as the Arctic people have an average IQ of 91 and they would be expected to have an IQ significantly higher than that if cold weather alone selected for intelligence. The real selector for intelligence is a mentally challenging environment, where survival (and therefore reproductive success) depends more on intelligence than on other traits. ⁷³ The Arctic may be colder, but the people who live there depend upon the same food source - sea animals - the entire year. Thus, obtaining and storing food for the winter is unnecessary and the same skills can be used to obtain food the entire year. In contrast, the large seasonal variations in northern territories south of the Artic and far from the sea, where vegetation must be relied upon as a major food source, make those environments more mentally challenging. ⁷⁴

A highly seasonal climate is more mentally challenging because of the many additional problems that must be solved in order to survive. These included keeping warm, of course, but also the absence of food in the winter, the need to hunt and kill large mammals, cut them up, and carry the meat back to women and children and store the excess when the temperature is above freezing. (Lynn, 2006a, pp. 227-228). These problems were not faced by people in the tropics, ⁷⁵ and solving these problems required careful planning, cooperation, and the crafting of weapons and tools, i.e. intelligence.

The center of the Chinese Han population is between the Yangtze and Yellow Rivers and extends from modern Wuhan, Nanjing, and Chengdu. This is in an officially-designated "hot summer/cold winter zone" where the average temperature in the hottest month is 25 to $30 \,^{\circ}$ C (77 to $86 \,^{\circ}$ F) and the average temperature in the coldest month is 0 to $10 \,^{\circ}$ C (32 to $50 \,^{\circ}$ F). ⁷⁶ It is no coincidence that the Chinese, coping with such wide swings in temperature, have an average IQ of 103. (Lynn, 2006a, p. 173). Now contrast China with equatorial Africa, where the annual temperature variation is between 17 and $32 \,^{\circ}$ C (63 and $90 \,^{\circ}$ F) and the average IQ is only 67. (Lynn, 2006a, p. 224).

Since northern women, until modern times, needed men to provide for them and men capable of doing so typically had status and wealth, which correlate highly with intelligence, northern women directly or indirectly selected more intelligent men. There is some evidence that beautiful women are of higher intelligence (Kanazawa, 2004), perhaps because their mothers were beautiful and their mothers selected intelligent men ⁷⁷ so, since men prefer beautiful women, they are also selecting for higher intelligence. As a consequence of these sexual selections, white women are only slightly less intelligent than white men. ⁷⁸

Like all traits, if average intelligence rises it is because people who are more intelligent are more reproductively successful. Since the brain is man's most expensive organ, ⁷⁹ intelligence quickly falls again when the less intelligent are just as, or more, reproductively successful than the more intelligent. By vastly increasing the number of people who could survive and by reducing the intelligence needed to do so, agriculture produced the first big drop in intelligence and the Industrial Revolution and the welfare state produced the second. ⁸⁰

Intelligence as a Liability

The greatest blind spot that anthropologists have is their unexamined assumption that more intelligence, at least in man, is always advantageous. This is a natural assumption for them to make because in their field more intelligence equals more success, but intelligence is not a unique ("*sui generis*") trait that is exempt from the selection pressures that apply to all other traits and all other living things.

In economics, "there ain't no such thing as a free lunch" ("TANSTAAFL") and that is also true in evolution. If an individual puts more of his resources into a larger, more intelligent brain, he has fewer resources available for his other organs. (Zimmer, 2008). Why are there no super-intelligent lions or gazelles? Because any gazelle that invested more resources in a larger brain would have fewer resources to devote to the muscles and bones that enable it to escape lions, nor could a slower, but bigger-brained lion catch enough of even the stupider gazelles to survive. That is, an animal's brain increases in size only as long as the additional grey matter increases his reproductive success; after he reaches his optimal brain size, any additional brain lowers his reproductive success. Since we humans have already invested so much in our brains (about 25% of our metabolism is devoted to brain function) going past our optimal brain size will rapidly lower reproductive success. (Isler, 2006). Remember, too, that each additional cubic centimeter of brain will probably require more than an additional cubic centimeter of brain will probably require more than an additional cubic centimeter of brain will be strongly selected <u>against</u>. Today, even though more intelligent people have the means to be more reproductively successful, they lack the motivation to do it, so their fitness, and the average intelligence of the population has declined.

The optimal amount of intelligence depends upon the other traits the organism has and the environment it is in. More intelligence is a waste of resources if an organism does not possess the means to make use of high intelligence, i.e., it lacks arms, fingers, or tentacles for manipulating its environment, or it can obtain all the energy it needs from its environment without solving mentally challenging problems (e.g., a sponge).

That the optimal amount of intelligence is less in Africa is demonstrated by the lower IQ of Africans (<u>Chap.</u> <u>4, Rule 10, second corollary</u>) and is supported by the correlation between IQ and distance from the equator (-0.68, <u>Templer, 2006</u>, 121–139). The extinction of large-brained Africans, such as Herto (Fig. 17-1), Boskop (Fig. 26-9),

The difference between the 105 average IQ of NE Asians (China, Hong Kong, Japan, Singapore, South Korea, and Taiwan) and the SE Asians, who are related to the NE Asians, but have an average of only 87 (Lynn, 2006a, pp. 173, 100) support the conclusion that the optimal IQ in tropical climates is likely to be low. Although the Incas and Mayans, living in the tropics of Mexico and the Amazon, built civilizations that had writing, a calendar, and mathematics, and therefore must have had a reasonably high IQ, the Native Americans today of North and Latin America have an average IQ of only 86. (Lynn, 2006a, pp. 130, 166). However, the Mayans and Incas may have come from a higher IQ founding population and may have been in the process of undergoing a reduction in IQ as it no longer paid off in reproductive success.

Brain size, and presumably intelligence, also fell outside of the tropics when it became less needed for reproductive success. (Fig. 14-8).⁸² Both the Cro-Magnons, who became the Europeans (Chap. 24), and the Neanderthals (Chap. 25) initially had larger brains than today's Europeans. It is possible that a mutation about 50,000 ya (the beginning of the Cultural Revolution) enabled the brain to become more efficient (Chap. 13), so that greater intelligence could be achieved even with a smaller brain (Lynn, 2006a, pp. 150-153), but it is more likely that the domestication of animals and agriculture reduced the reproductive pay-off from intelligence.

The vast expansion in the food supply made possible by agriculture and the domestication of animals meant less selection for high intelligence because a person who was



not intelligent enough to survive as a hunter could nevertheless survive as a farmer. (The adage that 95% of the fish are caught by 5% of the fishermen illustrates the importance of intelligence in hunting.) ⁸³ Also, although agriculture meant more food, it initially meant a lower quality food than meat, and did not provide the nutrition needed to support a large brain. In fact, if food is plentiful and high intelligence is not needed to acquire it, then it is a disadvantage to have a large brain instead of, say, a better immune system, which would be more advantageous in the more crowded conditions made possible by agriculture. For a hunter, more intelligence meant killing more game, thereby reducing the amount of food available, so human population growth was self-limiting. But once the knowledge of how to farm had been discovered, population growth was much less limited and depended more on hard, steady work than on outwitting game, ⁸⁴ i.e., the optimal brain size for a farmer was less than for a hunter-gatherer.

Chapter 15

Table of Contents

FOOTNOTES

1. "It seems there is an IQ threshold to be reached before a country can get off the ground economically. None of the black nations has yet reached this threshold." (La Griffe du Lion, 2002); La Griffe argues that it is the fraction of a nation's population that has an IQ greater than 108 that determines per capita GDP. A country with a national IQ below about 85 is likely to be an economic failure. (Lynn, 2006b, regression plot of national IQ). A civilization can be achieved and maintained with a somewhat below average (100) IQ if it is homogeneous, as the corruptions of ethny-against-ethny are avoided. The decline of the civilizations of the US, Europe, Canada, and Australia with the immigration of large numbers of ethnically and racially different groups shows that even an average IQ of 100 may not be sufficient under the burden of ethnic competition. Also see Table 32-2. Back

2. Also see <u>Table 32-2</u>, where the average IQ in South America is low, but not nearly as low as in Africa, yet their attainments in math and science are almost as sparse as Africans. <u>Back</u>

3. However, chimpanzees do not make stone tools (<u>Arsuaga, 2001</u>, p. 30) nor, when they obtain a useful stone, do they keep it for later use. (<u>Arsuaga, 2001</u>, p. 33). They use sticks to dig up tubers and bulbs, and to beat other chimps; they make points on wooden spears with their teeth to impale bush babies in hollow trees. Even crows make tools; a New Caledonia crow named "Betty" spontaneously bent a wire to make a meat hook and used it to retrieve some meat. (<u>Emery, 2004</u>). But so far only man has been found to use a tool to make a tool. <u>Back</u>

4. They also "pat each other on the hand to show affection, or kiss each other, or embrace. ...[and] develop lifelong friendships, and grieve for their dead babies by carrying them for days or weeks. [They can] do sums like 5 plus 4 or communicate with hand signs." (Wrangham, 1996, pp. 23-24; see the documentary, "Ape Genius."). Adolescent chimps outperformed human college students in remembering numbers. (Hooper, R. "Chimps outperform humans at memory task," New Scientist, Dec. 3, 2007). Back

5. The correlation between brain size and the g factor (general intelligence, i.e., abstract reasoning) across 25 primate genre is 0.77, which is a strong correlation. (Lee, 2005). "No one, I presume, doubts that the large proportion which the size of man's brain bears to his body, compared to the same proportion in the gorilla or orang, is closely connected with his mental powers." (Charles Darwin, *The Descent of Man*, 1871). Back

6. Very small animals can have disproportionately large brains. Animals that are socially complex, e.g., dolphins, elephants, and humans, also tend to have larger brains. (Marino, L., "<u>Cetacean brains: How aquatic are they?</u>" *The Anatomical Record Online*, May 21, 2007). <u>Back</u>

7. Data from Kambiz Kamrani. Some of that increase is due to an increase in body size, but body size may have increased to accommodate a larger brain, so absolute brain size may correlate more highly with intelligence. (Deaner, 2007; the increase in brain size may have been due to a longer period of brain growth as a result of neoteny; Coqueugniot, 2004). About 30,000 ya, the increasing brain size reversed and started decreasing (Wiercinski, 1979), but and man began to live much longer. (Caspari, 2004). This was sometime after the Cultural Revolution took hold; the use of abstract thinking (e.g., astronomy, complex languages,) would have produced a population increase that enabled more of those who were less intelligent (and had smaller brains) to survive and reproduce; the coming of agriculture about 12,000 ya also made it possible for more of the less intelligent to survive. The trend seems to be continuing. (Fig. 14-8). Back

8. East Asians have about 17 cc (1 in³) larger brains than Europeans, and Europeans have about 80 cc (5 in³) larger brains than Africans. (Jensen, 1998). Back

9. See the 2005 study by Michael McDaniel, an industrial and organizational psychologist at Virginia Commonwealth University, which found a direct correlation between intelligence and brain size. Also, (Posthuma, 2002; Thompson, 2001). "I can predict full-scale IQ from the amount of gray matter in a small number of areas." (Haier, R.J., quoted in Zimmer, C., "The Search for Intelligence," *Scientific American*, Oct., 2008, p. 73). Back

10. (<u>Gale, 2006</u>). As comedian Ron White put it, "You can't fix stupid." By day 166 of the 277 days of human intrauterine development the total number of cells capable of differentiating into neurons has been produced. Though most brain growth is before adulthood, neurons can regenerate to a limited extent in adults. (<u>Lindvall, 2003</u>). <u>Back</u>

11. (McDaniel, 2005; Rushton, 2000a, pp. 36-41, 113-146). The correlation with head circumference is an even greater 0.8. (Brandt, 1978). This correlation indicates that although brain size is important, other factors are also important. Artic people have the largest brains of any living people (1444 cc), but an average IQ of only 91, perhaps because more of their brains is devoted to visual memory and they may not have acquired mutations that other Eurasians did. (Lynn, 2006a, pp. 150-153). It is probable that at some stage in man's evolution, mutations occurred that made the brain more efficient (probably about 2 mya), so that the same intelligence could be achieved with a smaller brain. (Shaw, 2006). Intelligent brains are more efficient than less intelligent brains. (Seligman, 1992, p. 62). Back

12. Redrawn from (Jensen, 1998). "Negroid" is African American. Back

13. (<u>Rushton 2005c & 2005d</u>). In the US, for non-Hispanic white mothers, the percentage of their children who are in the bottom 10% of IQ scores is 39% if the mother's IQ is <75, 17% if the mother's IQ is 75 – 90, 6% if the mother's IQ is 90 – 110, 7% if the mother's IQ is 110 – 125, and <1% if the mother's IQ is >125. (*Wikipedia*, "IQ"). Back

14. (Lynn, 2006a, pp 26, 65). The high heritability of intelligence is evident in studies that show that black children from high socioeconomic homes have a lower IQ than white children from low socioeconomic homes. (Jensen, 1974a). Back

15. Those who wish to minimize the importance of IQ often say, "IQ is what is measured by an IQ test," and that is true if it is a valid test. The heritability of IQ is not 100%, which means that environment does affect IQ. (Lynn, 2006a, p. 70) estimates what the IQ would be if people lived in a "perfect" environment (Lynn, email to author), which he calls the "genotypic IQ." Lynn estimates the genotypic IQ of African Americans as 85, the same as their measured IQ, and of s-S Africans as 80, much higher than their measured IQ of 67 (Lynn, 2006a, pp. 69-71), but estimating the genotypic IQs of different populations is largely guesswork. The concept of genotypic IQ should not embolden the IQ-deniers because much of that "environment" is beyond our control, at least at the present time. That is, education is only a small part of the environment that affects IQ, most of the environment being the womb, family and friends, accidents, pollution, and events that are difficult or impossible to control. It is hard to specify exactly what a "perfect" environment is for maximizing IQ, and it is even more difficult to determine how perfect a child's environment was for that purpose. Back

16. The correlation of mating couples is 0.6 for educational background, and educational background correlates 0.6 with IQ. Thus, assortative mating for education increases the heritability of IQ within a family because the children are more likely to receive more alleles for intelligence than if they were the children of two random people in that population. (Mare, 2006). Back

17. "We were stunned to see that the amount of gray matter in frontal brain regions was strongly inherited, and also predicted an individual's IQ score." Paul Thompson, the chief investigator for a study on that subject and an assistant professor of neurology at the UCLA Laboratory of Neuro Imaging. (<u>Thompson, 2001</u>). <u>Back</u>

18. (Bornstein, 2006). Also see the *Early Childhood Longitudinal Study* and the *National Educational Longitudinal Study*. Back

19. (<u>Brody, 1992</u>). There are a number of very useful talents that are not included in "g" such as spatial visualization, musical composition, the visual arts, and higher mathematics. However, there seems to be a synergistic effect between "g" and these talents, so that having both is disproportionately beneficial. <u>Back</u>

20. In California, blacks got low scores on IQ tests and were placed in with the "educable mentally retarded" so, in 1979, a judge banned giving the tests, but just to blacks. (Larry P. v. Riles, 793 F.2d, 1984). In 2005, University of California President Richard Atkinson proposed not using SAT scores (which correlate 0.8 with IQ; <u>Seligman</u>, 1991) for admissions because blacks do so poorly on them. "In 1997, black students from families with incomes between \$80,000 and \$100,000 scored lower on the SAT than did white students from families with incomes of less than \$10,000." (*Journal of Blacks in Higher Education*, Summer 1998, p. 6). <u>Back</u>

21. (<u>Rushton, 2000a</u>, p. 50; <u>Levin, 1997</u>, p. 67). The correlation between the "g" loading of a test and the difference between black and white scores on that test is a high 0.78, so the more a test measures culture and not "g," the smaller will be the black-white gap. (<u>Rushton, 2000a</u>, p. 139). <u>Back</u>

22. (<u>Rushton, 2000a</u>, pp. 34-36; <u>Seligman, 1992</u>, pp. 60-63). "Inspection time," e.g., deciding which of two lines is longer, is another IQ test that depends on speed. <u>Back</u>

23. (<u>Rushton, 2000a</u>, p. 281). Even reaction time, simply pushing a button after a stimulus, has a correlation with IQ of 0.2 to 0.3. (<u>Lynn, 2006a</u>, p. 57). <u>Back</u>

24. (<u>Hunter, 1984</u>). Intelligence is the best predictor of job performance. (<u>Gottfredson, 1997b</u>; the correlation is over 0.90 for scores that are averaged, Schmidt, 2004). <u>Back</u>

25. (<u>Herrnstein, 1994</u>). Most wealth resides in the civilizations people create, not in their physical assets. (Hamilton, K., <u>Where Is The Wealth Of Nations?: Measuring Capital for the 21st Century</u>, World Bank, 2005). <u>Back</u>

26. In one study, each point increase in IQ score was associated with \$202 to \$616 more income per year. (Zagorsky, 2007). A study by the Census Bureau of veterans in their early thirties showed that a 15 point higher IQ corresponded to 11% more earnings. Similarly, a 15 point higher IQ between brothers in the sixth grade (Kalamazoo, MI) was associated with a 14% increase in annual earnings between ages 35 and 59. (Olneck, 1979). The percentage of non-Hispanic whites living in poverty is 30% for IQ <75, 16% for IQ = 75 – 90, 6% for IQ = 90 – 110, 3% for IQ = 110 – 125, and 2% for IQ >125. "People who work sitting down get paid more than people

who work standing up." (Ogden Nash). Many high IQ people, however, choose doing what they enjoy rather than maximizing their income. Back

27. "In growth regressions that include only robust control variables, IQ is statistically significant in 99.8% of these 1330 regressions, and the IQ coefficient is always positive. A strong relationship persists even when OECD countries [Organization for Economic Cooperation and Development – most of the major industrialized countries] are excluded from the sample. A 1 point increase in a nation's average IQ is associated with a persistent 0.11% annual increase in GDP per capita." (Jones, 2006b). Back

28. ("The Audacious Epigone," Aug. 15, 2007; Kanazawa, 2006). Back

29. "A meta-study of repeated prisoner's dilemma experiments run at numerous universities suggests that students cooperate 5% more often for every 100 point increase in the school's average SAT score." (Jones, 2006b). SAT scores correlate 0.8 with IQ. (Seligman, 1991). Back

30. ("<u>The Audacious Epigone</u>," May 31, 2006; <u>Hemmingsson, 2006</u>; <u>Gottfredson, 2004b</u>; <u>Lynn, 2006b</u>). As one would expect, a higher IQ usually equals a higher living standard within a country as well as between countries. (<u>Lynn, 2008</u>). See (<u>Levin, 1997</u>, pp. 54-59) for other correlations. <u>Back</u>

31. Gross Domestic Product [GDP] per person, i.e., per capita income in British pounds per year. "... the Nobel Prize-winning economist Robert Lucas declared the multiplier effects that stem from talent clustering (i.e., talented people interacting) to be the *primary* determinant of growth." (Florida, 2006, p. 35). Also see (Lynn, 2006b). Back

32. (Lynn, 2002a). In Fig. 14-4, Great Britain is set at IQ = 100. Back

33. Lowered from 70 in Lynn's latest book (2006a, p. 37). "One of the great paradoxes of Africa is that its people are for the most part desperately poor while its land is extraordinarily rich. East Asia is the opposite: a region mostly poor in resources that over the last few decades has enjoyed the greatest economic boom in human history." (Arthur Hu, "Asian Americans: Arthur Hu's Index of Diversity"). Back

34. The percentage of European ancestry in African Americans has been given as 25 to 28% (<u>Putnam, 1961</u>, p. 92), among other figures; a 1998 study of genetic markers of 1022 self-identified African Americans from nine big cities showed they were only 16.4% European, or about 5/6 African and 1/6 European. (<u>Parra, 1998</u>; also, <u>Rosenberg, 2002</u>). (<u>Shriver, 2003</u>) found that African Americans have ~80% African ancestry. <u>Back</u>

35. The high IQ of European Jews is due to selection for intelligence (e.g., encouraging the most intelligent boys to become rabbis and the daughters of wealthier, and more intelligent Jews, to marry rabbis (<u>Seligman, 1992</u>, p. 135, the Christian priests, also more intelligent were, however, celibate), and exclusion from occupations, such as farming, that required manual labor. The average intelligence of the Oriental Jews of North Africa and the Middle East is nearly 15 IQ points lower. (<u>David, H., 2007</u>). European Jews are stronger in verbal reasoning than in visual-spatial, the reverse of Asians. (<u>Nyborg, 2003</u>). Both are high in math, but Jews use algebraic reasoning while Asians use geometric reasoning. (<u>Seligman, 1992</u>, p. 133). <u>Back</u>

36. "... public schools now spend more per capita on black children than on white." (Levin, 1997, p. 127). Back

37. (Rushton, 2006; Seligman, 1992, pp. 39-40). "Contrary to environmentalist predictions, intervention beginning at age three makes no difference to the intellectual development of blacks. Perhaps surprisingly, intervention for whites does, indicating a possible nonsocial race difference in receptiveness to stimulation." (Levin, 1997, p. 112). Even the adoption of black children by white parents did not improve their IQ. (Lynn, 1994; Levin, 1994). "With the Negro, as with some other races of man, it has been found that the children are precocious, but that no advance in education can be made after they arrive at the age of maturity; they still continue mentally [as] children." (Hunt, 1864, p. 12). Back

38. Since 1988, the Mysterious Gap has increased. ("<u>Trends in Average Reading Scale Scores by Race/Ethnicity:</u> <u>White-Black Gap</u>," U.S. Dept. of Education, National Center for Ed. Statistics). Also see (<u>Table 32-1</u>); <u>Abramson</u>, <u>2006</u>). On the other hand, see (<u>Murray, 2007</u>; <u>Seligman, 1992</u>, p. 163). The "Black-White IQ difference in the United States is about 80% heritable." (<u>Rushton, 2006</u>). <u>Back</u>

39. Black children adopted in infancy by white middle-class families showed no significant improvement in IQ over other black children, further evidence that low IQ in blacks is genetic. (<u>Scarr, 1993</u>). For a point-by-point refutation of the environmental explanation for lower black IQ see (<u>Hart, 2007</u>, Chap. 16). <u>Back</u>

40. (<u>Herrnstein, 1994</u>, p. 279); the African curve was added. The black and white distributions are from Version II of The National Longitudinal Survey of Youth, 1990. <u>Back</u>

41. (<u>Herrnstein, 1994</u>, p. 276). Black and white IQs and SDs depend upon the test and who is considered to be "black" or "white." In Fig. 14-5, the black IQ was 86.7 and the difference between the black and white means was 1.2 SD (18 IQ points). (<u>Roth, 2001</u>) says the African American mean of 85 is about 16.5 IQ points (1.1 SD) lower than the white mean of 102, which may exclude Hispanics. <u>Jensen (1998</u>) also says the black-white IQ difference is about 1.2 SD. <u>Back</u>

42. (Jensen, 1974b; Lynn, 1998 and 2006a, p. 45; Rushton, 2000a, pp. 147-150; Fryer, 2006; Also see FN 362, p. 86). "Psychologists who study chimpanzees observe a certain parallelism between their learning process and ours up to the age of about two and a half years. After that the gap between us becomes wider and wider until it is a yawning abyss." (Arsuaga, 2001, p. 277). The U.S. black-white IQ gap increases from 0.70 SDs in early childhood, to 1.00 SDs in middle childhood, and to 1.20 SDs in early adulthood, which is consistent with brain growth terminating early in blacks. (Jensen, 1998). Back

43. Black school children in rural Georgia had an average IQ of only 71. (Jensen, 1977). This was attributed to a poor environment, but less white heritage is a better explanation because the whites did not have a comparable IQ lowering. See FN 396 on p. 116). Southern blacks have less white heritage (10%) and lower IQs (80.5) than northern blacks (25% & 87.6). (Shuey, 1966; Levin, 1997, pp. 20, 135, citing Reed, 1969). The slaves in Africa who were selected to be transported to the Americas, and who survived the trip, may have been above average in health, and health correlates positively with intelligence. (Richards, 2006). On the other hand, others contend that only the worst Africans were captured and sold as slaves. (Hunt, 1864, pp. 25-27). Back

44. The right end is more spread out, making the black distribution asymmetrical ("skewed"). The right tail are mulattoes who are more intelligent because they have a substantial amount of white heritage. <u>Back</u>

45. (Jensen, 1998, p. 353). (La Griffe du Lion, 2000c) gives an SD for African Americans of 13.5 when the IQ of non-Hispanic whites is normalized to a mean of 100 and a SD of 15. (La Griffe du Lion, 2007) also gives a whiteblack difference in "g" of 1.09 SD (16 IQ points), with a variance ratio ([B SD]/[W SD]) of 0.888. Back

46. "Adults in the bottom 5% of the IQ distribution (below 75) are very difficult to train and are not competitive for any occupation on the basis of ability. Serious problems in training low-IQ military recruits during World War II led Congress to ban enlistment from the lowest 10% (below 80) of the population, and no civilian occupation in modern economies routinely recruits its workers from that below-80 range. [This partly explains why companies do not put manufacturing plants in s-S Africa to take advantage of the low wages.] Current military enlistment standards exclude any individual whose IQ is below about 85." (Gottfredson, 1999). Of course, selecting the most intelligent people for the risks of military service is a good way to lower the national average IQ. Back

47. (La Griffe du Lion, 2000d). Back

48. The African average IQ of 67 is within the "mild retardation" range of 50 to 69. "Moderate and mild retardation, contrary to the more severe forms, are typically not caused by brain damage but [are] part of the normal variance of intelligence, and therefore largely genetic and inherited. This is important with regard to the question whether or not retarded persons should be allowed to have children; for especially the moderate and mild forms of retardation, wherewith it physically is possible to have children, are the most likely to be inherited." (Paul Cooijmans, "IQ and Real-life Functioning"). Back

49. (Rushton, 2000a, p. 5). Chimpanzees function quite well with an adult IQ just over 40. (Paul Cooijmans, "IQ and Real-life Functioning"). "More than Asia, Europe, and other areas of the world, the accuracy of such a low IQ for Africa is popularly questioned, but more with reflexive incredulity than adequate methodology. A typical comment is that it is hard to believe that half of Africa is mentally retarded. It is also hard to believe that 16% of African-Americans are 'mentally retarded,' but 16% of African-Americans do have IQs below 70, and the APA [American Psychological Association] recognizes this as an accurate and factual reflection of ability – IQ tests are not biased against African-Americans (the criticism is fairly ignorant to begin with since diagnosing mental retardation is mostly orthogonal to [independent of] the intelligence test, See Mackintosh 1998, p. 177. Although this is not controversial now, among scientists, it certainly was as shocking to believe for many back in the 1970s as the 2 SD [30 IQ point] difference is to many today." (Malloy, J., "A World of Difference: Richard Lynn Maps World Intelligence," *Gene Expression*, Feb. 1, 2006). Since the optimal intelligence for a population depends in part upon the culture, the average IQ in Africa was likely even lower prior to the introduction of some Western

cultural practices. Back

50. Similarly, East Asians have a higher average IQ than whites, but their smaller SD means that they have fewer people in the tails of the bell curves; people with "IQs of over 130 are 7 times more likely to be found in European populations than in East Asian populations." (Arthur Hu, "Asian Americans: Arthur Hu's Index of Diversity"). This helps to explain why Europeans have accomplished much more than Asians despite a higher Asian IQ. Back

51. Calculated using an African IQ of 70 and a normal IQ curve. (La Griffe du Lion, in "<u>Scary Stuff about Black IQ:</u> <u>Blacks & Whites with IQ>130</u>," From the *News Archives* of: WWW.AfricanCrisis.Org, Aug. 6, 2006). <u>Back</u>

52. The proportion of blacks in an occupation decreases as the intelligence required to practice that occupation increases. (Rushton, 2000a, p 145). The average black high school graduate has the academic proficiency of the average white 8th grader. (The National Assessment of Educational Progress, 2006). "Black children from the wealthiest families have mean SAT scores lower than white children from families below the poverty line." "Black children of parents with graduate degrees have lower SAT scores than white children of parents with a high-school diploma or less." (La Griffe du Lion, 2000a). A good example of this right tail effect is steroid use in baseball; it increases bat speed by about 5% but home runs (at the right tail of hits) by about 50%. (Tobin, 2008). Another example: African Americans are 12.5% of the population, but only 1.1% scored at least 700 on the 2005 math SAT and the percentage dropped even lower, to 0.7%, for scoring over 750. ("The Widening Racial Scoring Gap on the SAT College Admissions Test," The Journal of Blacks in Higher Education, Mar. 9, 2008). Back

53. (Taylor, J. "Race/IQ Explanation Gap at 'Achievement Gap Summit'," VDARE.com, Nov. 13, 2007). "... in the NLSY, a person with the black mean was at the 11th percentile of the white distribution [i.e., he is more intelligent than 11% of the whites], and a person with the white mean was at the 91st percentile of the black distribution [i.e., he is more intelligent than 91% of the blacks]." (Herrnstein, 1994, p. 278). A black is 53 times less likely to be gifted than a white. (La Griffe du Lion, 2000d). Back

54. (Hernnstein, 1994, p 456-457). If admission to medical school were determined by MCAT score, only seven blacks in the entire United States would probably be admitted to the top ten medical schools and there would be almost no black physicians. (Cross, 1997, p. 17; Dawson, 1994). Also see (La Griffe du Lion, 2000c; Gawande, 2004). The odds ratio favoring black applicants to medical schools over whites was 21 to 1 in 2005. (Clegg, R., "Discrimination Continues," Center for Equal Opportunity, Oct. 17, 2006). Male physicians are recruited from people with an IQ of at least 114 (U.S. Dept. of Labor), which is 1.1% of the black population and 23% of the white population, so there should be 4.8 black physicians for every 100 white physicians. In 1970, there were actually 23 black physicians for every 100 white physicians and, in 1980, it had increased to 30. This means that of those 30 black physicians, 25.2 had IQs less than 114. (30 - 4.8 = 25.2). If we take 114 as the minimum IQ for competency, then 84% (25.2/30 = 0.84) of the black physicians are incompetent. (Levin, 1997, pp. 264-265; Ree, 1992). Since the 1978 U.S. Supreme Court decision in Regents of the University of California v. Bakke, which permitted racial discrimination in favor of blacks in medical school admissions, the percentage of whites in medical schools between 1986 and 2005 has dropped 27% while the percentage of blacks has increased 23.8%. (Association of American Medical Colleges). Moreover, basing admissions on standard tests actually results in overrepresentation of blacks; for the SAT test (Harvard data), 240 points would have to be subtracted from the black combined verbal and math scores to accurately predict black college performance. (Klitgaard, 1985). See (Miller, 1994b) for a proof.

The same is true of law schools. (Heriot, G., "Affirmative Action Backfires," The Wall St. Journal, Aug. 24, 2007). Only sixteen blacks had a GPA of 3.50 or better and an LSAT score at or above the 92.3 percentile in the 1996/1997 tests, and those scores are below the median for elite law schools (Graglia, 1998), so Affirmative Action has also produced less competent black lawyers. (Kirsanow, 2006). First-attempt law exam pass rates were 31.1% for blacks and 73.1% for whites. (Law School Admission Council, 1998). "More than 20,000 adult blacks [out of a total adult (over 18) black population of 214,700,000 in 2004 (U.S. Census, Table 1)] in the U.S. have an IQ of 130 or more, but because of affirmative action, the chance that your black lawyer will be one of them is vanishingly small." (La Griffe du Lion, 2000a). "Currently only about one in three African-Americans who goes to an American law school passes the bar on the first attempt and a majority never become lawyers at all." (UCLA law professor Richard Sander, Fox News, Oct.15, 2007). (Lin, A. "Judge Rejects Race Bias Suit Against DLA Piper," The New York Law Journal, Dec. 7, 2007). Black police (Levin, 1997, pp. 81-82) and firemen are also less competent, again sacrificing lives for egalitarianism. (La Griffe du Lion, 2000c; Batz, R. "Quotas in the San Francisco Fire Department," American Renaissance, Vol. 9, No. 9, Sept. 1998). For every 1% increase in black officers in a police department, property crime goes up 4% and violent crime goes up 4.8%." (Lott, 2000); also, "How Whites Stack Up," American Renaissance, Vol. 18, No. 8, Aug., 2007, p. 11). Corruption also increases. (McGowan, 2001). Black teachers fail competency exams at more than twice the rate of white teachers. (Herrnstein, 1994, p. 393). In other higher level occupations, African Americans also have lower IQs than whites.

(Jensen, 1998, pp. 565-569). Far more black than white employees (44% versus 25%) work in grossly overpaid government jobs, where politics trumps competency. (The ninth annual Black Investor survey by Ariel/Schwab). Blacks are over-hired in Federal government departments by as much as 808% more than their proportion in the civilian labor force. ("Equal Opportunity vs. Equal Results," *Adversity.Net*, July 23, 2007). On TV and in the movies, blacks are portrayed as highly competent professionals, but the reality is the opposite. In the military, which is disproportionately black, "White recruits are more likely to end up in highly technical fields; black recruits are more likely to end up in clerical work or the supply services." (Seligman, 1992, p. 202). Since the low IQ of blacks makes it impossible to find enough qualified blacks, women were given "minority status" for the purposes of Affirmative Action, though women are actually a majority. Back

55. (Lynn, 2006a, p. 213, citing Templer, 2006, p 121–139; Lynn, 2002b). Back

56. Philosopher Michael Levin has a good discussion of racial stereotyping. (Levin, 1997; pp. 32-34). Back 57. It is hard to believe that the "stereotype threat" has much effect when even black researchers acknowledge that blacks have higher self-esteem than whites. (Gray-Little, 2000). Besides, K-12 IQ tests are presented as tests of knowledge, not IQ. Back

58. (La Griffe du Lion, 2007) gives a male-female difference in "g" of 0.162 SD (2.43 IQ points) with a variance ratio ([F SD]/[M SD]) of 0.916. Back

59. (<u>Rushton, 2000a</u>, p. 132). A higher male IQ is consistent with a faster and earlier maturation of females. Male brains can continue growing to about age 24, but female brains stop growing by age 18. Blacks also mature faster than whites and have smaller brains and lower intelligence. (<u>Chapter 11, FN 12</u> and <u>this chapter, FN 37</u>). <u>Back</u>

60. One or more of the genes for intelligence is on the X chromosome. Since women are XX and men are XY, higher intelligence is more likely to come from the mother. Also, an X from the mother may be expressed over an X from the father. Because two Xs average out, that may make the standard deviation for intelligence less for women than for men. <u>Back</u>

61. (<u>Nyborg, 2005</u>). The left vertical axis is the portion of men or women, the right vertical axis is the ratio of the number of men to women, and the horizontal axis is SD. There are twice as many men as women with IQs above 120 and 30 times as many with IQs over 170. (Jackson, N., <u>Interview with Paul Irwing</u>, *The Independent*, Nov. 30, 2006). Note the similarity of Fig. 14-7 & 14-5. A similar dotted line could be drawn in Fig. 14-5. <u>Back</u>

62. (<u>Sternberg, 1994</u>). Black males scored 88.4 and black females scored of 90.8 on the 1997 renormed Armed Forces Qualification Test. <u>Back</u>

63. See the author's article,"<u>A Possible Explanation for the Flynn Effect</u>," (Jan. 11, 2008). <u>Back</u>

64. Genetic IQ in the developed world has declined about one point per generation; in Britain, it declined 6.2 points from 1890 to 1980. (Lynn, 1996). Also (Herrnstein, 1994, Chapter 15; La Griffe du Lion, 2005; Sailer, 2004b & 2005c; Murray, 2003, Chap. 21). Back

65. (*Wikipedia*, "Literacy"). In Washington, D.C., which is 57% black (2005 U.S. Census), 36% of the residents are illiterate. (Eberhart, D., "<u>Washington, D.C.: Home to the Elite and the Illiterate</u>," *NewsMax*, Apr. 17, 2007). <u>Back</u>

66. SAT scores are periodically "normed down," i.e., scores are raised to keep the numerical results the same. (Levin, 1997, p. 233). "SAT scales got easier during 1963 to 1967 by about 8 to 13 points on the Verbal and perhaps 10 to 17 points on the Math." (Herrnstein, 1994, p. 773). Back

67. (National Commission on Excellence in Education, April, 1983.) Back

68. The Darwin Awards are given to people who improve the human gene pool by removing themselves from it, i.e., by dying when they do something that is hilariously stupid. <u>Back</u>

69. Although there is not yet a Quantum Mechanics for Dummies, there is an Einstein for Dummies. Back

70. (Michael Shayer, professor of applied psychology, and Philip Adey, a professor of education, at King's College, University of London; research funded by the Economic and Social Research Council (ESRC)). <u>Back</u>

71. (Vining, 1982, 1995) gives a decline of 1.6 IQ points per generation for whites and 2.4 for blacks. (Lynn, 2004)
gives a total decline of 0.9 IQ points per generation and 0.75 for just whites. (Van Court, 1985; Sailer, 2006). Back

72. The correlation between national average IQ and distance from the equator is 0.67. ("<u>Intelligence and Lattitude</u> in <u>US</u>," *The Audacious Epigone*, Apr. 13, 2007) and the correlation between IQ and mean high winter temperature is -0.68. (<u>Templer, 2006</u>). <u>Back</u>

73. Although high average IQ in a population will still depend on reproductive success, today a mentally challenging environment may no longer be a significant selector. <u>Back</u>

74. Richard Lynn (by email) confirmed that this is "very likely." In this regard, the Northern Hemisphere has more land and the Southern Hemisphere has more ocean, which means that there is a greater seasonal change, and more storms, in the Northern Hemisphere, making the north more mentally challenging than the south. (Coon, 1962, p. 46). Another selector for intelligence in Europe was probably the plagues, caused by <u>Yersinia pestis</u>, bacteria that lived on the fleas of rats that infested towns and cities. When Christians, believing cats were evil, killed the cats, the rats took over. The plagues wiped out the poorer (and less intelligent) people, who were crowded together in cities (and, in London, were forbidden to leave), while sparing the better off, and more intelligent, who did not live so close together (and fled the cities). In the 1300s the Black Plague killed 20 million people, nearly a third of the population of Europe. Twenty-three year old Isaac Newton, the greatest scientist ever, left London for Lincolnshire, where he invented calculus and worked on the nature of gravity, while his much less intelligent countrymen died in London; unfortunately, Newton left no progeny. Back

75. "...women go gathering plant foods about one day in three, and men go on hunting expeditions for about one week in three. This is sufficient to provide food for the whole group, including infants, children and the old. The rest of the time can be spent relaxing about the camp." (Lynn, 1991, citing Lee, 1968). Also see FN 32, p. 4. Back

76. (<u>Hogan, 2001</u>). This zone would extend all across Asia and Europe, though the difference between summer and winter temperatures would be less in Europe due to the moderating influence of the Gulf Stream. <u>Back</u>

77. Women do not give suitors IQ tests, but many choose mates who are knowledgeable, wealthy, musically talented, and have a good sense of humor, all of which correlate with intelligence. And, although most men do not want a woman who is more intelligent than they are, neither do they want an unintelligent woman. <u>Back</u>

78. An interesting consequence of modern times is that since white women no longer need men to provide for them, they can select more for attractiveness and less for intelligence, as self-sufficient African women have done for thousands of years, so men will become better looking, but not as intelligent. <u>Back</u>

79. "[B]rain tissue requires 22 times the energy of skeletal muscle." (Gorman, R.M., "Cooking Up Bigger Brains," Scientific American, Dec., 2007). Back

80. Agriculture greatly increased man's numbers, while decreasing his quality. (Diamond, J., "<u>The Worst Mistake</u> in the History of the Human Race," *Discover*, May, 1987, pp. 64-66). "Farming brought a population explosion, protein and vitamin deficiency, new diseases and deforestation. Human height actually shrank by nearly six inches after the first adoption of crops in the Near East." ("<u>Noble or savage?</u> *The Economist*, Dec. 19, 2007). <u>Back</u>

81. Cranial capacity has fallen in sub-Saharan Africa by 95 to 165 cm3 in males and 74 to 106 cm3 in females "between the Late Stone Age (30-2 ka BP) and modern times (last 200 years)." (<u>Henneberg, 2005</u>). The decrease in African brain size may be due to a long-ago infusion of larger-brained Eurasians into Africa who interbred with the natives, followed by a gradual decrease in brain size to the optimum for Africa. Note that African Bushmen have small brains and the world's lowest IQ (54; Lynn, 2006a, p 167), despite their apparent East Asian ancestry. The de-evolution of intelligence is most likely due to the selection of alleles that reduce brain size, which were retained in a portion of the population. Those alleles would spread throughout the population if the body's resources could be more reproductively successfully "spent" on traits other than intelligence. Back

82. (Chart from Keiio University, "<u>Basic Neuroscience: Evolution of the Brain</u>," citing "<u>Henneberg, 1998</u>"). Body size and nutrition also fell. "Early farmers in Greece and Turkey averaged 5 feet 3 inches tall for men, 5 feet 1 inch for women: Their Paleolithic hunter-gatherer ancestors had averaged 5 feet 10 inches and 5 feet 6 inches respectively, taller even than the well-nourished modern inhabitants of those countries." (<u>Haywood, 2000</u>, pp 104-106). Agriculture may have begun at least about 23,000 ya. (<u>Allaby, 2008</u>). Agriculture greatly changed the selection pressures on man, selecting for hard, constant labor (i.e., slow twitch red muscle fibers), pair bonding and monogamy (as couples were tied to the land), diversity of skills (the increased output per person permitted more specialization), a lower optimal intelligence, and individual interests over group interests (working a piece of

land – private property vs. owning little and sharing whatever was food was killed or found). The bounties of agriculture freed up people for other occupations and, when they concentrated in one area, it made civilizations possible. <u>Back</u>

83. Predators have a higher intelligence than comparable non-predators and domesticated animals are less intelligent than their wild counterparts. "Domestication is little more than the survival of the dumbest – under the guiding hand of humans." (Birkhead, 2003, p. 91-92). Domesticated animals typically have smaller brains and are not as intelligent as wild animals. (Howells, 1948, pp. 79-80). "On average, domestic dog, cat, sheep and pig brains weigh 25 per cent less than those of wild animals." (Kealey, 2006; Jerison, 1983). When domestic cats become feral, larger brains reappear. (Coon, 1962, p. 117). These changes in brain size suggest strong selection pressures for optimizing intelligence which, given its high cost, is to be expected.

Agriculture is a sort of domestication of man: "of all living beings the most domesticated" (I.F. Blumenbach); "the first domesticated animal" (<u>Howells, 1948</u>, p. 125); "man domesticated himself" resulting in "progressive shrinkage and weakening, and reduction in tooth size" (<u>Leach, 2003</u>); "... [human] brains have been getting smaller for 20,000 to 30,000 years." (Cochran, G., "<u>Human evolution, radically reappraised</u>," *World Science*, Mar. 20, 27, 2007). But once populations had expanded to the greater carrying capacity made possible by agriculture and private property made brains pay off again, higher intelligence was once more selected. <u>Back</u>

84. It is interesting that the domestication of animals (e.g., the wolf) is a selection for docility and, since the very young are more docile, it also selects for neoteny (wolf pups bark like dogs; adult wolves howl). Agriculture, in some ways, also seems to be a selection for docility and neoteny (gracile, less primitive, tame), a sort of domestication of humans. Thus, agriculture not only vastly increased carrying capacity, it also selected traits. When the Russian breeder Budiansky domesticated a species of wild fox by selecting for tameness, the foxes became more neotenic, retaining into adulthood the droopy ears that pups have. (Budiansky, 1992; Trut, 1999). "Not a single domestic animal can be named which has not in some country drooping ears." (Darwin, 1859). Women in the northern climates have been selected for both neoteny (youthful appearance) and tameness (smiling, good disposition) but, thank goodness, sparing them droopy ears. Back

Chapter 15 - Civilizations and Achievements

"It will be seen that when we classify mankind by colour the only one of the primary races, given by this classification, which has not made a creative contribution to any one of our twenty-one civilizations is the Black race."

Arnold Toynbee, The Study of History

For the purpose of describing the evolution of modern man, the last three stages have been divided into (1) early man, i.e., *Homo erectus* and his *Homo* predecessors, (2) archaic man, *Homo sapiens (Hs)*, who was anatomically and behaviorally not yet fully modern, and (3) modern man, *Homo sapiens sapiens (Hss)*, us. The dates generally given in the literature are that Hs arose about 200,000 ya and Hss arose about 160,000 ya. (Smith, 2007). But even though <u>anatomically</u> modern man arose about 160,000 ya, he did not begin to create civilizations or make notable achievements until about 50,000 ya. (Hoffecker, 2002, pp. 1, 12). The major anatomical difference between archaic man and modern man was that modern man was more gracile, i.e., fewer of the body's resources were expended on bone and muscle.

Here is a place where the general principles of evolution lead us to a conclusion that may conflict with the fossil evidence. Since evolution follows behavior (Chap. 4, Rule 12), and evidence that man's behavior changed drastically is dated at about 50,000 ya, either the anatomical changes that facilitated that behavior did not begin until about 50,000 ya or, if they began about 160,000, the behavior began changing prior to that date. The problem could be resolved, however, if the anatomical changes were in soft tissue, e.g., the brain, and a more gracile skeleton was not strongly selected for.

Before the Cultural Revolution 50,000 ya, man's progress was painfully slow – tens of thousands of years passing with little or no improvement in his tools and weapons. After the Cultural Revolution, tools and weapons became better designed and were made of better materials. Man no longer left his dead to rot and be eaten by animals, but he buried them, often with valued possessions, because now his mind could imagine a life after death. His carvings and drawings also showed evidence of abstract thought. Figures 15-1a and 1b shows two of the gorgeous cave drawings made by early Europeans.



Figure 15-1a



Figure 15-1b

What happened? No one knows, but (perhaps not coincidentally), a newly-discovered allele of the microcephalin gene, which affects brain size and intelligence, arose by about 37,000 ya and spread throughout the Eurasian population. (Chap. 13). This allele, together with another, similar allele of the ASPM gene, that arose much more recently, is still rare among Africans, and that may explain some of the difference between Eurasian and African IQs and capacities for civilized behavior. The ASPM allele may have produced a more fissured brain, but since we don't have the brains of archaic man, we cannot know how fissured his brain was, except by the marks the brain left on the inside of the skull, and they are not definitive. Perhaps it was a change in the organization of the brain, the way it was "wired," such as an asymmetry between the left and right sides of the brain that enabled areas of the brain to specialize (Corballis, 1991), or it may have been an increase in the prefrontal cortex. At any rate, a civilization is an expression of the gene pool of its builders.

Civilizations

Baker, in his book Race (1974), argues that a society originates a "civilization" if, prior to influence

from outsiders, $\frac{1}{2}$ most of its members met most of the 21 requirements given in Table 15-1 (id., p 507-508), where, as usual, "Africans" means sub-Saharan Africans.

Indicia of Civilization		Caucasians	Africans
1. In the ordinary circumstances of life in public places, they cover the external genital organs and the greater part of the trunk with clothes.	Yes	Yes	No
 They keep the body clean and take care to dispose of its waste products. 	Yes	Yes	No
3. They do not practice severe mutilation or deformation of the body, except for medical reasons.	Yes	Yes	No ²
4. They have knowledge of building in brick or stone, if the necessary materials are available in their territory.	Yes	Yes	No
5. Many of them live in towns or cities, which are linked by roads.	Yes	Yes	No
6. They cultivate food-plants.	Yes	Yes	Probably not
7. They domesticate animals and use some of the larger ones for transport (or have in the past so used them), if suitable species are available.	Yes	Yes	No ³
8. They have a knowledge of the use of metals, if these are available.	Yes	Yes	No
9. They use wheels.	Yes	Yes	No (id., p. 373)
10. They exchange property by the use of money.	Yes	Yes	No
11. They order their society by a system of laws, which are enforced in such a way that they ordinarily go about their various concerns in times of peace without danger of attack or arbitrary arrest.	Yes	Yes	No
12. They permit accused persons to defend themselves and to bring witnesses for their defense.	Yes	Yes	No
13. They do not use torture to extract information or for punishment.	Yes	Yes	No
14. They do not practice cannibalism.	Yes	Yes	No
15. Their religious systems include ethical elements and are not purely or grossly superstitious	Yes	Yes	No
16. They use a script (not simply a succession of pictures) to communicate ideas.	Yes	Yes	No (id., p. 394)
17. There is some facility in the abstract use of numbers, without consideration of actual objects (or in other words, at least a start has been made in mathematics).	Yes	Yes	No
18. A calendar is in use, accurate to within a few days in the year.	Yes	Yes	No
19. Arrangements are made for the instruction of the young in intellectual subjects.	Yes	Yes	No
20. There is some appreciation of the fine arts.	Yes	Yes	No
21. Knowledge and understanding are valued as ends in themselves.	Yes	Yes	No



A few comments on these items:

<u>Item 3</u>. Although there is currently a mania of tattooing and body piercing sweeping US youth, this is not considered "severe" mutilation or deformation of the body and is, hopefully, a phase that will quickly pass.

Item 4. African huts were built with vegetation and mud, never more than one story.

Item 7. Domesticating animals requires not only foregoing the instant gratification of eating them,

but also caring for them until they have reproduced. Even then, one must plan still farther ahead by eating only the worst animals, saving the best for reproduction. Such long-term planning is not characteristic of Africans. (Chap. 12).

Item 9. Africans had no wheeled vehicles or devises that employed a wheel, not even a compass.

Item 10. Africans never rose above a barter system.

Item 13. This should be interpreted as open, publicly-accepted torture against common people, and not during a war.

Item 14. Again, this means openly killing people in order to eat them.

Item 15. On January 9, 2001 a lunar eclipse caused rioting in Nigeria; evil people were blamed. ("Eclipse Triggers Nigeria Riot," *BBC News*, Jan. 10, 2001). Children have been banned by their own parents in the belief that they are witches. ("DR Congo's Unhappy Child 'Witches'," *BBC News*, Jan. 13, 2003). Albinos are killed for their body parts, which are used in witchcraft. ("Living in Fear: Tanzania's Albinos," *BBC News*, July 21, 2008). "Police in Congo have arrested suspected sorcerers accused of using black magic to steal or shrink men's private parts. There has been a wave of panic and attempted lynchings triggered by the alleged witchcraft." (The Case of the Penis Snatchers, *Now Public*, Apr. 23, 2008).

<u>Item 16</u>. Writing arose independently in at least three places: Mesopotamia, China, and Mesoamerica, and probably also Egypt and India, but did not spread to sub-Saharan Africa.

Item 18. Africans lacked even a sun dial for determining the time of day.

Baker (<u>1974</u>, pp. 506-529) concluded that Caucasians met all 21 criteria in Sumeria (Iraq), Crete, India, and Egypt, and the Asians met them all in China. Africans and Australian aborigines met virtually none of the 21 criteria. The list is, of course, open to much dispute, both as to the requirements on it and as to whether or not the three listed races have met those requirements.

Since the civilization that a people have created is a good indication of their intelligence and advancement from archaic man, the grandeur of their civilization should be consistent with the traits they have, as previously described, especially brain size and complexity, and this is indeed the case. ⁴

Figure 15-2 shows a portion of Stonehenge, built about 4300 ya in England. Notice how well the huge stones fit together. The capstones are secured to the upright stones by means of stone balls in between them inserted into pits. The circular structure was aligned with the midsummer sunrise, the midwinter sunset, and the most southerly rising and northerly setting of the moon, suggesting possession of a knowledge of astronomy for perhaps thousands of years prior to its construction. In 2150 BC, a thirty-five ton 'Heel Stone' was erected outside the circle. Eighty bluestones, some weighing as much as four tons, were transported from the Prescelly Mountains in Wales, 240 miles away. In 2075 BC, the bluestones were taken down and enormous Sarsen stones, averaging eighteen feet in height and weighing twenty-five tons, were transported from near another stone ring at Avebury, twenty miles to the north. $\frac{5}{2}$



Figure 15-2

Figure 15-3

Now compare Stonehenge with another stone structure, Great Zimbabwe (Fig. 15-3), the largest

ruins in sub-Saharan Africa. It consists of plain stone block walls without mortar and dates to less than 1000 ya, about 3300 yrs after Stonehenge was built and long after non-Africans had arrived. Although Africans probably supplied the labor, it is doubtful that they designed it or instigated its construction as it is not representative of any past Zimbabwean culture or architectural tradition, and Africans do not make use of stone construction. It may have been built by Islamic slave traders as a fortress and slave holding area or as a storage area for goods to be shipped out of Africa.⁶

The most advanced civilizations have been created by whites and East Asians. Perhaps the reader believes that the failure of Africans to create civilizations in the past is not due to genes, but to an environment that was not encountered by Caucasians and Asians. It does seem that not only does intelligence increase with distance away from the tropics, but so does civilization. ⁷ Southern Asia is also tropical and its people also have a lower level of both intelligence and civilization, but not nearly as low as in Africa.

Africa is a huge and diverse continent, with the southern tip having a temperate climate. If there were something unique about the continent itself that prevented the creation of civilizations, then one would expect blacks living elsewhere, such as in Haiti ⁸ or Detroit, ⁹ to build civilizations, but instead they have destroyed the civilizations that whites had already built there. Figure 15-4 shows the second floor of the Detroit Public Schools Book Depository, ¹⁰ where thousands of books have been destroyed.



Figure 15-4

"[T]hey [Africans] will destroy and devour him [whites] and they will destroy all his work." (Albert Schweitzer)

One might expect that whites who immigrated to Africa to also fail at building successful civilizations on that continent, but instead they built first world countries; those countries, now taken over by Africans, are descending into chaos. Rhodesia, as it was called when run by whites, was the breadbasket of Africa and exported grain; Zimbabwe, as it was renamed after Africans took over, cannot feed even half its own people. ¹¹ Even Liberia, founded by repatriated American slaves, is dissolving into chaos and cannibalism, despite the infusion of African Americans who had lived in a white country. ¹²

If Africans were even capable of keeping a white-created civilization going, one would expect them to be much better off when Apartheid and the economic boycotts of South Africa ended in 1994 and the reins of this first world country were turned over to them. But the National Bureau of Economic Research found that the average income of all races in South Africa dropped 40% between 1995 and 2000. The UN 2006 Human Development Report found that over the last 3 decades Africa has had a "virtual reversal" of human development; South Africa dropped 38 places on the Human Development Index since 1994. (UN Development Programme, 2007). The country of the world's first heart transplant (Christian Barnard, Dec., 1967), the Union of South Africa, is now the rape ¹³ and murder ¹⁴ capital of the

world. ¹⁵ The deterioration of South Africa since the end of Apartheid refutes egalitarianism. ¹⁶ No country ruled by blacks has escaped self-inflicted devastation; it is fair to conclude that blacks

No country ruled by blacks has escaped self-inflicted devastation; it is fair to conclude that blacks are incapable of achieving or maintaining a modern civilization when left to themselves. ¹⁷ Figure 15-5 shows the Grande Hotel in Beira, Mozambique in 1975, when the country became independent of white rule.



Figure 15-5

Figure 15-6 shows the same hotel in 2007, after 32 years of black rule.



Accomplishments

Charles Murray catalogued man's accomplishments according to the number of times they were cited by others. (Murray, 2003). Over 97% of the most important scientists and 74% of the most important artists and authors were white, almost all males, and most from only four countries, Great Britain, Germany, France, and Italy (Fig. 15-7); the remainder were mostly Asian, and none were African. The red hexagon encloses the "European Core," where 80% of the European significant figures in human accomplishment grew up. Note that southern and far northern Europe are outside the core and that Germany is at its center. The Chronology of Science and Discovery (Asimov, 1989) lists about 1500 of the most important scientific discoveries. Virtually all were made by Caucasians and Asians and none by Africans. Similarly, although Asians appear in American Men and Women of Science at six times their proportion of the US. population, African-American representation is negligible. (Weyl, 1989). Prior



Figure 15-7

to contact with other races, Africans never invented the wheel and axle (<u>Baker, 1974</u>, pp 372-373), never smelted metals, never domesticated a plant or animal, ¹⁸ never constructed buildings other than out of plant products and mud (<u>Baker, 1974</u>, pp 368-371), never developed a written language, and could not count beyond their fingers and toes. (<u>Baker, 1974</u>, pp 395-396). Blacks who do make significant contributions, or at least rise to prominence (other than in sports and entertainment), are almost always mulattos with a large percentage of white heritage. (e.g., Colin Powell, Barack Obama). ¹⁹

Life expectancy is a good indication of how advanced a civilization is. The world's shortest life expectancies are in Africa. Sierra Leone has the record lowest for males at 37 yrs, and Swaziland has the record lowest for females, also at 37 yrs. (*World Health Statistics*, 2007).

Mandated and voluntary affirmative action ²⁰ programs in the West (and even in the Union of South Africa for black Africans, although blacks are overwhelmingly in the majority) and political correctness have exaggerated even the meager achievements of blacks. ²¹ While at one time qualified blacks were excluded from certain occupations, by law or by unions controlled by whites, today the situation is 180° reversed and unqualified blacks are promoted over more qualified whites. Racial discrimination against whites is mandated by law in many predominately white countries. ²² Other predominately white countries, such as the United States, rely upon anti-discrimination laws that employers must interpret as requiring the hiring and promotion of minimum numbers of non-whites (quotas) in order to avoid "bad" publicity, lawsuits, fines, and damages for discriminating. ²³ Political appointments of blacks are made to obtain support for the appointing politicians. Since the pool of qualified blacks is much smaller than the pool of qualified whites (Chap. 14), blacks are either appointed to showcase positions or their decision-making authority is limited. The media is reluctant to criticize prominent blacks, especially for incompetence, and colleges and universities offer large amounts of scholarship aid to blacks. ²⁴ All these factors give blacks a huge advantage, yet they still fail to accomplish much.

No black has ever won a Nobel Prize in any of the arts or sciences. ²⁵ The importance of many of the alleged inventions made by blacks has been greatly inflated. ²⁶ This is true even of the most prominent black inventor, George Washington Carver, ²⁷ yet every schoolchild knows his name, though none know the names of the white men who invented plastics, television, the computer, or the internet (hint: it wasn't Al Gore), all far more important than some uses for the peanut. High school students were found to know more about Harriet Tubman than about who commanded the American army in the Revolutionary War or who wrote the Emancipation Proclamation. ²⁸ When a classical radio station plays a rag, it is almost always one by Scott Joplin, a black composer, though rags are not exactly classical music and many were written by whites. ²⁹

Killing off all the large mammals on an

entire continent is probably not something to brag about, but it is worth noting that they had disappeared from Australia by about 45,000 ya (Prideaux, 2007), from northern Asia and Europe by about 10,000 ya, and from North America by about 11,000 ya ³⁰ all, coincidentally, about the same time as the arrival of Eurasians. Thankfully, the large mammals in Africa – e.g., elephants, giraffes, rhinoceroses, hippopotamuses, lions, and gorillas - were not killed off by Africans, at least not yet. (Fig. 15-8). ³¹ Since Africans have no compunctions about killing these animals, a fair conclusion is that the animals were not previously killed off because Africans had not invented the means to do so.

Conquest is another very un-PC area of accomplishment. Caucasians hold the record for



Figure 15-8

conquering other peoples, much to the dismay and shame of Caucasian egalitarians. Portions of all the continents, arguably excepting Antarctica, have been conquered and seized by Caucasians. Other than Genghis Khan, who had a huge advantage in numbers (and red hair, <u>Chapter 24, FN 22</u>), this is much less true of Asians and conquest by Africans of non-Africans is unknown. There was, of course, Hannibal, but he was Caucasian, he was not from sub-Saharan Africa, and his attempt at conquest failed. ³²

Although most people today think of conquest and war as grave faults, there are good reasons for believing that they were an important positive selector for modern behavior. Predation is a powerful selecting force. The prey becomes faster and better able to evade the predator because the predator kills the slow and inept first. Similarly, the predator becomes faster and more skilled because slow and inept predators do not eat. Now, what happens when groups of men prey upon other groups of men, not necessarily for food, but to defend and obtain territory? Man also advances, both as predator and prey. Those groups that communicate the best, devise the best weapons and tools, and develop a culture that binds them together, survive and prosper, and those who do not, perish. Conquest has not only accelerated man's evolution, it has at the same time selected for ethnocentrism – loyalty to one's own group; man is a natural born racist. ³³

One might think that Caucasians, as the most accomplished race, would increase in numbers while the numbers of the less accomplished races declined. After all, doesn't accomplishment equal better adaptation, which equals more reproductive success? Not necessarily, because exactly the reverse is occurring. The white race, which was 25% of the world's population in 1900, was only about 8 to 10% in 2005, and the percentage of whites has continued to decline. ³⁴ Ironically, it is the accomplishments and sacrifices of whites that have made the vast expansion of the other races possible.

Evolution, however, does not imply that those who are the most accomplished in the arts and sciences will have more reproductive success, and reproductive success is not included in the achievements that Murray describes in *Human Accomplishment*. Caucasians may be good at making discoveries in math and science and at creating great works of art, but they aren't so good at making more Caucasians which, as far as evolution is concerned, is all that counts.

In other words, success in accomplishments implies that Caucasians have a necessary condition for reproductive success – control of the resources and technology needed to support an expanding population, but lack the most important sufficient condition – the will to increase their numbers. Until the widespread use of effective contraception, their lack of will would have had little effect, but now people can choose whether to have children or do something else with their lives, and so many whites are choosing to do something else that the number of white births is less than the number of white deaths.

Chapter 16

Table of Contents

FOOTNOTES

1. (<u>Hart, 2007</u>, p. 313). Africa was visited by Europeans, Indians, and Arabs thousands of years prior to recorded history. This is known because crops and animals not indigenous to Africa are nevertheless found there. Also, visitors left many remains of their own civilizations, such as stone structures, pottery, and metals. (<u>Baker, 1974</u>). <u>Back</u>

2. Even today, in formerly-civilized South Africa, Africans practice "severe mutilation" for "medical reasons," though probably not in the way that Baker had in mind. (Tibbetts, G., "<u>Machete gangs bring fear to South Africa as they carry out mutilations for traditional medicine</u>," *Telegraph*, Oct. 18, 2008). Back

3. Some say the guinea fowl was domesticated in s-S Africa, but (<u>Baker, 1974</u>, p. 375) denies it. It is easy to domesticate as it does not have to be penned. The failure of Africans to domesticate mammals is consistent with their high rate of lactose intolerance. Dr Steinman (<u>*Milk Allergy and Lactose Intolerance,*</u> May, 2002) gives the following figures for lactose intolerance for children over 5 years old: "90-95% of black individuals and 20-25% of white individuals throughout the world." However, most Asian populations, especially people from Far East, are also very lactose intolerant (close to 100%). Asians did domesticate herds, but did not use them for milk. A few African tribes, such as the Fulani, have low rates of lactose intolerance (around 20-25 percent), but the Fulani are an Islamic people who likely have an Arabic heritage. <u>Back</u>

4. An "emergent" property is property that is expressed in an interacting group of units, but is not expressed in the individual units that comprise that group. For example, molecules have properties very different from the properties of the atoms that comprise them, and so do organisms compared to their cells. An emergent property is possible only if the units have a property that enables the emergent property to be expressed when the units interact. A civilization is an emergent property of the individuals who create and maintain it, and that civilization requires those individuals in order to be created and maintained. And, because the traits of individuals in different populations differ (Section II), their civilizations will be unique to those individuals, i.e., different populations will create and maintain different civilization. (Kemp, 2006). Back

5. Oxford University engineer Professor Alexander Thom and the astronomer Gerald Hawkins pioneered the new field of archaeoastronomy - the study of the astronomies of ancient civilizations. They showed that 2000 years before Euclid, and at least 3000 years before the sixth century AD sage Arya Bhata discovered pi, the Pythagorean Theorem and pi were used in the construction of Stonehenge. A 4000 year old temple, the Temple of the Fox in Peru, also had astronomical features. (Benfer, 2006). Another example: a bronze analogue navigational computer dated at 80 BC was found off a Greek island. See (*Wikipedia*, "Antikythera Mechanism"; Freeth, 2006). The higher sea level after the last ice age may have left other Eurasian structures, such as the Yanaguni Monument off Japan, under the ocean. Back

6. (<u>Childe, 1965</u>, pp. 212-243). A more modern comparison may be the tiny Netherlands, much of it reclaimed from the sea, whose economic product is greater than all of Africa's. (Dalrymple, T., "<u>How the West Was Lost</u>," *The American Conservative*, June 18, 2007). <u>Back</u>

7. "Tropical rainforests are not generally favorable to the development of civilizations." (<u>Haywood, 2000</u>, p. 150). <u>Back</u>

8. "Between 1844 and 1915 only one Haitian President completed his term of office. Fourteen were ousted by armed uprisings, one was blown up, one was poisoned and another was hacked to pieces by a mob. Between 1908 and 1915 the revolutions and assassinations increased so rapidly that a United States military occupation was needed to restore order. This lasted from 1915 to 1934. Thereafter followed twelve years of rule by a mulatto elite which ended in the resumption of control by the black military in 1946. Since then wholesale corruption and political murder have been the rule." (Putnam, 1967). Back

9. Detroit looks like a bombed out city; so much vegetation is reclaiming it that it is now one of the greenest cities in the country. ("<u>The Ruins of Detroit</u>"). In 2007, Detroit won the "<u>Most Dangerous City in</u>

America" award (CQ Press); Detroit's population is 81.6% black (2000 US Census). Back

10. "A mind is a terrible thing to waste," (United Negro College Fund). Back

11. Yet whites turn the worst land into an <u>oasis</u>. In July, 2005, President Robert Mugabe said there would be "not a single white on the farms" under his land reform policy. As the whites were driven away, the country soon faced "starvation and economic collapse." (C. Thompson, "Zimbabwe poised to welcome back white farmers," *Guardian Unlimited*, Jan. 3, 2007). Also, (Berger, S., "Zimbabwe's Hospital System 'Beyond Help'," Feb. 8, 2007, *Telegraph*, UK). For details on the waste, corruption, stupidity, and savagery in post-colonial Africa, the reader is referred to (Meredith, M., *The Fate of Africa: From the Hopes of Freedom to the Heart of Despair*, Public Affairs Press, 2005). "[Zimbabwe] has the world's highest inflation and fastest-shrinking peacetime economy ... with the lowest life expectancy anywhere – just 34 for women and 37 for men – and the highest percentage of orphans." (Christina Lamb, *The Australian*, Mar., 2007; also, Kemp, 2006, Chap. 57). To put this another way, the carrying capacity of Africa depends on the people living there; it is much higher in a white Africa than in a black Africa. The presence of whites in Africa enables black Africans to proliferate far in excess of the black carrying capacity. (Chapter 4, caveat to Rule 7) See (Salter, 2002a, p. 61-63) for a discussion of carrying capacity. Back

12. (www.YouTube.com, "Founded by Americans, Liberia was once the shining star of Sub-Saharan Africa. Now cannibals rule the streets"). "Even Christianity, of more than three centuries' duration in Congo, has scarcely excited a progressive civilization." (<u>Hunt, 1864</u>, p. 19). <u>Back</u>

13. In South Africa "a woman is sexually assaulted every 40 seconds." ("<u>Big Brother Horror Show</u>," *The First Post*, Nov. 1, 2007). "Is it not horrendous for an adult man to rape a nine-month-old baby?" Nobel Peace Prize winner archbishop Desmond Tutu, referring to the belief among South African blacks that raping a baby cures AIDS. ("One Child Raped Every 24 Minutes," *News 24*, South Africa, Nov. 4, 2007). File this under "Ouch!": A white South African woman invented a "female condom"; it has small hooks that attach to an attacker's penis. ("Anti-Rape Device Must Be Banned, Say Women ." *Times* (England), June 8, 2005). Swedish women are raped so much by African immigrants that some have designed and are selling a chastity belt. ("Swedish Girls Design Anti-Rape Belt," *The Local*, Nov. 22, 2005). Back

14. (Mercer, I., "The ugly truth about democratic South Africa," World Net Daily, Dec. 15, 2006). Back

15. The black-white income gap shrank up to 1994, when Apartheid ended, then grew from 98% more income for whites to 118% more. (Leibbrandt, 2005). The number of South Africans living on less than \$1/day has more than doubled in the decade after Apartheid ended. (South Africa Institute of Race Relations). Also, ("Has the Penny Finally Dropped?" *South African Bulletin*, Transvaal Agricultural Union). Google has censored the "Why South Africa Is Crap" blog, and its successors, "South Africa Sucks" and "South African Hell," but the "<u>South Africa Sucks</u>" blog has re-appeared. Also see "<u>African Crisis</u>" and (<u>Kemp, 2006</u>, Chapter 56). <u>Back</u>

16. Black economist Walter Williams stated, "[O]rdinary Africans were better off under colonialism." (*Jewish World Review*, Jan. 9, 2001). The Belgium Congo is another example: "The atrocities perpetrated by these armed groups are of an unimaginable brutality that goes far beyond rape. Women are brutally gang raped, often in front of their families and communities. In numerous cases, male relatives are forced at gun point to rape their own daughters, mothers or sisters. Frequently women are shot or stabbed in their genital organs, after they are raped. Women, who survived months of enslavement, told me that their tormentors had forced them to eat excrement or the human flesh of murdered relatives." (Yakin Erturk, U.N. human rights expert; Klapper, B.S., "Attacks On Women In Congo Go 'Far Beyond Rape'," *Associated Press*, July 30, 2007). Back

17. "Better to reign in Hell than serve in Heaven." (John Milton, *Paradise Lost*). "The still largely primitive Africans have not as yet acquired the necessary skill merely to maintain the legacy left by the Whites, let alone to organize further developments." (<u>Schumann, 1960</u>, p. 91). Also see (Kaplan, R.D., "<u>The Coming Anarchy</u>," *Atlantic Monthly*, 1994). <u>Back</u>

18. (<u>Baker, 1974</u>, pp 373-377). However, "[donkeys were] the only important domestic animal known to come from Africa." (<u>Hecht, 2005</u>). Hecht adds that the domestication was only 5000 to 6000 ya in Egypt, so it was not in sub-Saharan Africa and would have been by Caucasians. <u>Back</u>

19. Notice (p.113) how Caucasian-looking <u>these</u> prominent blacks are. Light-skinned blacks are more intelligent (Lynn, 2006a, p 65) and accomplished (<u>Baker, 1974</u>, pp 503-505) than darker blacks. Also see (<u>Simpson, 2003</u>, p. 719). (If female, they are also favored by black males and hated by blacker females; Marroquin, C.A., "<u>The Face of Colorism</u>," *Student Web*, University of Oklahoma). <u>Back</u>

20. The 1964 Civil Rights Act, which explicitly <u>prohibited</u> quotas, has now been interpreted as requiring quotas. *Griggs v. Duke Power* (401 US 424, 1971), created the concept of "disparate impact," that, even in the absence of any intent to discriminate, any job requirement not met by a proportional number of protected minorities is illegal, unless the requirement is "job related." (But if a company is not discriminating why would it have a requirement unless it was job related?). The result has been to construct requirements in such a way that the requirements are incapable of distinguishing between qualified white males and unqualified, but protected, minorities. (Meyer, B., "Federal rule blocks recruiting police officers from outside Buffalo," *The Buffalo News*, Oct. 26, 2007). Back

21. Blacks who are below the 40th percentile of "g" distribution for IQ, have slightly less income than whites, but blacks in higher IQ levels earn increasingly greater amounts more than whites because the number of blacks drops rapidly at higher IQs (p. 114), while the demand for them increases due to affirmative action. (Nyborg, 2001). "[B]lack college-educated females currently earn 125 percent of what white college educated females earn." (Reiland, 1995). "This means that white professionals would be paid more if they were black, another transfer of wealth from whites to blacks. The result is a shift of whites to fields where discrimination against them is more difficult, such as self-employment and consulting work. White males are also less likely to pursue professional degrees. Companies, forced to pay more for less competent employees, transfer operations overseas or farm out work to people in foreign countries." (Nyborg, 2001). "It is shown that on average a black worker, between the ages of 25 and 64, earns an extra \$9,400 a year because of affirmative action. Hispanics also benefit to the tune of almost \$4,000 a year. However, being a zero-sum game, white workers pay an average of about \$1,900 annually to foot the bill." (La Griffe du Lion, 1999b). Back

22. One may wonder why whites would pass laws that sacrifice the interests of whites to benefit nonwhites, which is surely suicidal and maladaptive; that is discussed in Chapter 33. <u>Back</u>

23. In December, 2005, it was announced that Walmart's general counsel told its top 100 law firms that at least one person of color and one woman must be among the top five relationship attorneys that handle its business. (Hobbs, M., "<u>Wal-Mart Demands Diversity in Law Firms</u>," *Law.Com*, July 6, 2005). It is very common for large businesses to require their white management to hire and promote blacks into management, then make sure they do not fail; they are threatened with the loss of bonuses and promotions, and even being fired, if they are do not. Also see (<u>Cardwell, 2006</u>). Since there are not enough competent black managers to meet the demand, competent black managers are paid a significantly greater salary for being black, and incompetent blacks must be hired to make up the difference, practices which make American businesses less competitive. <u>Back</u>

24. In violation of the Fourteenth Amendment: No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws. (Thomas, 1995). Back

25. Nobel Peace Prizes, however, are often given to blacks (at least five) for vague and dubious accomplishments. Kenyan ecologist Wangari Maathai, (the 2004 winner) claims that the AIDS virus was invented in some laboratory in the West as "a biological weapon aimed at wiping out the black race." Another recipient was Martin Luther King. (Epstein, M., "Myths of Martin Luther King," *LewRockwell.com*, Jan. 18, 2003). <u>Back</u>

26. See "<u>Black Invention Myths</u>." Also (<u>Gayre, 1967</u>, pp. 131-143; <u>Nevin, 1967</u>, p. 233). <u>Jenkem</u> is an actual black invention. <u>Back</u>

27. (<u>Mackintoch, 1976</u>). Mr. Mackintoch is an historian with the National Park Service in Washington, D.C. Carver had so much white heritage that his eyes were blue. (<u>Putnam, 1961</u>, p. 92). <u>Back</u>

28. A 1987 study, quoted in Samuel Huntington's book, "Who Are We." Back

29. Musical ability is associated with intelligence, but African Americans do poorer than Europeans on tests of pitch, tone, and musical memory, and are about the same only on tests of rhythm. (Lynn, 2006a, p 55-57). I un-humbly cite my own essay on this subject. Back

30. For a list, see (<u>Arsuaga, 2001</u>, p. 194; <u>Haywood, 2000</u>, p. 64). Horses were actually native to North America, but they had been hunted to extinction by the Indians 10,000 years before the Spaniards arrived; the Spaniards re-introduced them in the 1500's. (<u>Allman, 1994</u>, p. 207). That Eurasians killed off large mammals has been disputed. (<u>Guthrie, 2006</u>). A comet in the Great Lakes region may have killed off the North American large mammals. (Dalton, R., "<u>Blast in the Past?</u>," *Nature*, May 16, 2007, Vol. 447, pp. 256-257). <u>Back</u>

31. Picture of <u>gorilla head</u> is from (*The Sunday Telegraph*, Sept. 5, 2004). Also, see (*Discovery Channel News*, "<u>Silverback Gorillas Eaten By Rebels</u>," Jan. 18, 2007). Now that Africans have white man's guns, these and smaller animals are disappearing. (See the powerful documentary movie, "<u>Africa Addio</u>.") The bonobo chimp is being killed as bush meat, and so are many other animals that Africans could not have killed without white technology. The chimpanzee and the gorilla did get some revenge – Africans who ate them picked up the virus that causes AIDS. ("<u>Aids started by humans eating chimps</u>," *Telegraph* (England), Feb., 1999). Van Heuverswyn, 2006). Back

32. General Butt Naked was a contemporary African general in Liberia. ("<u>Ex-warlord confesses to 20,000</u> deaths," *CNN.com*, Jan. 21, 2008). <u>Back</u>

33. (<u>Barkow, 1991</u>, pp. 148-149). And, surprisingly, the Western population that is the most opposed to racism, the Jews, is the most ethnocentric. (Review by S. Hornbeck of (<u>MacDonald, 2002b</u>)). "[T]he original motivation of many of the early Zionists was that Israel would ensure racial purity." (MacDonald, K., on his blog, "<u>Outside the Jewish Mainstream: Robert Weissberg and Philip Weiss</u>"). Ethnocentrism, war, and other behaviors found in humans is also seen in the most successful monkey species, the rhesus macaques. (<u>Maestripieri, 2007</u>). <u>Back</u>

34. "By 2010, whites will account for only about 9% of the world's population, compared with 17% in 1997, according to demographer Harold Hodgkinson; whites will then be the world's smallest minority." (Rubenstein, 2006). In 1959 whites were 27.98% of the world's population and blacks were 8.97%; by 2060 whites will be 9.76% and blacks will be 25.38%. ("Global White Population to Plummet to Single Digit—Black Population to Double," *National Policy Institute*, Apr. 14, 2008). Back

Chapter 16 - Primitive Traits

"There are none so blind as they who will not see."

John Heywood 1

A living population is more primitive than another living population if it has more of the same traits that the LCA of the two populations had. If the LCA is extinct (e.g. erectus) and all we have of it are teeth, bones, and a few stone tools ("stones and bones," the proof of man's presence), then traits of the two populations (other than their hard-tissue traits) are compared, either to the traits of chimpanzees, who are assumed to have not evolved drastically away from the chimp-human LCA, or to the traits of living populations of humans who are otherwise known to be primitive. Thus, "primitive" traits are "simian" (ape-like) because they are similar to traits possessed by our LCA with living apes. Many simian traits (e.g., long skull, brow ridges,

prognathism, small ears, flat nose) are illustrated in Figure 16-1, which shows a computer reconstruction of a bipedal ape (minus the hair) that has some human features. ² Any human population that has significantly more primitive traits than another population has evolved less away from our ape common ancestor and is therefore more simian and more primitive. ³

It is not possible to conclude, however, that a less primitive living population evolved from a more primitive living population and is in the same lineage as that more primitive population. Indeed, it is more likely that it is not, but simply that they both had a common ancestor. Of the three major races, Africans are by far the most primitive, but at least some Asian aborigines are more primitive than Africans.

Ideally, a trait that is primitive will be

possessed by all of the large anthropoid apes, will be less pronounced in *Homo erectus*, and still less so in most humans, so that the prominence of the trait diminishes as genetic distance from apes increases, but evolution is seldom so tidy. Nor will all of the traits of one population necessarily be more primitive than all the traits of another population. There will inevitably be a few primitive traits in otherwise modern populations, and vice-versa; these are traits that were strongly selected for or against in one of the two populations or that were adaptive, then maladaptive, then adaptive again. Hairiness, for example, is a primitive trait because chimpanzees, gorillas, and some Asian aborigines are hairier than most humans. Africans, however, who are primitive in most other ways, are not as hairy as Caucasians. The explanation is that body hair reduces the cooling efficiency of sweating (only humans and horses sweat), so it is selected against in the tropics and, before garments, was selected for in the cold north. $\frac{4}{2}$

Primitive traits can also be acquired by interbreeding with a more primitive population. For example, many Japanese males, who are otherwise completely modern, have significant brow ridges. This unusual primitive feature is believed to be the result of the invasion of Japan by modern Koreans between about 1500 BC to about 400 BC, who then interbred with the more primitive, and hairy, Jomon people already there, producing the Japanese.

Primitive traits correlate highly with tropical traits, which is to be expected because our ancestors lived in warmer climates before they evolved traits that enabled them to live in colder



Figure 16-1

climates. Thus, living descendants of those tropical ancestors will tend to retain those tropical primitive traits even when they are no longer as useful for their original purpose, but can now serve another purpose. Long arms, for example, useful to apes for swinging through the trees, may be retained by their tropical descendants, although they no longer swing through the trees, since long arms are also useful in dissipating heat and throwing objects. Not every tropical trait is primitive, however, since some traits, such as resistance to diseases unique to humans in the tropics (e.g., sickle cell anemia), were probably not possessed by long-ago tropical ancestors.

Although some tropical populations are neotenic, the most primitive traits are not neotenic, which suggests that neoteny occurred early in man's lineage, but did not reach all primitive populations. The reason may be that neoteny occurred and was retained when man moved into cooler climates (see Chap. 6) where it was advantageous and, when populations of neotenic man later migrated back into the tropics, they did not interbreed with all the tropical populations. Neoteny includes a large number of traits and, if a population becomes more neotenic then, on balance, it is fair to conclude that neotenic traits are advantageous in that population (Chap. 4, Rule 10 second corollary), even if some neotenic traits are neutral or even disadvantageous. The disadvantageous traits will be selected against and gradually lost (or "turned off") and the population will then be left with a mixture of advantageous and neutral neotenic traits plus advantageous non-neotenic traits. This is especially likely to happen when a neotenic population migrates to a new environment where some of its previously advantageous neotenic traits are now disadvantageous and are therefore selected against. For example, a larger brain is an advantageous neotenic trait in a mentally challenging colder environment, but its high energy cost makes it a disadvantageous trait if the environment is not as mentally challenging. Thus, there are some tropical populations (Bushmen, Negritos) that are noticeably neotenic, but have small brains.

Sexual dimorphism (greater differences between male and female) has been declining from *Australopithecus* to humans. ⁵ Sexual selection can greatly affect sexual dimorphism. Selecting mates for their masculinity and femininity increases sexual dimorphism and selecting mates who will pair bond reduces it; ⁶ neoteny also reduces sexual dimorphism. Of the three major races, Asians are the least sexually dimorphic. As to particular traits, Africans and Europeans vary as to which race is more sexually dimorphic, but overall it seems to be Europeans, probably due to greater selection by both sexes. Thus, determining the primitiveness of a race based on sexual dimorphism should probably be based on particular traits that are conserved but are not noticeable, which has not yet been done.

Technological advancement can also reduce some primitive traits. A person who is more "robust" (i.e., heavier bones and stronger muscles) is more primitive than a person who is more "gracile" (i.e., lighter bones and less muscular) because apes are more robust and so was early man. A population that is more technologically advanced (e.g., has spears and other long-distance weapons) relies less on physical strength, giving an advantage to more gracile individuals who invest resources in brains instead of strong muscles and bones. (Lewin, 1998). Eating more meat (caught with better weapons) and cooking food (i.e., controlling fire) to soften it reduced the need for primitive traits such as powerful chewing muscles, large teeth, a supraorbital ridge, a saggital keel, and thick, heavy skull bones.

Both blacks and whites regard black facial characteristics (i.e., primitive traits) as threatening (Lieberman, M.D., 2005; Eberhardt, 2006). However, some primitive traits (e.g., large jaw, heavy bones and muscles) are also regarded as more masculine (Fink, 2007). The masculinity of primitive traits may, in part, account for why most black-white miscegenation is black man-white woman, and much less is white man-black woman, ⁷ and why women find Asian men, with their neotenic, baby-like features, less attractive. Conversely, the absence of primitive traits (e.g., gracile body, neotenic face) is regarded as more feminine and may explain, in part, why white men are attracted to Asian women.

Hard Tissue Traits (Chapter 9)

Some of the hard tissue primitive traits found more often in the skulls of Africans include a thicker ⁸ and narrower skull with less cranial capacity, a more sloping forehead, a more massive protruding jaw, ⁹ and larger teeth. ¹⁰ Figure 16-2 compares the skull of an ape with a European skull to illustrate these differences. (Howells, 1948, p. 130). Now, in Figure 16-3 (also see Figures 9-4 & 9-5, and Figure 9-9), compare a European skull (left) with an African (Sudanese) skull (right). The eye sockets and nasal openings have been aligned. Although it looks like the two skull halves in Figure 16-3 are misaligned, they are not; the smaller brain and larger jaw of the African skull just makes it appear that way.



African nose is "very flat." (<u>Hanihara, 2000</u>). A less prominent chin and the percentage of skull bones that join on the side of the head $\frac{11}{11}$ are also primitive traits, but they are of less use in distinguishing living populations. <u>Tables 9-1</u>, 2, and <u>3</u> list other primitive hard tissue traits that Africans have.

Soft Tissue Traits (Chapter 10)

Primitive soft tissue traits include larger muscles, larger scent glands, and a smaller, and less fissured brain ¹² with a smaller front-to-back ratio (a smaller forebrain), and a thinner supragranular layer in the brain. Note that dark skin is not listed as a primitive soft tissue trait because lighter or darker skin is selected according the amount of sunlight and, since there is no fossil skin and chimpanzees are light-skinned when young and dark-skinned when older (De Waal, 1997, p. 21), it is hard to say which color is more primitive. ¹³ As to hair curliness, again there is no fossil hair. Chimpanzees have straight hair, but the most primitive Asian Negritos have wooly hair, suggesting that tropical *erectus* (or even *Australopithecus*) had wooly hair and that straight hair arose later with northern migration. If that is true, then wooly hair would also be a primitive trait. Also, straight hair may be neotenic. ¹⁴

There is some indication in the literature that the African hair type differs in fundamental ways (Figure 10-13) from Eurasian hair in that, among other things, it lacks a central duct. Since Africans and some Asian Negritos have very curly hair, it would be interesting to know if Negrito hair also lacks a central duct. If it did, a reasonable conclusion would be that tropical *erectus* had hair that lacked a central duct and that such hair is primitive.

Another primitive soft tissue trait that might be mentioned is a sclera (cornea) that is yellowish rather than completely white, usually in only adult males. (Figure 10-4). The primitiveness of this trait is shown by its presence in the gorilla, some Africans, and some of the

aborigines of the Pacific. 15

In apes, the larynx is higher in the throat and, as a result, the number of different sounds they can make, and the ease with which they can control the sounds they make, is diminished. ¹⁶ The ability to make more varied sounds means superior communications between people so that they can transfer information more easily and more accurately. This would, of course, be a great advantage in hunting ¹⁷ and in battle, as well as in passing knowledge on to the next generation. Gibbs (<u>1865</u>) says the larynx of Africans differs from that of whites, but does not describe its position.

An unusually large mouth (Figure 10-9) is a primitive trait, as it is a characteristic of apes (required for fully opening the mouth to expose the teeth and bite), and most Africans do have large mouths. Most also have large everted lips, but some Africans, perhaps with Caucasian or Asian ancestry (Chapter 26), do not. Chimpanzees have a large mouth, but with thin lips, and the lips of primitive Asian aborigines are not as large as some Africans.

Ear size is another problematic soft tissue trait because, although Africans (Figure 26-7) and gorillas have small ears, Caucasians and chimpanzees (Figure 6-1) have large ears; apes generally have small ears (Figure 16-1). To add to the confusion, large ears may be more vulnerable to frost bite in cold climates, but may help radiate heat in the tropics (e.g., elephants' ears); on the other hand, sound carries farther in the more-open and colder north than in the tropics, making large ears more advantageous in the north. Identifying the age of the allele responsible for ear size may shed some light on which ear size, if either, is more primitive.

The flat nose of Africans is primitive, because apes have very flat noses and external nose bones (needed for a more protruding nose) are absent in apes and early man. The nose only gradually became more prominent, most likely when man moved into colder climates where a longer nasal passage was advantageous in warming inhaled air.

Large buttocks is a primitive African trait as it is found in the most primitive people (Andaman Islanders, Hottentots, and Bushmen, <u>Chapter 26</u>), and prominent buttocks are a feature of some female primates, particularly when in heat (e.g., the baboon).

Reproductive Strategy (Chapter 11)

Reproductive strategy is a very fundamental trait as it determines the solution to the allimportant problem of how best to create the next generation, which then influences a large number of other traits. A more "r" orientated reproductive strategy is definitely more primitive as man has a more "K" reproductive strategy than any other primate. There is extensive evidence (<u>Rushton, 2000a</u>) that Africans are more "r" orientated. The faster maturation of blacks also applies to the development of their intelligence, which develops close to whites until about age 2, then begins to stagnate. (<u>Chapter 11, FN 12</u> & <u>Chapter 14, FN 37</u>).

Behavioral Traits (Chapter 12)

A propensity for violence is a primitive behavioral trait because, as intelligence increased and man became more civilized, intra-populational violence became more disruptive. A propensity for violence correlates with physical traits such as a protruding jaw and large mouth (for biting), strong, dense bones and larger muscles, as well as behavioral traits, such as impulsiveness and the inability to plan for the future, all of which are higher in blacks. Cannibalism was, and still is, a primitive behavioral trait in Africans, despite the best efforts of foolish, but tasty, missionaries to put a stop to it.

Genes (Chapter 13)

The "smoking gun" that proves primitiveness beyond question is genes. If a population has the same alleles that the great apes have, and other populations do not have those alleles, then that population is more primitive. Genetics has just begun to determine the distribution of

different alleles among people across the Earth, but the use of chimpanzee and gorilla alleles to identify Africans as the "ancestral" population (i.e., Africans have alleles that chimps and gorillas have, but Eurasians do not have) is widespread. ¹⁸

More recent work is identifying the genes responsible for important traits, such as intelligence and the propensity towards violence. So far, it is known that a few of the alleles thought to be responsible for high intelligence, of the genes <u>microcephalin</u> ("MCPH1") and <u>ASPM</u>, are rare or absent in Africans. Eventually, all of the alleles responsible for the racial differences in traits will be identified, and their distribution is expected to coincide with the racial distribution of those traits.

Intelligence (Chapter 14)

Low average intelligence in a population is the most important primitive trait as intelligence has increased over millions of years and it is the defining trait of humans. It is now well-accepted by psychologists that blacks have a lower intelligence. ¹⁹

Civilizations and Accomplishments

(Chapter 15

The inability to create and maintain a civilization or to accomplish much of any note are primitive traits, as earlier hominoids were capable of neither; nor are today's Africans.

It should be obvious from the preceding that Africans possess a large number of primitive traits, but some South Pacific aborigines possess even more, though they do not necessarily have the same primitive traits that Africans do. Some Asian aborigines are so primitive that they might even be classified as late *Homo erectus* instead of *Homo sapiens*. The number of South Pacific aborigines are not great as the number of Africans, however, and they are concentrated in Australia and the South Pacific Islands and do not present all the social problems that the large numbers of blacks in the West do.

To summarize, Section II provides overwhelming evidence that race is real and that blacks are the most primitive ²⁰ of the major races, though only a small proportion of the known racial differences is presented. Because research on racial differences, except where they are medically important, has been effectively outlawed for at least the last 50 yrs, there are no doubt thousands of other racial differences that have not been discovered or published. In reading comparisons between different types of animals, one is struck by the immense number of small differences in anatomy, physiology, protein structure, and development. Surely, there are also a large number of differences between the races.

The fact is that virtually all of the racial differences between Africans and Eurasians are in traits that are primitive; there are few, if any, African traits that are more modern than Eurasian traits. The evidence comes from a large variety of very different traits, hard tissue, soft tissue, physiology, behavior, intelligence, accomplishments, and genes. And, most importantly, <u>all of the evidence</u> is consistent. It is not the case that genes are saying blacks are modern and bones are saying they are primitive. All of the evidence is saying the same thing – they are primitive, less evolved, and closer to our ape ancestors.

That is the source of the title of this book, not that *Homo erectus* is alive today as the species that lived from nearly 2 mya

until as recently as a few tens of thousand ya, but that erectine long alleles lost by Eurasians are still active in Africans and some aborigine



Figure 16-4

Figure 16-5

Figure 16-6

populations, expressing themselves in primitive traits of body and behavior. These traits are readily discernable at a glance, though people are indoctrinated and warned not to notice such things and to deny them if they are mentioned. In Fig. 16-4, 16-5, & 16-6, note the erectine features of these black athletes (left to right): the prominent brow ridges and receding forehead of Jerry Stackhouse, the protruding jaw of Shaquille O'Neal, and the slight saggital keel of former NBA player Karl Malone.

Whites have romanticized "noble primitive people as savages" and, in movies and on television. they usually are portraved as competent, wise, and kind-hearted towards whites. Real life data, however, does not support that portrayal. (Keeley, 1996; Wade, 2006; Lablanc, 2003). European soccer fans, who make ape-like hooting noises and throw bananas to



Figure 16-7

taunt black players may be boorish, but biologically, they have a point. ²¹ Blacks, biologically, have traits that man had hundreds of thousands of years ago. In Figure 16-7 the horizontal length of the lines is proportional to genetic distance; the short length of the horizontal line going to "African" indicates that Africans have not evolved much, and the long length of the horizontal line labeled "non-African" indicates that non-Africans have evolved a long way away from Africans. ²²

In the next two sections, the OoA and OoE theories of the evolution of modern humans are examined.

Section III

Table of Contents

FOOTNOTES

1. "Who is so deafe, or so blynde, as is hee, That wilfully will nother hear nor see?" (Heywood, *Dialogue of Proverbs*, 1546). <u>Back</u>

2. The image is of 6.8 to 7.2 mya *Sahelanthropus tchadensis* ("Toumai"), from Mission Paléoanthropologique Franco-Tchadienne (M.P.F.T.). Toumai, found in Chad, Africa, was about

4 feet tall and is believed to have been bipedal.; he may have been in the human lineage. Back

3. Primitive traits can be re-acquired by a population when they are selected for. Good examples are the sexually-selected child-like traits of some Eurasian women, such as the large, wide-apart eyes that our nocturnal prosimians ancestors had. <u>Back</u>

4. Body hair went from adaptive in early apes to maladaptive in bipedal apes, to adaptive in northern man, to maladaptive again once northern man had garments. (Chap. 24). <u>Back</u>

5. Nevertheless, the bonobo is the least sexually dimorphic of all primates, including humans. (Tanner, N. M. (1981) *On Becoming Human*, p. 202). <u>Back</u>

6. Greater promiscuity and less pair bonding increases sexual dimorphism because males have to compete for females; this is most evident in birds, where the males of the most promiscuous species (e.g., peacocks) are brightly colored and the females drab, but in pairbonded species (e.g., swans) males and females are difficult to tell apart. <u>Back</u>

7. (<u>Getahun, 2005</u>). Ten times more single white women than single white men reported that their most recent sex partner was black. (*Sex in America*, 1992). <u>Back</u>

8. Note in Figure 14-8, how skull thickness, which is reflected in the difference between cranial capacity and brain size, has declined over the last 35,000 yrs. <u>Back</u>

9. A 2.4 million year old genetic mutation for a size reduction in chewing muscles may have lead to a smaller, weaker jaw and separated man from his ape-like ancestors by shifting man towards more reliance on brains and less on muscles. (Stedman, 2004). Man compensated for not being able to tear hides with his teeth, or to gnaw the tough parts of an animal, by banging rocks together to knock off sharp-edged cutting chips. In time, the importance of tool-making became such a powerful selective influence for intelligence and creative skills that weak jaw muscles can be said to have led to a bigger, better brain. Back

10. "Indeed, … Adolf Schultz had found a supposed Pithecanthropus-like gap between the upper permanent second incisor and the upper permanent canine in a 'modern negress,' and Abbie himself had stumbled upon something similar in a 'living Aborigine.'" (Schwartz, 1999, p. 157). Africans have more rapid dental development, similar to fossil hominids. (Tompkins, 1996). "Sub-Saharan Africans are characterized by a collection of unique, mass-additive crown and root traits relative to these other world groups. Recent work found that the most ubiquitous of these traits are also present in dentitions of earlier hominids, as well as extinct and extant [living] non-human primates [e.g., chimpanzees and gorillas]; other ancestral dental features are also common in these forms." (Irish, 1998). The teeth of Australian aborigines are even larger (Hanihara, 2005) and the age of eruption of permanent teeth is earlier and the likely presence of a third molar is greater. Back

11. The percentage of skulls with a fronto-temporal pterion (juncture) on one or both sides is much higher in Australids, Negrids, gorillas, and some other apes. (<u>Baker, 1974</u>, pp. 191, 298-299). <u>Back</u>

12. In primitive primates, such as lemurs, the cerebral cortex is small and smooth. (<u>Howells, 1948</u>, p. 48). <u>Back</u>

13. (Coon, 1962, p. 112). "... the Old World monkeys and apes, have lightly pigmented skin

covered with dark hair, …" (Jablonski, 2006, p. 64). When body hair was lost, dark skin was strongly selected for in the tropics, but not in the temperate zones. Producing melanin (which makes skin dark) is costly but necessary for survival in the tropics, but in the north incurring that cost is unnecessary, a waste of resources (Rogers, 2004), and reduces the body's production of vitamin D. The fact that the palms and the bottom of the feet of Africans are white also suggests the absence of dark pigmentation when it is not needed. Africans are lighter in color immediately after birth, as dark skin is not needed in the womb, but soon darken. (Cartwright, 1857, p. 45). Back

14. "The hair of the infant negro is neither crisp and curly, nor black; it has a chestnut-brown color and is of a silky fineness. However, as it grows longer it becomes darker and more curly, and by the time the child begins to walk it appears completely woolly." (Burmeister, 1853). The younger Ainu in Chapter 24, Figure 8 seems to have straighter hair. Back

15. "...the 'white' or sclerotic [of the Negro eye] is often (as in apes) pigmented – a dull reddish yellow." (Johnston, 1910). Back

16. Part of the larynx is a valve (the epiglottis) that blocks food and liquids from going into the lungs. In most animals, the larynx is high in the throat so that they can breathe and swallow at the same time. Human infants start out that way, but then the larynx moves down to about the Adam's apple, which enables us to make a greater variety of sounds for speech, at the cost of choking if we swallow while breathing. (Allman, 1994, p. 165). Back

17. The more that hunting is required for survival, the more important it is for males to cooperate, as hunting requires more cooperation than gathering; in the cold north, hunting was needed to survive the winters. (Levin, 1997, p. 165). Back

18. (<u>Deka, 1995</u>). Many other references could also be cited: (<u>Supplementary Notes: Human</u> *Population Genetics* (2005-03-03208); <u>Weber, 2002</u>; <u>Watkins, 2001</u>; etc.). Africans may also have alleles that neither chimpanzees nor gorillas nor Eurasians have that were acquired after the LCA with chimps, then lost in Eurasians. <u>Back</u>

19. ("Mainstream Science on Intelligence," The Wall Street Journal, December 13, 1994). Back

20. "In addition, as Darwin saw it, the Africans were primitive humans and served as a link between his concept of an apelike human ancestor and truly civilized humans." (Schwartz, 1999, p. 127). This is not just a conclusion of modern Europeans. Throughout the ages, Arabs and Asians who have encountered Africans have also reached similar conclusions. (Davis, 2006, pp. 62-63; Rushton, 2000a, Chap. 5). If one accepts that man evolved from an ape, then it is to be expected that not all men evolved equally far away from that ape. Back

21. The older anthropological literature is replete with comparisons between Negroes and apes (<u>Hunt, 1864</u>; "U.S. citizens implicitly associate Blacks and apes." (Black psychologist J. Eberhardt; <u>Goff, 2008</u>). <u>Back</u>

22. (<u>Salter, 2003</u>, p. 68; drawn from <u>Cavalli-Sforza, 1994</u>, p. 79). <u>Back</u>

SECTION III The Out-of-Africa Theory

"We share a common ancestor -- a man who lived in Africa around 60,000 years ago. That's only about 2,000 generations... We're all effectively members of an extended family."

Spencer Wells, Genographic Project director

In this Section, ¹ we examine the Out-of-Africa ² ("OoA") answer to the question, "When and where did man become modern?" About 2 mya *Homo erectus* inhabited Africa, Europe, and Asia. In one of those locations he evolved into an archaic form of our species, *Homo sapiens* (*Hs*), then into modern man, *Homo sapiens sapiens* (*Hss*) and the people living today.

We will call the promoters of OoA, the dominant theory of our time, "afrocentrists." They believe that it was the <u>African erectus</u> that evolved into *Hs* and that *Hs* evolved into *Hss* in <u>Africa</u>, then those modern African *Hss* migrated out of Africa "replacing" all the more primitive people who were then living in Europe (Neanderthals) and Asia (*Homo erectus*). Once those modern Africans moved into Eurasia, they lost all the African traits described in Section II and evolved all the Eurasian racial traits we see in today's Asians and Europeans. That theory is consistent with egalitarianism because OoA holds that not very long ago all modern humans were Africans, so recently, in fact, that everyone is still virtually genetically the same, and therefore equal, particularly in behavior, intelligence, and the capacity for learning, but excepting "very superficial features like skin color and hair form." ³ Genetic differences between populations are of no biological importance, however, only if they are neutral, i.e., they have no effect on the reproductive success of those populations. But, as Section II shows, genetic differences between races, including skin color and hair form, were the result of natural or sexual selection, which means that they did affect reproductive success. ⁴

The principal competing theory, the Multiregional theory, $\frac{5}{2}$ is out of favor and is clung to by only a few die-hard scientists. And last, there is the theory presented in this book, which holds that Hs and Hss evolved in Eurasia (Out of Eurasia, "OoE"), not Africa. That theory will be presented in Section IV.

Figure III-1 is a tree that shows the OoA theory, where "LCA" is the last common ancestor of man (*Homo*) and chimpanzees (*Pan*).

The tree shows that <u>all</u> modern humans (*Hss*) evolved in Africa from an African *Homo erectus*. The tree also shows that Africans migrated out of Africa and into Asia 65,000 ya and Asians migrated into Europe 46,000 ya, becoming Caucasians. (<u>Mellars</u>, <u>2006</u>). According to OoA, the LCA in the tree lived in Africa; most scientists believe that <u>all</u> the hominoids in the human lineage, going back to a primitive mammal, lived in Africa.

The date of the proposed migration out of Africa is critical, as

that date must be consistent with fossil and genetic data. A date prior to 50,000 ya is needed to provide enough time for Africans to go to Asia before the earliest date of the modern cultural sites in Asia, ⁶ and then on to Europe and Australia before the date of *Hss* fossils discovered there.

On the other hand, since OoA holds that Hss, modern humans, arose 160,000 ya in Africa, the migration of *Hss* out of Africa must have occurred tens of thousands of years after that (Lewin, 1993, p. 98), which raises the question of what took them so long to leave? Also, the afrocentrists want to claim that the Μ and Ν macrohaplogroups coalesced (explained in Chap. 20) in Africa, before the migration out of Africa because those are the groups that modern Eurasians fall into. (If the coalescence occurred in Eurasia then. because M and N are modern, modern man arose in Eurasia, not Africa.) that coalescence Since occurred 65,000 ya, the about supposed migration must have occurred more



Figure III-1

recently than about 65,000 ya. The March, 2006, issue of *National Geographic* magazine (<u>Shreeve, 2006</u>) states that it is "virtually certain" that the date was between 50,000 and 70,000 ya, $\frac{7}{2}$ so a date of 65,000 ya will be used. ⁸

With that tree in mind, let's take up the story of man again with the OoA version and see how well OoA explains the facts. But first, let's clarify what "Africa" means. OoA deals with the migration of "Africans" 65,000 ya, who are presumed to have had traits similar to the people living south of the Sahara Desert in Africa today. ("Africans," in this book means those people living in sub-Sahara Africa, particularly the Congoids). Most of the fossils the afrocentrists cite in support of their theory, however, come from NE Africa, which is part of sub-Sahara Africa, but very close to the Middle East. Moreover, as we shall see in Chapter 26, the territory north of the Sahara, at least until several thousand years ago, was occupied by whites. So, for these reasons, "Africa" will refer to sub-Saharan Africa.

The OoA story is that <u>all</u> species of *Homo*, including even Heidi and the Neanderthals, evolved in Africa. Early man, e.g., *erectus*, migrated out of Africa, but did not evolve into modern man outside of Africa. The evolution of *erectus* into *sapiens* happened only in Africa, by about 160,000 ya, most likely in NE Africa. That raises the immediate questions, "If <u>modern</u> man was in Africa 160,000 ya why are today's Africans still primitive according to all the traits discussed in Section II?" Did present day Africans de-evolve from more advanced ancestors and become more primitive?

Another question that pops to mind is, "Why would tropically-adapted Africans leave Africa 65,000 ya when that was right in the middle of the first ice age (about 73,000 to 55,000 ya, pp 31-32), and large numbers of cold-adapted Eurasian hominids were moving south?"

And, one last question, "Why did <u>African</u> *erectus* become sapiens, rather than Asian or European *erectus*, especially since the environment in Eurasia was more selective for modern traits and the pay-off for becoming *Hss* was greater there?" The OoA answer to that question is that evolving into *Hss* was a chance event and Africa just got lucky. However, as discussed previously (<u>Chapter 4, FN 12</u>), chance is overrated as an explanation for biological phenomenon.

In the next chapter, we examine the fossil skulls that the afrocentrists cite to show that modern man was in Africa before he was anywhere else.

Chapter 17

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FOOTNOTES

1. Most of the ideas and references in Section III came from Ronald A. Fonda and are described in (Fonda, 2001) and on his web site. Back

2. Aka, Recent African Origin ("RAO"), Recent Single Origin Hypothesis ("RSOH"), and Replacement Hypothesis. (*Wikipedia*, "Recent Single Origin Hypothesis"). Back

3. "It looks as though all non-African diversity is a product of the second migration of Homo sapiens out of Africa - a migration so recent that there just hasn't been time for the development of much genetic variation except that which regulates some very superficial features like skin color and hair form." ("Race: The Power of an Illusion," PBS television series, interview with Stephen Jay Gould, 2003). Back

4. An egalitarian can argue that modern civilization has made at least some of those differences neutral, but it is difficult to prove a negative (no effect) and some effects may be subtle and hard to detect. <u>Back</u>

5. The <u>Multiregional Theory</u> (aka "Regional Continuity") holds that man evolved in Africa, left Africa about 2 mya for Eurasia and independently evolved on Africa, Australia, Asia, and Europe, with significant interbreeding. It is supported by Dr. Alan Thorne, a visiting fellow at the Australian National University's research school of Pacific and Asian studies, along with Professor Milford Wolpoff of the University of Michigan; also, Fred Smith and David Frayer in the U.S. and Wu Xinzhi in China. Also see (Coon, 1962) and (Weidenreich, 1947). "Unfortunately the implications of these rival theories have not been lost on either racists or anti-racists and there is a danger that the debate could become politicized." (Haywood, 2000, p. 42). <u>Back</u>

6. Modern humans were living in India prior to the explosion of Mt. Toba, 73,000 ya. (<u>Petraglia</u>, <u>2007</u>). <u>Back</u>

7. The same issue states that an earlier migration of modern humans made it to Israel, but died out about 90,000 ya. <u>Back</u>

8. However, a new study states, of the European-African split, "... we find a lower bound at 120,000 yrs and no upper bound." (<u>Plagnol, 2006</u>). Others believe there were at least two major population expansions out of Africa; one about 600,000 ya and another about 95,000 ya

(<u>Cann, 2002</u>) and that a much earlier expansion of *Homo erectus* from Africa occurred 1.7 mya. (<u>Templeton, 2002</u>). <u>Back</u>

Chapter 17 - Fossil Skulls

"In my hands, an ancient bone, hard and bare and long alone, 'Neath the ground, so very old, With a story to be told."

A fossil skull tells us what its long-ago possessor looked like, how intelligent he was, what he used his brain for, and even what he ate. It may also tell us who were his likely ancestors as well as his possible descendants, which is the evidence we are looking for in this book.

The afrocentrists argue that Africa has the oldest archaic (*Hs*) and modern (*Hss*) skulls and therefore modern man arose in Africa. But, as the character "Sporting Life" sang in Gershwin's *Porgy and Bess*, "It ain't necessarily so." Afrocentrists claim that several African fossil skulls are "modern" even though they are in some ways more primitive than some of the skulls of early man, shown in Chapter 2, and are more primitive than some European and East Asian skulls of about the same age. This is not surprising as living Africans are also more primitive than Eurasians, as described in Chapter 16.

Human fossils are rare because the conditions needed to preserve them are rare. ¹ Early humans did not bury their dead, so animals, decomposition, and the weather soon erased all traces of them. To be preserved, a body must be buried soon (hours, days, or months, depending on circumstances) after death in a way that excludes oxygen. This can happen if a catastrophic event, such as a volcanic eruption, a landslide, or a flash flood caused the death, or the person dies in a river that is depositing silt. So, if non-Africans were the first moderns, but did not die in areas where preservation was likely, an early African skull may not be from the first modern humans. Also, northern Africa is, and was, quite accessible to Eurasians and, as we shall see in Section IV, it is likely that modern humans arose outside of Africa, then migrated in to Africa, where they and their descendants died.

Even if the African skulls <u>are</u> modern and some of the humans from those populations <u>did</u> migrate <u>out of</u> Africa, that does not mean that <u>all</u> of today's modern humans came from those African modern humans; modern humans could also have arisen <u>both</u> inside and outside of Africa, as the Multiregional theory holds – independent evolution is very common. Flight, for example, independently evolved in insects, birds, and mammals and sight independently evolved in insects, mollusks, and vertebrates. If becoming "modern" required a series of changes in many different genes, man becoming modern is unlikely to have occurred independently on two different continents. But if it required only a single change in a single gene, such as a Hox gene that turns a host of other genes on or off, then independent evolution may not be unlikely at all.

Let us look at the most prominent skulls offered by the afrocentrists to prove that *Hss* arose in Africa.

Herto

As evidence for their contention that the oldest modern human skulls are found in Africa, the afrocentrists offer the Herto skulls, of two adults and one child. (Clark, 2003) However, these skulls are now assigned to the sub-species *Homo sapiens idaltu*, which indicates that they are *Hs*, not *Hss*, and therefore not "modern." The skulls were found near the village of Herto, in the Afar region of eastern Ethiopia in northeast Africa. Radiometric dating places the remains at between 160,000 and 154,000 ya. Figure 17-1 is a side view of one of the adult skulls.

This skull is of an almost complete adult cranium. It has a number of primitive features, such as large eye sockets, prominent





Figure 17-2

brow ridges, sloping forehead, large teeth, and a severe post-orbital constriction, which is a very primitive characteristic. The reader may compare the post-orbital constriction in the superior view of the skull (Fig. 17-2) with the skulls in Figures 9-7 and 9-14 to 9-16.

The adult Herto skull is also wider at the cheek bones, another erectus trait, and is much thicker and more robust than a modern, fully Hss skull. It lacks a saggital keel, but it does have an occipital bun, as in the Neanderthals. Although the jaw protrudes, it is not as much as it does in some living Africans. A further puzzlement is its cranial capacity of about 1450 cc, the average for Neanderthals, but larger than most living Caucasians (1441 cc) and significantly larger than most living Africans (1338 cc), though it is smaller than the average for Asians (1491 cc.). If present day Africans evolved from a Herto population, the

afrocentrists cannot explain how their brains shrank. Since Africans today have a significantly smaller cranial capacity than Herto, if Herto did evolve in Africa and today's Africans evolved from Herto, then large skulls, and therefore large brains and greater intelligence, must be a disadvantage in conclusion that afrocentrists Africa. а would find embarrassing. The patterns on the inside of the skull do not specifically match those of any contemporary group of modern humans, which suggests that Africans did not deevolve from Herto and that the Herto population was a dead end.

Moreover, Herto does not have features that are clearly African, but does have some non-African features, particularly the large cranial capacity. So what is this un-African skull doing in Africa? One clue may be the location where the Herto skulls were found. The village of Herto is in the famous Rift Valley, where Richard Leakey and other paleoanthropologists have found many human fossils. The

SUDAN GULF OF ADEN HERTC SOMALIA ADDIS ABABA ETHIOPI/ 250 km

Figure 17-3

village is only about 200 miles from the narrow strait that separates the Red Sea from the Gulf of Aden. The country of Yemen in the Middle East is on the other side of the strait. (Fig. 17-3).

Herto lived during an ice age (Fig. 5-1) when sea water was locked up in ice; sea levels were well over a hundred feet lower than today.² Thus, the passage of people across the strait from the Middle East into Africa could be expected.³ Eurasian *Hs*, escaping the cold, could easily have crossed from the Middle East into Africa. Interbreeding with African erectus would produce hybrids like Herto, who have a sapiens cranial capacity in a skull with some erectine features. This is likely the reason that afrocentrists have classified Herto as Homo sapiens idaltu instead of as Hss, despite their claims that Herto is modern. Thus, it cannot be concluded that Herto evolved in Africa.

Omo

The Omo skulls are also cited by afrocentrists as support for OoA. (McDougall, 2005). Like Herto, which was found near the Awash River in Ethiopia, Omo was also found near a river in Ethiopia, the Omo River near the village of Kibish (in Fig. 17-3, it's in SW Ethiopia near the top of the long blue lake). Omo is a bit older than Herto, dating to 195,000 ya. There are two partial adult craniums, Omo 1 and Omo 2 (Fig. 17-4), with Omo 2 being described as more primitive.

Omo 1 Omo 2



Omo 1 is only a skull cap, so not much

information can be obtained from it, but its upturned front and back ends indicate that it is very primitive.

Figure 17-1

Omo 2 has a cranial capacity of over 1400 cc and seems to be another Herto-type hybrid of Eurasian *sapiens* with an African *erectus*. Omo, like Herto can, at best, be *Hs*, but certainly not *Hss*, nor do the afrocentrists claim that these skulls are Hss; nevertheless, they claim these skulls are "modern."



Figure 17-5a



Figure 17-5b

Figures 17-5a and 17-5b show an African *erectus* skull, Kabwe, aka "Rhodesian Man" or "Broken Hill"). This male (Kennedy, 1984) skull is from the Broken Hill 1 site, near Kabwe, Zambia, in Africa. It is classified as a Heidi (Fig. 2-5) and is dated at 125,000 to 300,000 BP. It is very primitive but the capacity of the skull is between 1280 and 1300 cc, only slightly less than living Africans (1338 cc). Note the prominent ridges above the eyes, the extreme slope of the forehead, the saggital keel, and the protruding upper jaw ("maxilla").

Now, one might wonder, why does this 125,000 to 300,000 year old African skull look so much more primitive than the 160,000 to 154,000 year old Herto skull and the 195,000 year old Omo skull when it might actually be younger? Surely, the primitive Kabwe skull should have a much older date? Yes, it should, especially since it was found on the same continent. The answer to that question may come from looking at a map of Africa (Fig. 17-6).



Figure 17-6

Ethiopia, where Herto and Omo were found, is almost touching Yemen in the Middle East, but Zambia, where Kabwe was found, is deep in the interior of southern Africa. Zambia would have been a more difficult place for people from the Middle East to reach 125,000 to 300,000 ya. Any inconsistency between the age and primitiveness of the Kabwe and the Herto and Omo skulls is easily resolved by the hypothesis that Herto and Omo were the descendants of *Hs* or *Hss* Eurasians who had migrated into Africa and had interbred with indigenous African *erectus*, such as Kabwe. If that simple hypothesis is correct, then modern man did not evolve in Africa. $\frac{4}{2}$

Eurasian Fossils

Now let's look at some Chinese skulls, starting with a gruesome, but happy, Chinese *erectus*, reconstructed by Franz Weidenreich. (Figures 17-7).



Figure 17-7a

Figure 17-7b

This skull is known as Peking Man (aka "Beijing Man"), pieced together from the fossil remains of several different individuals found at the Dragon Bone Hill site, Zhoukoutien, near Beijing, China. Note the prominent brow ridges, the sagittal keel, occipital bun, and protruding jaw with no chin. Although it has primitive features, its cranial capacity is about 1075 cc and, aside from being larger, its teeth and arm bones are indistinguishable from those of modern man. It is estimated to be between 300,000 and 500,000 yrs old, older than Kabwe. Unfortunately, the original of the skull was lost in WWII, so it cannot be accurately dated. Animal remains and evidence of fire and the manufacturing and use of tools were found nearby. The flaking of his stone tools shows that Peking Man had already developed handedness, and was right-handed. (Howells, 1948, p. 49).



Figure 17-8



Figure 17-9

Figure 17-8 is a particularly interesting skull from China, known as "Dali." It has a mixture of erectine traits (saggital keel, heavy brow ridges) and *sapiens* traits (delicate cheek bones, flat face). The endocranial volume is about 1120 cc (*Encyclopedia Britannica*) and, although uranium series dating of ox teeth from the site gave a date of 209,000 \pm 23,000 yrs, other testing gives a date of about 270,000 yrs. (Xiao, 2002).

Next compare 125,000 to 300,000 year old Kabwe (Fig. 17-5) to the 260,000 year old skull in Figure 17-9 from Jinniushan, China. (Rosenberg, 2006). Although Jinniushan and Kabwe both date from about the same time, Jinniushan is classified as an *Hs*, while Kabwe is classified as an *erectus*. Also, the cranial capacity of Kabwe is 1280 to 1300 cc, but the cranial capacity of Jinniushan is about 1330 cc (Rosenberg, 2006), comparable to the average of today's Africans (1338 cc), and Jinniushan is the skull of a woman. Although women have smaller skulls than men, this woman is estimated to have been 5' 5 1/2" tall and weighed 173 pounds. (Bower, 2006). If the Chinese archaics were so much farther evolved than the African archaics, just as today's Chinese are far more advanced than today's Africans, isn't it more reasonable to conclude that modern man evolved in Asia rather than Africa?

Figure 17-10 shows a skull found in Liujiang County, China. It is unequivocally modern (<u>Shen, 2002</u>) and should be classified as *Hss.* The top of the skull is smooth and evenly domed and shows not even a hint of a thickening or a saggital keel. There are no brow ridges and the face is refined with small teeth. The Liujiang skull was initially dated at 87,000 BP ⁵ but it was found in sediment dated at 110,000 to 138,000 yrs old ⁶ and some experts believe it is over 150,000 yrs old. ⁷ Its skull capacity is a remarkable 1480 cc (<u>Wu, 1995</u>), higher than today's Caucasians (1441 cc), much higher than today's Africans (1338 cc), and only slightly less than today's Asians (1491 cc). The Liujiang skull proves that modern man was in China long before 65,000 ya, when the afrocentrists say he left Africa.

Another difference between the Kabwe skull and the four Chinese skulls (Peking Man, Dali, Jinniushan, and Liujiang), that is not as easily seen, is that the Chinese skulls have "shoveled" incisors. Shoveled incisors (Fig. 9-28) are seen only rarely in living Caucasians and almost never in living Africans (except for Bushmen), but they are common in living Asians and Native Americans that came from Asia. ⁸ But where did the Asians get them from?

All of the Chinese fossils (that have incisors) have shoveled incisors, dating back to the earliest Asian *Homo erectus* (Java Man) about 1.8 mya. ⁹ Hmmm. Now if the Chinese *H. erectus* had shoveled incisors, Peking Man, Dali, Jinniushan, and Liujiang had shoveled incisors, and many of the Chinese alive today have shoveled incisors, and a significant percentage of no other living population outside of Asia commonly has them, it doesn't



Figure 17-10

take a Sherlock Holmes to figure out what's going on here. Modern Chinese evolved from an Asian *erectus* that was already different from *erectus* in Africa and Europe! ¹⁰ The OoA position, that the Asian *erectus* with its shoveled incisors was replaced by modern Africans without shoveled incisors 65,000 ya, who then evolved shoveled incisors a second time in Asia, is simply incredible.

In addition to shoveled incisors, all Chinese skulls from *erectus* to the present show a remarkable similarity in head shape and facial characteristics, as well as a gradual change in features. (Pope, 1992).

Table 17-1 summarizes the skulls presented in this chapter; Java Man is from Indonesia, but hominin fossils of about the same date have been found in China (<u>Zhu, 2008</u>).

Skull	Classified as	Cranial Capacity (cc)	Age (ya)	
Java	H. erectus	940	1,700,000	
Peking	H. erectus	1075	500,000 - 300,000	
Dali	Erectus-sapiens	1120	270,000	
Jinniushan	Hs.	1330	260,000	
Liujiang	Hss	1480	150,000	
Living Asians	Hss.	1491	0	



Table 17-1 shows an almost continuous increase in cranial capacity from *H. erectus* to modern Chinese, excellent evidence that modern Chinese evolved in China. (Etler, 1996). And, while we are on this subject, take a look at the Chinese "firsts" in Table 17-2. $\frac{11}{2}$

First	Date	Place in China Reference (see Morton, 2002)	
Occupation of China ¹²	2.25 mya	Renzidong Cave, Anhui	(<u>Hotz, 2000</u>)
Occupation in Asia north of 40° latitude ¹³	1.36 mya	Nihewan Basin	(<u>Zhu, 2001</u> , p. 413)
Asian hand ax ¹⁴	800 kya	Rezidong Cave, Anhui	(<u>Hotz, 2000</u> , p. 24)
Asian fire ¹⁵	500 kya	Zhoukoudian	(<u>Barnouw, 1982</u> , p. 141)
Association of men with dogs $\frac{16}{10}$	500 kya	Zhoukoudian	(<u>Serpell, 1995</u> , pp. 8-10)
Oldest writing	8600 ya	Jiahu	(<u>Senner, 1989</u>)

Table 17-2

(All "firsts" are by *erectus* except writing, which is by *Hss*.) Are these tables consistent with the OoA theory, which asserts that there were no modern men in China until modern Africans left Africa 65,000 ya and migrated there thousands of years later? $\frac{17}{17}$

The Hobbit

In 2003, an 18,000 year old skull of a 32 year old (age approximated from worn teeth and fused skull bones) female was discovered on the Indonesian island of Flores ("Homo floresiensis"). She was about 1 meter tall (3' 4") and had a cranial capacity of only 417 cc, ¹⁸ smaller than a chimpanzee's, though the frontal part of her brain would have been "well-wired." The skull appeared to be a dwarf form of an early erectus, earning it the nickname, the "Hobbit." ¹⁹ The Hobbits were fully bipedal, used stone tools and fire, and hunted dwarf elephants also found on the island. The skull (Fig. 17-11) had a protruding jaw, large teeth, brow ridges, and the sloping forehead; both a chin and an external nose are absent. The skeletons are also reported to have "shoulders ... hunched slightly more forward than in modern humans, and ... extraordinarily short legs ended in long feet." 20 Note that the ape skeletons (Fig. 9-30) have shoulders hunched forward and short legs. The feet of apes are also long in proportion to their height. (Coon, 1962, p.



Figure 17-11

248). The Hobbits show similarities to *Homo habilis* above the neck and to *Australopithecus* below the neck. ²¹

Since the current population of Flores is also of very small stature and the Hobbits were living there from at least 94,000 ya to at least as recently as 13,000 ya, ²² they may have been ancestors of the current population on the island. The afrocentrists take the position that all living people are modern, but the Hobbit skull (Fig. 17-11) clearly is not modern, so either the Hobbits evolved into modern humans in only 13,000 yrs (extremely unlikely) or the present population is not modern (no, the afrocentrists insist that every living person is modern, and if they are modern, the Hobbits must have been modern). The only other possibility is that OoA is wrong and modern humans either did not arise only in Africa and leave only 65,000 ya, or they did not evolve in Africa at all.

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FOOTNOTES

1. (<u>Schwartz, 2005</u>, p. 90). Most African fossils have been found in the Rift Valley of East Africa, which once had volcanoes. Volcanic ash quickly killed, buried, and preserved hominids, a blessing for paleoanthropologists that Eurasia did not have. Consequently, that's where they look for hominid fossils and, if you don't look, you don't find. <u>Back</u>

2. The Cosquer cave on the Mediterranean, where Cro-Magnon paintings were found, is now 120 feet below sea level, an indication of how much water was tied up in glaciers during ice ages. <u>Back</u>

3. Note, in the discussion of <u>Chapter 26</u>, Figure 2, that the area where these fossils were found was mixed Negro and white in 1492; if migration was into Africa, instead of out of Africa, the area would have been all white at the time the fossils lived. <u>Back</u>

4. If modern man had evolved in Africa and migrated out of Africa through NE Africa 65,000 ya, one would expect there to be racial continuity between prehistoric NE African skulls and the skulls of today's NE Africans. However, none was found. (Howells, 1989, citing: Skull shapes and the map: craniometric analyses in the dispersion of modern Homo. (1989) and Who's Who in skulls: ethnic identification of crania from measurements (1995), *Peabody Museum Papers* 79:1-189 and 82:1-108, respectively). Back

5. Teeth from the site were dated at 95 kya by uranium dating. Back

6. There were two mudstone layers in the unexcavated cave deposits and there were two corresponding layers in the internal cranial deposits of the skull; the oldest layer has been dated at 110 kyr. (Zhao, 2004). Back

7. "TIMS U-series [thermal ionization mass spectrometry, uranium series] dates for another hominid fossil from Liujiang, that is an anatomically modern Homo sapiens fossil show that the Liujiang hominid is probably older than 150 ka. This exceeds the age estimate the oldest anatomically modern hominid in Africa." Advanced Centre for Queensland University Isotope Research Excellence. Also see (Shen, 2002). Back

8. American Indians, Eskimos, , Mongolians, and part of the Japanese and Chinese populations have the highest incidence of shoveled incisors, followed by Hawaiian aborigines, most of the Japanese and Chinese, then the Indonesians, Polynesians, Micronesians and Ainu; American Negroes, Bantu, Fijians, American whites, and Finns have the lowest incidence. (Suzuki, M. & Sakai, T., "Morphological analysis of the shovel-shaped teeth," *J. Anthrop. Soc. Nippon*, 74:202-218). <u>Back</u>

9. (Swisher III, 2001). Java Man is similar to Peking Man but is the only hominid with a gap ("diastema") in its upper jaw to provide space for the lower canines. (Howells, 1959, p. 157). "... the shovel shape of the incisor teeth, can be seen in fossils 750,000 years old; in the famous Peking Man fossils, which are a quarter of a million years old; and in modern Chinese populations." (Leakey, 1994, p. 88). Living Chinese people also have flatter frontal bones and wider and more prominent cheekbones than other modern humans (Chap. 9, Fig. 17), and so do many *Homo erectus*, archaic, and human fossils skulls found in China. *Erectus* and *Hs* from other regions also show racial characteristics, which indicates that the races of man are ancient and arose even before the species of man. (Coon, 1962, p. 351). Back

10. (<u>Chap. 4, Rule 10</u>; <u>Wolpoff, 1991</u>). An examination of over 5000 fossil teeth going back to *Australopithecus* showed that African teeth differ from Eurasian teeth. (<u>Martinón-Torres, 2007</u>). <u>Back</u>

11. (<u>Morton, 2002</u>). To the list, one can add earliest death ritual, 500 kya. (<u>Corballis, 1991</u>, p. 42, citing <u>Clark, 1969</u>). <u>Back</u>

12. Two million year old worked stones have been found in China and Indonesia. (<u>Coppens, 2004</u>, p. 99). <u>Back</u>

13. "Stone tools found," *BBC News*, Sept. 27, 2001. Also, <u>THIS Back</u>

14. Tools may have been used earlier in Asia than in Africa or Europe, but if they were bamboo tools rather than stone tools, there would be no trace of them today. <u>Back</u>

15. "Sinanthropus [Chinese *erectus*] had fire." (Coon, 1962, p. 436; Howells, 1948, p. 148). At Dragon Bone Hill, the Chinese *erectus* had fire in a cave between 620,000 and 410,000 ya, long before *Hss* allegedly arose in Africa 160,000 ya. (Boaz, 2004). Fire use was recently reported in Africa up to 1.5 million ya but evidence for control of the fire may not be decisive. "Only in Africa is there evidence that fire arrived late, as late as 40,000 years ago." (Coon, 1962, p. 332). The higher vulnerability of blacks to lung cancer may be because they did not possess fire as early as other races. (See PDE4 gene in Chap. 13.) Back

16. This should probably be "wolves," instead of "dogs." (Olsen, 1977). Back

17. "In my opinion, the Sinanthropus [Chinese *erectus*] remains show that as early as 360,000 years ago some peoples had attained a level of social organization in which men of fifty, who had passed their physical prime, were tolerated, if not fed, by their juniors." (Coon, 1962, p. 103). <u>Back</u>

18. Note the dent in the top of the head, similar to some African skulls (<u>Chap. 9, Fig. 13</u>), perhaps suggesting an ancient *erectus* common ancestor. <u>Back</u>

19. Some scientists believed the Hobbit was not a new species of humans, but a modern human who had microcephaly, a (usually) genetic disease that produces a small head and brain. Later, two mandibles and the bones of at least 9 similar individuals were found, and they could not all be microcephalic. Unlike modern humans, the mandibles had some twin-rooted molars, which also suggested a new species. (Gordon, 2008). Back

20. (<u>Brown, 2004; Morwood, 2004</u>, 2005; <u>Lahr, 2004</u>; also see footnote on page 112 of <u>Coon, 1962</u>). <u>Back</u>

21. (Tocheri, 2007). Also see (Berger, 2008) for similar findings on Palau in Micronesia. Back

22. Bones of other individuals and stone tools support those dates. Powledge (2006) says Hobbits lived only 12,000 ya and they may have lived as recently as 250 ya. The small people now living on Flores say the Hobbits stole and scavenged from their villages. They chattered, were naked, and lived in caves. (Davies, 2004). When they took an infant, the villagers killed every Hobbit they found. (*Wikipedia*, "Ebu Gogo"). Back

Chapter 18 - Modern Behavior

"Historical and sociological studies support the view that genetic differences are not of importance in determining the social and cultural differences between different groups of Homo sapiens."

United Nations, Unesco, 1950

Paleoanthropologists make a connection between "modern" (*Hss*) anatomy, which they say arose 160,000 ya, and "modern" behavior. If a population is (or was) anatomically modern, it should be (or should have been) capable of modern behavior and there should be some evidence of such behavior. Conversely, if there is no evidence that a population engaged in modern behavior, then doubt is cast on whether the anatomy of a population has been correctly categorized as "modern."

"Modern" humans, i.e., *Hss*, did not just make functional tools and weapons, as did *erectus* and *Hs*, but had a culture – drawings, musical instruments, burying their dead with artifacts. The first definite evidence of human culture is beads over 100,000 yrs old found in Israel. ¹ Thus, if Omo has a modern skull, as the afrocentrists assert, then modern man in Africa went about 60,000 yrs without modern culture, even though he was supposedly capable of creating it. ²

Did any Africans engage in modern behavior before recent incursions of modern Eurasians into Africa? As we saw in Chapter 15, Africans did not come any where near creating civilizations, which would certainly have constituted modern behavior.

Traveling farther across water than one can swim, which requires, at the minimum, only a few logs secured together, is certainly modern behavior. If Africans became modern 160,000 ya, this is one modern behavior they could easily have engaged in. But there are many large islands just off the coast of Africa that were not visited or settled by Africans. Off the Western coast lies the seven Canary Islands, only 108 km (67 miles) away, with the highest peak visible from Morocco; they were first settled by white Berbers. Howells, 1948, p. 272). Zanzibar is only 32 km (20 miles) off the eastern coast, but was visited by Egyptians (2500 BC) and Phoenicians (600 BC) long before Africans (Bantu, 100 AD). The fourth largest island in the world, Madagascar, lies just 370 km (229 miles) off the eastern coast of Africa, with the smaller Comoros islands in between, yet the islands were first settled by Indonesians, not Africans. (If the reader will refer to the map of Africa (Fig. 17-6) he can identify these and other islands off the coast.)

Meanwhile, stone tools found on the island of Flores indicate that Asian *erectus* was using boats 800,000 to 900,000 ya. (Morwood, 1998; O'Sullivan, 2001). How is that possible when supposedly modern man in Africa could not even reach islands just off the African coast a few thousand years ago? To have not explored and settled islands, even some that are visible from Africa, strongly suggests that Africans, even recently, had not become modern, so to suppose they were modern when they allegedly migrated out of Africa 65,000 ya is ludicrous. How could supposedly modern Africans not only leave Africa and travel throughout Europe, Asia, and even to Australia and South Pacific islands, but never reach islands just off their own coast?

Domesticating an animal is behavior that is clearly modern. Domestication requires keeping an animal within a limited space so that it can be located and easily captured, feeding, watering, and protecting it, and selectively breeding it for traits that are useful to man. The domestication of a wild animal, particularly a dangerous wild animal, unlike making simple tools, which even chimpanzees and some birds can do (FN 444, p. 106), requires a modern mind that can plan for the future ³ and can engage in complicated behavior. There is no evidence that any animal was domesticated in sub-Saharan Africa. Some tribes (Zulus, Masaï, Tutsis) do herd

cattle, but those tribes have interacted with Arabs, who did have domesticated cattle. 4

The NE Asian wolf was the first animal to be domesticated, between 100,000 and 130,000 ya. ⁵ Now, can you guess where the NE Asian wolf lived? If you guessed in NE Asia, you win an honorary paleoanthropologist merit badge. And, one more guess, where did the people live who domesticated it? If you guessed "Africa," go back to Chapter 1. So, again, the OoA theory fails because modern man must have lived within the range of the NE Asian wolf, which does not include Africa, long before the afrocentrists say he left Africa.

There is other evidence that people outside of Africa engaged in modern behavior before 65,000 ya, the date that the afrocentrists say the first modern man left Africa. Heidi was killing elephants, twice the size of today's elephants, with wooden spears and butchering them with flint tools 400,000 ya in Great Britain. ⁶ In Germany, seven balanced throwing spears, over 400,000 yrs old, were found with stone tools and the butchered remains of more than 15 horses; these are "the world's oldest wooden throwing spears – so far the oldest complete hunting weapons of humankind." (Thieme, 1997). This find strongly suggests that systematic hunting, involving foresight, planning, and appropriate technology – all modern behavior – occurred in Europe long before modern man allegedly even arose in Africa. The <u>BBC News</u>, June 20, 2006, reported that a 250,000 year old cleaver and "giant flint hand axes" of "exquisite, almost flamboyant, workmanship" were found in Britain, which is also modern behavior. People were living as far north as Finland, where tools were found in and below layers dated at 340,000 to 300,000 ya. (Schulz, 1998). In southern France, 73,000 year old prehistoric man was burning coal for fuel. (Thery, 1996). Neanderthals (at least 60,000 ya, Kebara, Israel) and pre-historic man in Europe were burying their dead before Africans.

In the Northern Territory of Australia, stone tools and other artifacts, including a large piece of hematite that had been used as a red pigment, were dated by archeologist Rhys Jones at about 53,000 to 60,000 BP, with the latter date more likely (<u>Roberts, 1993</u>); that date would allow only 5000 yrs to migrate there from Africa.

The control of fire, i.e., keeping a fire burning in one location (and probably also being able to start a fire), is one of the most important modern behaviors because control of fire vastly extends to the north the territory that could be occupied. Fire breaks down meat for easier chewing and digestion, leads to metallurgy, and is a powerful defense against predators (e.g., the cave bear in the north, which competed for living space). The earliest hearths are in Israel 790,000 ya (Goren-Inbar, 2004), Vétesszöllös in Hungary, and Choukoutien near Peking, dated at 400,000 to 500,000 ya (Chap. 17, Table 2). In Africa, clear evidence of controlled fire is not found until about 60,000 ya, at Kalambo Falls, Zambia, although many earlier living sites have been found in Africa. ⁷ The much earlier controlled use of fire by the Eurasians strongly implies that the selection pressures for advanced technology were greater in the north and that Eurasians responded to those pressures, again suggesting that modern man did not arise in Africa.

In one of "the coldest, driest places in Europe," on the Don River in Russia some 250 miles south of Moscow, scientists found 45,000 to 42,000 year old stone, bone and ivory tools, as well as perforated shell ornaments and a carved piece of mammoth ivory that appears to be the head of a small human figurine. (Anikovich, 2007). Could Africans, in only the 20,000 yrs since they allegedly left Africa 65,000 ya, have traveled and lived that far north?

In the next two chapters, we look at mtDNA evidence that the afrocentrists cite to prove their case.

Chapter 19

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FOOTNOTES

1. (Vanhaeren, 2006). Simple items of personal adornment, e.g., beads, carnivore teeth with holes drilled through them, were probably the first cultural items, especially in populated areas, as they enhanced status. Small stone blades and a pigment associated with body painting, dated about 164 kya (±12 kyrs), were found in a cave at Pinnacle Point on the south coast of South Africa. The pigment could have been used to draw symbols. (Marean, 2007). This was during an ice age (Chap. 5, Fig. 1), when Africa was cool and dry and, since human fossils were not found with the artifacts, it is not clear which human made them. Back

2. A possible explanation is that there is no point in creating culture unless there is a social organization that it can influence, and such social organizations did not arise until environmental conditions forced an intensification of social relations. (Allman, 1994, p. 199). However, man's brain grew to about modern size about 100,000 ya and that growth is often attributed to more complex social relations. Back

3. Chimpanzees do not plan for the future. (Arsuaga, 2001, p. 28). Back

4. "[C]attle-keeping ... is not strictly typical of negro culture at all." ("<u>Negro</u>." 1911 *Encyclopedia Britannica*). Also see (<u>Baker, 1974</u>, pp. 357-360). <u>Back</u>

5. (Wayne, 1993) Wayne's research, which is based on complete nuclear DNA (rather than segments of only mtDNA), shows that dogs are over 100,000 years old. The oldest known remains of a dog, however, date to only about 14,000 ya in Russia (Sablin, 2002), with another 14,000 ya find in Germany, where a dog was buried with two people. (Olsen, 1985). The range of the NE Asian wolf extended into Eastern Europe. The bones of wolves have been found with hominoid bones in China, dated 500,000 ya. (Olsen, 1977). The cat started living with humans as early as 130,000 ya in the Middle East, protecting stores of grain from rodents. (Driscoll, 2007). Back

6. (<u>Wenban-Smith, 2006</u>). A 500,000 year old fossilized rhinoceros shoulder blade with a projectile wound in it was found at Boxgrove, England. (Pitts, M. & Roberts, M., *Fairweather Eden*, 1997). <u>Back</u>

7. Burnt bones at the Swartkrans site in South Africa dated at 1.5 million years (Brain, 1988) and baked clay at the Chesowanja site in Kenya at 1.4 million years (Gowlett, 1981, 1982) may show earlier use in Africa, but fires are started by lightning, especially during drought, though man may have made use of them; the extremely early dates in an environment where warmth is not critical arouses skepticism. Back

Chapter 19 - MtDNA

"... it is also a good rule not to put overmuch confidence in the observational results that are put forward until they have been confirmed by theory."

Sir Arthur Stanley Eddington, British astronomer and physicist

"Eve" is a metaphor that the afrocentrists have given to our ancestral mother, who they believe lived in Africa about 150,000 ya (<u>Shreeve, 2006</u>), and from whom all living humans derived their mtDNA. "Eve" was not a single woman, however, since at least a thousand breeding pairs would be needed for a viable population. ¹ According to the afrocentrists, all the women in that founding population either had the same mtDNA or, if they had different mtDNA, did not have daughters.

As support for Eve living in Africa, and for her date of 150,000 ya, afrocentrists point to studies of mtDNA in living people. Cells were collected from people all over the planet and were analyzed to determine the A-C-G-T base sequences (see <u>Appendix</u>) in their mtDNA; people within each geographically separated population tend to have many of the same A-C-G-T sequences, but those sequences are different in other populations. ² For example, at a particular location ("locus") on an mtDNA string, Europeans may have an A while Asians have a T. Differences in the A-C-G-T bases at a locus are called "SNPs" (single nucleotide polymorphisms). ³ Now the scientists had to decide what was the original base (A, T, C, or G) at each locus and which base (A, T, C, or G) is the mutation; the population with the original base was then be presumed to be the older, ancestral population from which all other populations descended. However, as we shall see, that reasoning may not be valid.

So the scientists programmed a computer that created millions of "trees," with different populations at the bottom and on the various branches, based on "A's" changing to "T's" and "T's" changing to "A's" and so on. The assumption was made that the "correct" tree, that showed the actual changes that occurred in the bases over at least tens of thousands of years, would be the simplest tree, the most "parsimonious" tree. ⁴ The computer compared all these different trees and picked out the simplest tree and, low and behold, it was the tree with the Africans at the bottom, just as OoA had predicted.





The tree in Figure 19-1 (from *Wikipedia*) is imposed on a map of the world to show human migrations (black arrows) under the OoA theory. The blue lines represent the boundaries of areas covered in ice or tundra during the last ice age. The colors in the list on the right of the map are for the circles and the numbers for the colors in that list give the number of

thousand years BP, i.e., before 1950. The letters and numbers inside the small white circles are for the groups of mtDNA alleles ("haplogroups," see next chapter) that people living in those areas have. $\frac{5}{2}$

The tree begins with an upside-down Africa in the tail of this weird-looking bird, then spreads to Asia (body) and Europe (left wing - orange circle), down to Australia (foot - red circle) and across the Bering Strait to North America (neckblue circle) and South America (head - green circle). Unfortunately, the bird didn't fly because the biologists who did the calculations were not mathematicians and, when a mathematician checked their work, he flunked them. The OoA tree was not the simplest tree. In fact, there were over a billion parsimonious trees. ⁶

So the mtDNA analysis does not show that Eve was an African. Can it at least tell us how long ago Eve lived? Since scientists now have all these mtDNA sequences and know how many SNPs there are, if they can assume that (1) every mutation that has occurred in Eve's mtDNA is represented by a SNP in the data they have and (2) the mutation rate is constant (i.e., one mutation every X years), then they can easily calculate how long ago Eve lived, the "coalescence" date. But are those two assumptions reasonable?

As to the first assumption, there are several reasons why the number of SNPs observed may be greater than the number of mutations that have actually occurred. Occasionally, during fertilization, the tail of a sperm will enter the egg along with its head, thereby adding the father's mtDNA to the mother's and possibly ending up in her daughter. (Hagelberg, 2003). If the father's mtDNA is different from the mother's, the scientists may count those differences as additional mutations, making the coalescence date seem farther in the past than it really was. Also, some of our male ancestors may have interbred with a female of another subspecies of Hs. If the daughters were accepted into our lineage, the scientists would count these additional SNPs as mutations and conclude that the coalescence date occurred much farther in the past than it did.

The number of SNPs may also be less than the number of mutations that have actually occurred. A mutation may occur, then later a second mutation may occur at the same location that reverses the first mutation, for example, A→T, then later $T \rightarrow A$. The scientists don't see any SNP at that location and they count no mutation, when really two mutations occurred. and therefore the coalescence date is older than they think it is. Also, two or more mutations may have occurred at the same site. Suppose $A \rightarrow T \rightarrow G$. All the scientists see is an $A \rightarrow G$, so they count only a single mutation when there were really two mutations, and they again think that the coalescence date is more recent than it actually was.

Scientists have obtained ancient animal mtDNA⁸ from fossil bones and teeth and date those bones by chemical and physical means. They can compare that mtDNA to mtDNA obtained from living descendants of those animals and count the number of SNPs. After adjusting as best they can for all the possible sources of error mentioned above, they divide the number of mutations by the number of years, which gives them the mutation rate, the number of mutations per year. They can then take the number of mutations in all living humans (as estimated from the number of SNPs), divide by the animal mutation rate and determine when all those humans started out with the same mtDNA (i.e., the coalescence date, the date that Eve lived).

But even if the number of SNPs is correctly adjusted for all the possible sources of error described above, the second assumption, that mtDNA mutates at a constant rate, must still be made. If, for example, hundreds of thousands of years go by and the mtDNA does not mutate at all and then there is a shower of cosmic rays or a volcano spews mutagens into the atmosphere, causing a large number of mutations, the mtDNA clock is not going to be accurate because it will be slowing down and speeding up. ⁹ And, when fossil bones are used to determine the mutation rate, additional assumptions must be made. The humans who lived at the time of the fossils and those who lived today were not genetically the same and may not have had the same resistance to mutations. After the Industrial Revolution, thousands of additional mutagens that never before existed were spewed into the atmosphere and the drinking water, so since about 1750 there may have been a higher number of mutations, making the date for Eve appear older than it was.

For these reasons, until technical problems are overcome, the mtDNA data cannot be relied upon for either the location of Eve or her date. ¹⁰ If the computer-generated tree made by afrocentrists does not prove that Eve lived in Africa, or even reliably when she lived, is it nevertheless possible to use the mtDNA data in another way to find out where she lived?

The OoA proponents claim the Founder Effect supports OoA. The Founder Effect means that as a genetically diverse group spreads into new territories, the new territories are settled by only small portions of the original group. Each of the smaller groups is genetically less diverse than the original group so, if we look at living populations, the less diverse groups must have descended from the more diverse founding group. Since Africans have the most genetically diverse mtDNA, Asians and Europeans must have come from Africans. Figure 19-2 (Long, 2003, p. 15) shows the amount of genetic variation for the three major races.

Note in Figure 19-2 that the variations found in Africans include almost all the variations found in Europeans and Asians. The OoA explanation for this is that only a portion of the Africans, i.e., those within the red and green circles, left Africa and became the Europeans and the Asians. Another possible explanation, discussed in Section IV, however, is that the Africans who are outside the green and red circles are the descendents of very early Eurasian hominoids who migrated into Africa a long time ago, but became

extinct in Eurasia, due to Toba, the ice ages, plagues, the inability to compete with more advanced populations, etc. To explain in more detail, at some SNPs some Africans might have an "A," others a "T," and still others a "G," while all Eurasians have a "T." There are many SNPs like that, where Africans have more variation than do Eurasians. (Eurasians also have some SNPs that Africans do not have, but not as many.) This means that, although some alleles are specific to each of the races, there are more African-specific alleles than European, Asian, or Eurasian-specific alleles. ¹¹ Since DNA (both nuclear and mtDNA) gradually mutates, a population will gradually accumulate more variation as it ages. Because Africans have more variation in their SNPs than do Eurasians, the afrocentrists argue that Africans must be older than Eurasians.

Given the fact that Africans have more variation in their DNA than Eurasians, does that prove they are older? No, because they may have gotten some of those additional variations by interbreeding with non-Africans, especially non-sapiens non-Africans, who migrated into Africa but died out elsewhere. 12





Next, the afrocentrists argue that since the greater diversity of Africans shows that they are older, Eurasians must have evolved from Africans. But the fact that one population is older than another population does not imply that they are related as progenitors and descendants; a young insect did not descend from an old reptile. The afrocentrists <u>assume</u> that either Africans came from Eurasians or Eurasians came from Africans, then argue that since one descended from the other, the younger Eurasians came from the older Africans. ¹³ In other words, the afrocentrists have to <u>assume</u> descent in order to argue for their order of that descent! The afrocentrists' assumption that either Africans evolved into Eurasians or Eurasians evolved into Africans fails to consider the possibility that neither descended from the other and that both descended from one or more common ancestors.

Figure 19-3 is a simplified tree of what the afrocentrists are proposing, where "LCA" is the last common ancestor of chimps and humans, and Figure 19-4 is a simplified alternative tree that is consistent with Africans having greater genetic variation.



If both of the assumptions made by the afrocentrists (i.e., Eurasians and Africans are in the same lineage and more variation = older) are wrong and Eurasians did not evolve from Africans, but from a common ancestor with Africans (LCA), and the greater variation in African alleles is not due to their greater age, but to the infusion of DNA into Africa from multiple non-African hominoids who migrated there, ¹⁴ then the tree would look like Figure 19-4 (omitting intermediates). In Figure 19-4, the Eurasians did not descend from Africans and are not younger than Africans; Eurasians just gave Africans some alleles from time to time, adding to the variation in Africa.

As we shall see in Section IV, the tree of Figure 19-4 is more complicated, but it explains much more than does the OoA tree.

Chapter 20

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FOOTNOTES

1. (<u>Harpending, 1998a</u>). There is also a "50/500" rule of thumb, that at least 50 individuals are needed to begin a new population and at least 500 to keep it going for a long time. <u>Back</u>

2. OoA postulates that racial differences began only 65,000 ya, but some mtDNA differences between today's Africans and Eurasians are older than that, as we shall see, which is not consistent with OoA. Back

3. SNPs that occur in less than 1% of a population are ignored for the purpose of establishing descent as they are considered random. About 90% of human genetic variations are SNPs; they occur every 100 to 300 nucleotides. (Human Genome Project Information, "SNP Fact Sheet"). Back

4. That assumption has been questioned because evolution does not always proceed straightforwardly. Also, there are many problems defining "parsimony" because the time between A-C-G-T changes is not known or considered and changes that took a very long time or a very short time may be incompatible with some trees. Also, the geographical locations where the A-C-G-T changes occurred is not known or considered and some of those locations may be too far away from the next step in the tree; the parsimony techniques gives equal weight to all changes, but some changes were no doubt much more important than others and critical changes must be in the right place on the tree, even if the tree is not parsimonious. (Schwartz, 2005, pp. 179-181). Back

5. Individuals who have the same haplogroup have interbred and are related. Thus, people in the M haplogroup in Australia are genetically close to the people in the M haplogroup in India. The Asians in the A, B, C, and D haplogroups are related to the Amerindians; the Ainu in Japan are also in haplogroup B. The X haplogroup in both Europe and in some Amerindians shows a relationship between them. Back

6. Henry Gee, a member of the editorial staff for the journal, *Nature*, described the studies as "garbage." Gee calculated that the total number of potentially correct parsimonious trees is somewhere in excess of one billion. (Gee, 1992). In a letter to *Science*, Mark Stoneking (one of the original researchers) acknowledged that the theory of an "African Eve" had been

invalidated. ("African Eve theory takes a step back," New Scientist, Feb. 15, 1992). Back

7. The coalescence date is not necessarily the date that our species, Hss, began, however, though it may be. Back

8. There are thousands of copies of mtDNA in a cell and only one copy of nuclear DNA, so the chances of finding mtDNA preserved in old bones is much greater. Back

9. For example, a mutation may occur that is almost neutral and survives for thousands of years with few variations occurring in it. If the environment changes, e.g., a new disease, a different climate, that mutation may become vital and spread rapidly throughout the population, greatly increasing the number of people who have it and the number of variations in it. <u>Back</u>

10. "We call into question the use of mtDNA for studies of human evolution." (Curnoe, 2003). Back

11. "... the gene pool in Africa contains more variation than elsewhere, and the genetic variation found outside of Africa represents only a subset of that found within the African continent. From a genetic perspective, all humans are therefore Africans, either residing in Africa or in recent exile." (Pääbo, 2001). Back

12. "A surprising prediction of introgression [introducing new alleles by interbreeding] is that many genes may have a higher allelic diversity attributable to archaic introgression in Africa, not Eurasia." (Hawkes, J., 2006). Also, "mtDNA diversity is essentially unpredictable and will, in many instances, reflect the time since the last event of selective sweep, rather than population history and demography." (Bazin, 2006). I.e., when a mutation is positively selected, nearby alleles "hitchhike" along with it, so that as the mutation spreads, so do the hitchhiking alleles, thereby reducing variation in the genes of those alleles.

There is evidence besides greater diversity that afrocentrists could use to support their conclusion that Africans are older than Eurasians, but the afrocentrists do not rely on it, probably because it is a great embarrassment to them. Living Africans have alleles that chimpanzees and gorillas have, but Eurasians do not have. (Deka, 1995). This fact may, however, show not that Africans are older than Eurasians, but that they did not evolve as much as Eurasians – a population that begins in the tropics and stays there will not evolve as much as a population that begins in the tropics and slowly moves north into a temperate zone. Back

13. But if Eurasians did not come from a sub-population of Africans and are older, why do Eurasians have less variation? The answer is given in the next chapter. Back

14. "In Africa three races have intermingled to a certain extent with the negro; the Libyans (Berbers: q.v.) in the Western Sudan; and the Hamitic races (q.v.) and Arabs (q.v.) in the east." ("Negro," 1911 *Encyclopedia Britannica*.) There has been so much infusion of non-Africans into Africa that non-African traits can be found even in fossils in southern Africa. (Chap. 26). Back

Chapter 20 - Population Differences in MtDNA

"Things are seldom what they seem; skim milk masquerades as cream."

W.S. Gilbert, "A Many Years Ago," H.M.S. Pinafore

Some of the strongest evidence that the afrocentrists are wrong comes from DNA studies of living people across the globe. As explained in Chapter 3, most genes have a number of different alleles. Although all the alleles of a gene are different in their A-C-G-T sequences, several of those alleles may nevertheless code for the same trait (e.g., several different alleles may code for the same eye color).

Certain alleles are more common in some populations than in others. For example, the allele for blue eyes is common in Europe, but absent in Africa and Asia. ¹ As one would expect, scientists have found that particular alleles from different genes tend to group together in different populations. In Europeans, the allele for blue eye color, which is on one gene, is often found with alleles for blond hair, on a different gene. A group of alleles that are inherited together is a "haplotype," a group of haplotypes is a "haplogroup," and a group of haplogroups is a "macrohaplogroup." ²

There are two mtDNA macrohaplogroups, known as M and N, which include all Eurasians, but very few Africans. The M macrohaplogroup includes people from India ³ and SE Asia and the N macrohaplogroup includes Europeans and northern Asians, as well as (extinct) Cro-Magnons. Figure 20-1 answers the question left over from Footnote 14 in the last chapter, "If Europeans did not come from Africans, why is their mtDNA less varied than Africans?"



Figure 20-1

In Figure 20-1, time goes from left to right and the number of people alive in Eurasia increases from the bottom to the top, but population size is very approximate. The arrows entering from the left symbolize the many lineages of mtDNA haplogroups that different populations living in Eurasia had prior to the eruption of Mt. Toba and the first ice age. ⁴ The two population crashes (dips in the curve) were caused by Toba and the two ice ages when large numbers of Eurasians starved to death. Some people in the M and N macrohaplogroups made it through the ice ages, but people in other haplogroups did not, resulting in a population "bottleneck" in the trough of the first ice age (and possibly the second, as well) and leaving the survivors with less variation.

The "coalescence date," the date that the populations who have the alleles in the M and N macrohaplogroups began to diverge, has been determined to be about 65,000 ya. ⁵ The fact that <u>both</u> the M and the N macrohaplogroups are dated near the trough in the first ice age supports the explanation that the M and N coalescence was the result of the extinguishment of most mtDNA haplogroups due to Toba and the first ice age. ⁶

When the ice eventually receded, the survivors, who were in a haplogroup within the M or N macrohaplogroups, repopulated Asia and Europe. As the populations expanded, mutations occurred, producing other haplogroups within the M and N macrohaplogroups. ⁷ The mtDNA of today's Eurasians has less variation than African mtDNA not because Eurasians are younger than Africans, but because female Eurasians who had mtDNA that was not in the M and N macrohaplogroups did not survive the ice ages. ⁸

The ice age bottlenecks that the Eurasians suffered through ⁹ had very little affect on tropical Africa. ¹⁰ Before agriculture (about 12,000 ya), the tropics (African and Asian) supported populations that were much greater (per unit area) than the temperate Eurasian populations, ¹¹ more than enough to account for the higher variations in Africans. Although there was a severe drought in East Africa from 135 to 75 kya, after about 70 kya Africa became much more

humid and stable, as shown in Figure 20-2. (Scholz, 2007,).



The African droughts, however, could not be predicted by the Africans (as Fig. 20-2 suggests, they may have been caused by eccentricities in the precession of the earth's orbit), so they could not be planned for as winters could be in the north, even if the Africans were capable of such planning.

Figure 20-3 is a wonderful tree $\frac{12}{12}$ that shows the evolution of populations inside and outside the M and N macrohaplogroups.



Figure 20-3

In the tree, "NG" is New Guinea. Note that all of the Europeans are in the N macrohaplogroup. Note that some of the South Indians, perhaps descended from the Aryans who invaded India, are in proximity to the Southeast Asians, some of the Pacific Islanders, and some of the Australian aborigines. There are several lineages of Australians in both the M and N macrohaplogroups, suggesting multiple migrations into Australia by widely-separated populations. (Chap. 27).

No Africans are in either the M or N macrohaplogroup. The lowest branch of Africans (61) is tied directly to the common ancestor with the chimpanzee at the very bottom of the tree; Africans are the race most closely related to chimpanzees and the Nigerians ("Ibo," "Hausa") are the closest Africans to chimpanzees. ¹³ Thus, if OoA is correct, once Africans evolved from an ape into modern humans, they ceased to evolve any further, while Eurasians continued to evolve farther away from those modern Africans and from our ape ancestor. That would explain how Africans can be, at the same time, the most primitive, simian race, yet also the first, and only, race to evolve directly all the way from an ape into a modern human. Section IV, however, presents another explanation that, hopefully, makes more sense.

Since an individual who is in the M or N macrohaplogroup is modern and those macrohaplogroups originated (coalesced) about 65,000 ya, long after man became modern 160,000 ya, anyone who was in those groups 65,000 ya was modern. Therefore, in order for OoA to be correct, the M and N macrohaplogroups must have originated in Africa where the first modern humans allegedly arose, then were carried out of Africa when those modern Africans left Africa 65,000 ya. If M and N did not originate in Africa, then modern man did not originate in Africa or, at least, only in Africa, and there was no migration of modern man out of Africa into Eurasia, i.e., OoA collapses.

If M and N originated in Africa, one would expect most of the haplogroups in the M and N macrohaplogroups to

be found in Africans, but there are, in fact, almost none, and those that are found in Africans are in NE Africans (e.g., Ethiopia), which is easily accessible from Eurasia. As the fossil skull photos in Chapter 17 (and other evidence to be presented in Chap. 26) show, there were very likely multiple incursions of Eurasians into NE Africa. The small amount of alleles in the haplogroups included within M and N that were found in NE Africans is easily explained as being due to Eurasians crossing over into Africa from the Middle East or from North Africa (the first Egyptians were Caucasian) and interbreeding with Africans.

Since very few Africans are in macrohaplogroups M and N, it is likely that these macro-haplogroups did not originate in Africa (Chap. 4, Rule 11), but in Eurasia, which means that modern man was in Eurasia at least 65,000 ya. In fact, at least one publication claims that most of the haplogroups, and the oldest ones, in the M macrohaplogroup originated in India, not Africa. "The deep roots [i.e., old age] of M phylogeny [i.e., the evolution of the M macrohaplogroup] clearly establish the antiquity of Indian lineages, especially M2, as compared to Ethiopian [i.e., African] M1 lineage and hence, support an Asian origin of M majorhaplogroup [i.e., macrohaplogroup]." ¹⁴ If the M macrohaplogroup originated in India and some NE Africans are in the M macrohaplogroup, then that is evidence that the migration was in to Africa (Section IV), not out of Africa.

The afrocentrists' explanation for the absence of Africans in the M and N macrohaplogroups is that any Africans who had M or N alleles "lost" them, i.e., they died without living descendants. But if M and N arose in Africa and the Africans had them, they were very probably beneficial or, at the very least, not harmful, so why would the Africans who had them die out? Africa was little affected by Toba and there were no disasters in Africa that could have wiped out populations in the M and N macro-haplogroups, but left populations in other haplogroups intact. The environment in Africa did not change drastically so as to turn harmless or beneficial alleles in the haplogroups of M and N into deadly liabilities. Rather than say that those alleles were so advantageous in Eurasia that the people having them were able to repopulate those two continents, but so deadly that in Africa that anyone having them died, it is far more likely that no one in Africa had the alleles in M and N until a few Eurasians brought them there.

Furthermore, why is it only in <u>NE</u> Africa, where Eurasians entered Africa multiple times, that traces of M and N in Africa are found? Under OoA, the fact that different populations fall into different haplogroups is explained as being due to the Founder Effect, where the first migrants from Africa into a new territory all belong to one tribe in the same haplogroup. However, this model is difficult to reconcile with the fact that <u>northeastern</u> Africa harbors <u>all</u> of the African-specific mtDNA lineages. Why, when NE Africa has all the <u>other</u> African-specific mtDNA lineages, did <u>only</u> the Africans who had M and N lineages, the <u>least</u> common lineages in Africa, allegedly leave Africa and replace all the Eurasians? <u>15</u>

Also, in going from West Asia to Siberia, haplogroups A, C, D, and G do not gradually merge, but sharply change, even though the land has no sharp dividers, such as water, deserts, or mountains. That is better explained by invasion and conquest than by a gradual expansion of founder populations. (Mishmar, 2003).

LM3

Mungo Man (Figure 20-4, a reconstruction) was an "anatomically modern human" fossil found near Lake Mungo, NSW, Australia. (Adcock, 2001). He was buried with his hands interlocked and positioned over his crotch, covered in red ochre.

MtDNA was recovered from Mungo Man ("LM3"), but it did not match the mtDNA of any living person and differed from modern human mtDNA as much as Neanderthal mtDNA. ¹⁶ (That fact establishes that at least some mitochondrial variation has been lost from the Eurasian gene pool, which is consistent with Fig. 20-1.) Since Mungo Man is dated at at least 40,000 ya, ¹⁷ his mtDNA is the oldest known mtDNA in the *Hss* lineage. If <u>every</u> *Hss* came from Africa, how did the <u>oldest</u> *Hss* mtDNA get into a modern Australian who lived 40,000 ya? How did modern Africans leave Africa 65,000 ya and arrive in Australia only 25,000 yrs later, and probably sooner, since it is unlikely that Mungo Man was the first person in Australia who had the LM3 mtDNA?



Figure 20-4

The LM3 mtDNA found in 40,000 year old Mungo Man is so similar to an

"insertion" of <u>nuclear</u> DNA on chromosome 11 that is found in some people living today that scientists have concluded that the <u>nuclear</u> DNA insertion at one time must have been mtDNA. In other words, Mungo Man is descended from an archaic population that had LM3 mtDNA in it and, in one of the individuals in that population, a highly unique event occurred – some LM3 mtDNA migrated into the nucleus in an egg that became a reproducing human. Because that insertion was so unusual, it must have happened to only a <u>single</u> person in that population.

As the years passed, that individual had descendants, some of whom are the people living today who have that insertion. Other individuals in that same archaic population, who did not have the insertion, also had descendants, ¹⁸ some of whom are also still living today alongside those who have the insertion. The insertion is not known to confer any advantage on those who have it, so it was not positively selected, but just gradually spread from that single individual through subsequent populations. Today, over half of the Eurasians have it. ¹⁹ Although the size of the archaic population the insertion arose in is not known, it would have had to have been in the thousands in order to be sustaining, so the insertion went from being in only one person in thousands to being in over half of the Eurasians, which would have required hundreds of thousands, if not millions, of years. ²⁰ In other words, the date of the insertion

was long before 65,000 ya, the date that supposedly modern Africans supposedly left Africa.

Mungo Man was Asian and the populations living today in which the majority of people have the insertion are Eurasian, so it is almost certain that the archaic population in which the insertion occurred was Eurasian, not African (Chapter 4, Rule 11). And, if that is true, it must also be true that Eurasians did not descend from Africans.

Because Mungo Man's LM3 mtDNA is unlike any other known mtDNA, afrocentrists claim that it does not belong to any known macrohaplogroup. However, the mtDNA of most of the people living today who have that <u>nuclear</u> LM3 insertion are in the N macrohaplogroup, including the living descendants of the original inhabitants of Australia, e.g., Mungo Man. The only reasonable conclusion is that LM3 is, and always has been, part of the N macrohaplogroup, which is, and always has been, Eurasian.

Haplogroup X

Mitochondrial haplogroups A, B, C, and D are shared by 95% of Native Americans. Haplogroups A, C, and D are found in 58% of the Siberians who migrated into the Americas across the Bering Strait. ²¹ Haplogroup B is found in people living along the Asian coast who may have come to the Americas later, using boats that followed the coast.

However, a fifth haplogroup, called X, is $21,6000 \pm 6000$ yrs old (for the X2 version; <u>Reidla, 2003</u>) and is present in about 20,000 Native Americans living mostly in north central North America; it has also been found in several pre-Columbian populations. Haplogroup X is also present in European populations (<u>Figure 19-1</u>), but absent in Asians, except people in southern Siberia (Altaia) who are believed to have come from an area just north of Turkey and Iran, i.e. Georgia, where *georgicus* was found (Chap. 24). This suggests that Europeans brought haplogroup X to the Americas. ²²

There is a variety of <u>other evidence</u> that consistently points to the Europeans as the first Americans. At least one linguist (Swadesh) believes that the Na-Dene Indian language (Algonquian) and the Basque language (between Spain and France) are related. The native domesticated America dog did not descend from the N. American wolf, but from the European or Asian wolf.

Radiocarbon tests of carbonized plant sediments in South Carolina (Topper site) showed that artifacts found in the sediments were at least 50,000 yrs old. (Goodyear, 2004). The artifacts were not the same as more recent (13,000 ya) Clovis artifacts ²³ that were made by Asians who crossed the Bering Strait, ²⁴ but were very similar to Solutrean artifacts. (Bradley, 2004). The Solutreans were hunters and craftsmen who lived along the shores of France and Spain at a time of maximum glaciation, when the sea level was about 425 feet lower. ²⁵ Boats of hides and other materials were used, and travel along the northern ice to North America would have been possible. (See migration route in Figure 19-1, dotted line from (X) in France to (X) in N. America). Figure 20-5 shows the skull and a facial reconstruction of 10,630 year old Spirit Cave Man found in Nevada, and Figure 20-6 shows the skull and facial reconstruction of 9300 year old Kennewick Man found in the state of Washington, both of whom are definitely Caucasian. ²⁶



Figure 20-5

Figure 20-6

How likely is it that "modern" Africans left Africa only 65,000 ya, migrated to what is now France, then traveled across the Atlantic Ocean to what is now South Carolina at least 50,000 ya, when only a few thousand years ago Africans could not even build boats that would take them to islands just off Africa?

Chapter 21

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FOOTNOTES

1. The only other blue-eyed primate is the <u>blue-eyed black lemur</u> in Madagascar. <u>Back</u>

2. There are mitochondrial haplogroups, autosomal (not on the X or Y chromosome) nuclear haplogroups, and Y chromosome haplogroups, all using some of the same letters. <u>Back</u>

3. (<u>Rajkumar, 2006</u>). The oldest mtDNA in the M macrohaplogroup is found in India and, in the absence of evidence that it was brought into India, it is reasonable to assume that it arose there (<u>Chap. 4, Rule 11</u>). Since it is in living non-African *Hss*, if it did arise in India, the *Hss* from which those living non-Africans descended were not from Africa, which refutes OoA. <u>Back</u>

4. Artifacts have been found in India immediately above and below a 2.4 meter thick layer of Toba ash, showing modern man was in India prior to Toba and survived it. (Petraglia, 2007). Back

5. (<u>Mishmar, 2003</u>), ±12,000 years. <u>Ingman (2003)</u> gives a coalescence date for the N macrohaplogroup of 71,000 ya and for the M macrohaplogroup of 78,000 ya (both ±12,000 years). <u>Back</u>

6. (<u>Mishmar, 2003</u>). "Collapse into a population bottleneck is one interpretation of positive values of <u>Tajima's D</u> [a statistical test], reported for some, mostly non-African, populations, on the basis of analyses of autosomal [i.e., not X or Y chromosome] loci ..., with the strongest signature found for eastern Asian populations." (<u>Harding, 2000</u>). Indeed, since there was no coalescence of M and N, but a purging of other mtDNA lineages, Eurasians could have had the M and N macrohaplogroups hundreds of thousands of years before 65,000 ya. <u>Back</u>

7. The migrations due to the first ice age would have brought diverse populations into contact. Interbreeding followed by selection of the most fit would have also reduced the number of haplogroups. <u>Back</u>

8. (<u>Marth, 2003</u>). The second ice age may have also wiped out some haplogroups. Also, some mtDNA haplogroups may have died out due to "lineage sorting," the failure of Eurasian women within those haplogroups to have daughters, but this loss is less significant. <u>Back</u>

9. Since the populations at that time were less migratory and therefore more inbred than today, the bottleneck may have had a very disproportionate effect on different populations, killing most or all of some populations and few of others, thereby significantly reducing variability. A decrease in population size will increase the average IQ of the surviving population, at least for a time, if more intelligent people can better overcome the selector that is responsible for the decrease. Back

10. "Analyses of sub-Saharan African populations provide little evidence for a history of population bottlenecks ..." (Garrigan, 2007). Back

11. (<u>Chapter 4, Rule 8</u>). "... long-term effective [population] size was greatest in Sub-Saharan Africa. (<u>Relethford</u>, <u>1995</u>). <u>Back</u>

12. (Ingman, 2003), reproduced from (Saito, 1987). Back

13. (<u>Deka, 1995</u>). Using Nei's standard genetic distance method, the Nigerian-chimp genetic distance was 1.334 +/-0.375, by far the closest value. Using the Cavalli-Sforza method, the Sokoto Nigerians were again the closest to chimps (0.539) by a large margin. <u>Back</u>

14. (<u>Rajkumar, 2006</u>). Although no direct reference claims that the N macrohaplogroup is of Asian origin, its highest incidence is in Asia. <u>Back</u>

15. "... Northeastern Africa harbors all of the African-specific mtDNA lineages as well as the progenitors of the Eurasia radiation, yet only two mtDNA lineages (macrohaplogroups M and N) left northeastern Africa to colonize all of Eurasia..." (Mishmar, 2003). Back

16. "If genuine,... the sequence of Lake Mungo 3 is among the most divergent modern human mtDNAs ..." (Caramelli, 2003). Back

17. The age is in dispute (Wikipedia, "Mungo Man"), with one study (Adcock, 2001) giving an age of 62,000 ya. Back

18. Mungo Man's nuclear DNA has not been analyzed to determine whether or not he had the insertion. Back

19. It is found in 78% of an Amerindian tribe, 68% of Melanesians, 65% of Japanese, and 54% of Europeans, but only 10 to 25% of Africans. (Zischler, 1995). That distribution is consistent with its origination somewhere in Eurasia, with

migration gradually carrying it outward. Back

20. Although the insertion is believed to be ancient, determining its date is not easy. Ronald A. Fonda discusses its date on his web site under "Australian Ancestry." Back

21. There was a continuous land bridge between Siberia and Alaska between about 50 and about 38 kya and a second one between about 25 and 13 kya. (Sykes, 2001, p. 280; Goebel, 2008). Language also ties Siberians to Amerindians. (Ruhlen, 1998). Back

22. (Brown, 1998; Derenko, 2001; Newman, 1950). Y chromosome data supports a connection between people living in the Americas and people living in India, who were possibly invaders from Europe. (Underhill, 2001). When later arrivals are more numerous (or more advanced) they push earlier arrivals away from the entry point. If the later arrivals entered the Americas across the Bering Strait they would push the earlier arrivals east. Since the Amerindians in eastern US are more Caucasian in appearance, they either were pushed east or they came from Europe. Also see http://www.vimeo.com/user331557/videos/sort:date Back

23. Sites in <u>Meadowcroft, Pennsylvania, Cactus Hill, Virginia,</u>, and <u>Monte Verde, Chile</u> also indicate settlements thousands of years older than Clovis. Also see the DVD documentary, "<u>Ice Age Columbus: Who Were the First Americans</u>." Mummies at least 600 years old of the Chachapoyas, "a tall, fairhaired, light-skinned race that some researchers believe may have come from Europe" were found in a cave in northern Peru. ("<u>Moment 600 years ago that terror came to the mummies of the Amazon</u>," Jan. 10, 2007). A virus found in one of those mummies is most similar to viruses found in today's Japanese. (<u>Sonada, 2000; Coulthart, 2006</u>). <u>Back</u>

24. <u>Howells (1948</u>, p. 296) describes American Indians as unspecialized Mongoloids, suggesting they either left Asia prior to the Asian specializations for the cold or, more likely, were not pure Mongoloids but Caucasian-Mongoloid hybrids; the Eskimos, who are specialized for the cold, left Asian later. <u>Back</u>

25. "The extinction [of the Neanderthals] coincides with the rise of the Solutrean culture." (<u>Jiménez-Espejo, 2007</u>). Back

26. (*Wikipedia*, "Forensic Facial Reconstruction," *BBC News*; "Indian Giver,"*American Renaissance*, Nov., 2004, **15** (11)). "The Indians of New England seem to have been the least mongoloid and most European-looking of any in appearance, and are fairly well represented by the head on the buffalo nickel." (Howells, 1948, p. 257; also see Leonard, R.C., "Atlantians in America"). Back

Chapter 21 - Nuclear DNA

In this chapter, we look at what nuclear DNA has to tell us about human origins. Humans have about 25,000 genes, each with an average of 14 alleles, so that makes about 350,000 different nuclear DNA alleles. Most alleles occur in more than one population, but the percentage of individuals in those populations who have them differs. But some alleles are found only in Europeans, others only in Africans and still others only in Asians. It is highly unlikely that alleles that are today found only in Europeans, or only in Asians, arose in Africans. ¹ For an allele to have arisen in Africans, be carried by Africans into Europe or Asia, then die out back in Africa would mean that the allele was initially beneficial in Africa, then became harmful (or at least neutral) in Africa while still being beneficial in Eurasia, despite Africa providing a more stable environment.

If a person has a "population-specific" allele, he most likely acquired it from someone in that population, either because he is a member of that population or because one of his ancestors was (<u>Chapter 4, Rule 11</u>). There can be entire groups of alleles, some from the same gene, and others from different genes, that are population-specific. ²

Harding (2000) and others studied the MC1R gene, which influences the pigmentation of skin and hair, and therefore its color. The allele for red hair and the allele for blond hair are both found only in Europeans, and Europeans have more alleles for the MC1R gene than do Africans. Africans have only synonymous alleles ³ of MC1R that all code for eumelanin, a pigment that produces dark skin and hair. Although Eurasians also have alleles that code for eumelanin, they don't have the same alleles for it that the Africans do, plus they also have many alleles for phenomelanin, a red-gold pigment that produces light skin and hair colors. Africans lack alleles for phenomelanin because light skin and hair are disadvantageous in Africa and an African who may have acquired them would have been less likely to survive and leave progeny.

Thus, the alleles for light skin and hair could not have gotten a foothold in Africa, but only in a population that had lived in Eurasia, and that had lived there long enough for all the various alleles that code for light skin and hair to arise. Since the Eurasian alleles were not strongly positively selected, ⁴ once those mutations occurred in Eurasia, an additional long time would have been required for the alleles to spread throughout the population to their present high frequency. ⁵ The 65,000 yrs allowed by OoA for these mutations and their spread to occur is not nearly long enough and afrocentrists exclude the possibility that those mutations were acquired by interbreeding with indigenous Eurasians who already had them. The number of different alleles ("polymorphisms") in the nuclear DNA of present day non-African populations shows "great time depths," i.e., they are too many to have resulted from mutations over a period of only 65,000 yrs. (Eswaran, 2005).

The LCA of Africans and non-Africans for the <u>MC1R</u> gene is about 1 mya, ⁶ which means that Africans and non-Africans split into two separate populations at least that long ago, not 65,000 ya, as held by OoA. Several Eurasian <u>MC1R</u> alleles are 250,000 to 100,000 yrs old, and the allele for red hair is about 80,000 yrs old, ⁷ so a Eurasian population must have existed that had those alleles that long ago. <u>Harding (2000)</u> concludes that, "...an incompatibility arises between estimated ages in the range of 250,000 – 100,000 years, for non-African <u>MC1R</u> allelic variation, and ages, from fossil evidence, of ≤100,000 years for the dispersal of modern humans outside Africa and the Middle East."

For OoA to be correct, not only must <u>all</u> of the African-specific alleles disappear from all the Eurasian populations in 65,000 yrs, but a whole new collection of Eurasian-specific alleles must arise within that time. Although some <u>individual</u> European-specific and Asian-specific

alleles might appear in the huge numbers of people who have those alleles today in less than 65,000 yrs, that is not possible for the <u>entire collection</u> of European and Asian specific alleles. Thus, either some of those alleles evolved in another species of *Homo*, such as the Neanderthals, then entered the *Hss* lineage by interbreeding less than 65,000 ya or there was no replacement of Eurasians by Africans and OoA is wrong. There is no evidence that some of the traits coded for by those alleles were even useful in Eurasians, so there would not have been strong selection for them ⁸ and, without strong selection, much more time would have been required for them to spread throughout the Eurasian population. ⁹

In fact, there is no plausible model for the conversion of African nuclear DNA into European and Asian nuclear DNA, and there is no evidence that there ever were Eurasians who had <u>any</u> African-specific alleles. For example, European and Asian skulls do not show traits that are unique to African skulls, ¹⁰ and traces of African-specific alleles, such as wooly hair, are not found in modern Eurasians whose ancestors have not interbred with Africans.

Many, even most, of the nuclear alleles that have been globally surveyed arose prior to even 200,000 ya, before *Hs* allegedly even arose in Africa. ¹¹ This strongly suggests either that Eurasians got those alleles by interbreeding with archaic humans or, more likely, that *Hss* did not arise in Africa, but in Eurasia.

Haplotypes

Not only are there mtDNA haplotypes, there are also nuclear DNA haplotypes. During the formation of the egg and sperm, chromosome pairs (one from the father and one from the mother) are broken up into small pieces, some of the pieces from each parent are interchanged, then the pieces are recombined to re-form the chromosomes, a process called "crossover" (p. 26). Small chunks of this nuclear DNA, however, are not broken up into pieces, but are inherited as chunks, called "haplotypes"; a group of these haplotypes is called a "haplogroup." Thus, in this way haplotypes and haplogroups maintain their integrity from generation to generation the same way that mtDNA from the mother and the Y-chromosome from the father do, though they all gradually accumulate mutations. There are about 100,000 haplogroups in each individual's genome and, since haplogroups of different populations accumulate different mutations, an individual's race can be determined by checking only the locations on the DNA where these mutations have occurred.

By comparing similarities and differences in the haplogroups of different populations it is possible to determine which haplotype is the oldest and estimate how old it is. For example, there were several versions of a haplotype within the gene **PDHA1**. The different versions fell into a tree that branched 1.8 mya, one branch of which branched again 200,000 ya. (Harris, E.E., 1999; Harding, 1999). But if all humans were a single group in Africa 65,000 ya, as OoA holds, it would not be possible for there to be humans alive today who have versions of a haplotype that branched twice before that date, but there are. And this haplotype is only one of many that contradict OoA. The only way to explain these haplotypes and still retain the basis of OoA, that man originated in Africa, is to say that the ancient variations were picked up by interbreeding with other, older species of man, such as Neanderthals in Europe and *erectus* in East Asia. However, any significant interbreeding with other species of man.

Haplogroup D

Nuclear haplogroup D is another haplogroup that is a problem for OoA. Haplogroup D, one of the haplogroups in nuclear macrohaplogroup M, is found in Caucasians and Asians, but is rare or absent in Africans. The gene *microcephalin* (MCPH1) on Chromosome 8, which regulates brain size during development, is one of the genes within this haplogroup. Haplogroup D is believed to have arisen about 1.1 mya, possibly in the ancestors of

Neanderthals, who may have mated with *Hss* about 37,000 ya. (Evans, 2006). It is so advantageous that about 70% of the Eurasians living today have it. $\frac{12}{12}$

Y Chromosome Haplogroups

Before we leave nuclear DNA, let's look at the nuclear DNA on the Y chromosome. Since mtDNA is transmitted through the female line, mapping the variations in it in people across the globe tells us the geographical journeys of women. Similarly, Y chromosome DNA is transmitted through the male line and tells us where men went. It does not tell the same story that mtDNA tells because men did much more exploring than women. Men frequently went to new lands without their women, then mated with native women, so that their descendants had native mtDNA and the explorers' Y chromosome DNA. Figure 21-1 (Underhill, 2001) shows the world-wide distribution of different variations of the Y chromosome.



Figure 21-1

The amount of each color in the circles is proportional to the number of men in that location who had the variation indicated by that color. Note that olive, the major color in Africa, appears outside of Africa only around the Mediterranean, suggesting that Africans did not migrate out of Africa, except as slaves taken to those areas. ¹³ Bright red and dark blue are unique to Africa, which also suggests that there were no migrations out of Africa; those variations may have been brought in to Africa by primitive hominoids (Section IV) who died out elsewhere but whose Y-DNA still continues in Africa.

The orange and yellow European colors indicates that European men lived in the Middle East, North Africa, Georgia of the former U.S.S.R., ¹⁴ India, southeast Asia, Australia, and North America; where they originated will be discussed in Chapter 24. (The orange and yellow men may have been members of a single population.) Green is the dominant color in the Americas, and the small amounts of green in the Old World suggest its origins in Western Asia, then migrating into northern India and southern Siberia, and possibly the Ainu in Japan. From the large amounts of pink in eastern Asia one might expect substantial amounts of pink in the Americas, but it is not there; this suggests that the pink Asians were not inclined to explore much and that less evolution occurred in the pink Asians than in the orange and yellow Europeans.

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FOOTNOTES

1. "Subsequent data from the nuclear genome not only fail to support this model [Out-of-Africa], they do not support any simple model of human demographic history." (Eswaran, 2005). Back

2. A few examples: The Duffy antigen Fy (a-b-) is very rare among whites, but is found in nearly all Africans; an allele, 35delG, of the gene <u>GJB2</u>, occurs only in Europeans and Jews; alleles of genes that provide lactose tolerance and HIV resistance are rare outside Europe (<u>Libert, 1998</u>); certain alleles that cause a number of diseases are found almost exclusively among Ashkenazi Jews. Also see (<u>Hinds, 2006</u>). <u>Back</u>

3. I.e., the alleles have different A-C-G-T sequences, but code for the same polypeptide. See Appendix. <u>Back</u>

4. The afrocentrists argue that the Eurasian alleles spread quickly throughout the Eurasian population because they were strongly selected, but no evidence for strong selection was found. "For many European and Asian individuals, variant MC1R alleles contribute to both lighter skin color and sun sensitivity. However, we found no statistical evidence that **MC1R** diversity [i.e., the large number of alleles in Eurasians] has been enhanced by selection, either in its apparently high levels or in its haplotype frequency distribution patterns." That is, there was no evidence that having those alleles was advantageous. Back

5. <u>Harding (2000)</u> calculates that it took at least a hundred thousand years, and possibly more than twice that long, for just one of these alleles to reach its current frequency. <u>Back</u>

6. "Both African and non-African data suggest that the time to the most recent common ancestor is ~1 million years ..." (<u>Harding, 2000</u>). <u>Back</u>

7. "These estimates suggest that the MC1R variants Val60Leu, Val92Met, and Arg163Gln may trace back to ancestors in Eurasian populations existing 250,000 - 100,000 years ago. ... For the European red hair-associated Arg151cys and Arg160Trp variants, we estimate an age of ~80,000 years;" (Harding, 2000). Back

8. The traditional test for selection (<u>Tajima's D statistics</u>; <u>Tajima</u>, <u>1989</u>) does not show strong selection. (<u>Harding</u>, <u>2000</u>). Other tests for selection have not been useful as they show too many other alleles being strongly selected. <u>Back</u>

9. The 7R allele of the <u>CG4</u> gene is a good example. It appeared in the *Hss* lineage perhaps only 50,000 ya, but it would have taken many times as long for its ancestral allele to evolve, step by step, through all of its several intermediate forms and become the 7R form. <u>Back</u>

10. Except the <u>Grimaldi</u> skeletons, discussed in Chapter 26. <u>Back</u>

11. E.g., b-globin, MC1R, PDHA1, Dys44, Y-chromosome haplotypes, etc. Back

12. Percentages are likely higher in Europe and north Asia and lower in southern Asia. Back

13. A small number of Africans were even brought into India as slaves; they were later freed and are now called "Sidis." <u>Back</u>

14. Note the great diversity of Y-DNA in Georgia, which suggests considerable evolution took place there, which will be discussed in Chapter 24. <u>Back</u>

Chapter 22 - Replacement

"According to this model [OoA], as modern populations migrated out of Africa and grew in numbers, they <u>completely replaced</u> existing premodern populations."

(Leakey, 1994, p. 96)

The idea of replacement is that more adapted populations replace less adapted populations. That is entirely reasonable, and replacement in that sense has undoubtedly occurred for billions of years. However, the longer a population lives in an environment, the more adapted it becomes to that environment and the more superior the adaptations of another population have to be in order to replace it.

The OoA theory of the origin of modern man holds that modern man (*Hss*) arose in Africa, then migrated into Europe and Asian, "replacing" all the more primitive Eurasian species of man, e.g., *erectus*, who had lived there for well over a million years, and the Neanderthals, who had lived there for about 350,000 yrs. But *erectus* was different in different territories, and those same differences appear in the modern men in those territories who supposedly came from Africa and "replaced" erectus. Thus, for example, the improbable OoA scenario requires the Asian *erectus*, with his shoveled incisors, to be forced into extinction by modern Africans, who lacked shoveled incisors, but managed to evolve them once they arrived in Asia. A better explanation is that the Asian *erectus* did not go extinct because it was <u>replaced</u> by modern Africans, it went extinct because it <u>became</u> modern Asians, right where it was – in Asia – and its descendants kept their shoveled incisors.

According to OoA, the supposedly modern Africans who supposedly migrated into Eurasia did not, for the most part, interbreed with indigenous Eurasians and absorb them. No, those primitive indigenous Eurasians just could not compete with the superior modern Africans, and they starved, died from disease, or those modern Africans killed them off. At any rate, so the OoA story goes, primitive Eurasians disappeared from Eurasia and modern Africans appeared, then those modern Africans evolved into today's modern Asians and Europeans.

The replacement of Eurasian indigenous species by Africans is an essential part of the OoA theory because, if there was no replacement, then modern Eurasians must have evolved somewhere other than in Africa and the whole OoA theory falls apart. The reader may be wondering how anyone could believe such a story, but that is the dominant view throughout the sciences and the media. Let's examine it more closely.

The African Migrants

What would these Africans, who allegedly replaced all of the indigenous Europeans and Asians 65,000 ya, have been like? Were they already like today's Asians, neotenic, storing fat evenly all over their bodies, white skinned, and flat faced? African adults today do not store fat uniformly over their bodies as babies do, nor is there any need to when one is living in the tropics and there is little danger from the cold, particularly for an adult. Indeed, the uniform storage of fat in the tropics would be maladaptive, because in the hot sun of the day it would prevent the dissipation of heat and lead to hyperthermia, especially during times of great activity, such as hunting or fighting. Losing traits that are advantageous in Africa <u>before</u> leaving Africa, is not reasonable, and it is safe to conclude that the African migrants would not have lost their African traits until many thousands of years after they had settled in to their new Eurasian home.

How would the first modern men, *Hss*, who allegedly arose in Africa, have been different from their immediate African *Hs* ancestor? The *Hs* African ancestor of an African *Hss* would have been somewhat less primitive than the African *erectus*, but well adapted to live in

the tropics of Africa. Since these *Hss* Africans were the first <u>modern</u> humans on the planet, they would have been superior to all the indigenous *Hs* Africans and would have replaced them before they left Africa and started replacing Eurasians. In order for African *Hss* to be <u>more</u> successful than his archaic *Hs* predecessors, so that he could replace them, he would have had to have retained all of the traits that his *Hs* predecessors had that were advantageous in Africa, and he probably retained most of the neutral traits as well. Since he was still living in the same environment as his predecessor, there were no strong selection pressures, which means that he would have been very similar to his predecessor.

If we compare a skull of today's Africans (Figures 9-3 & 9-4), who live in the same environment, to Kabwe, a 125,000 to 300,000 BP archaic African skull (Figure 17-5), we can see the direction of any changes. This comparison suggests that if the first modern man, *Hss*, arose in Africa, he would fall somewhere in between those two skulls, and would be more primitive than today's Africans, having a smaller brain, more sloping forehead, larger teeth, a more protruding jaw, and more noticeable traces of a saggital keel. Since tropically-adapted traits (e.g., dark skin, short black wooly hair, little body hair) likely evolved long ago and today's Africans have these traits, the first modern Africans probably also had them.

Now, if it can be shown that <u>today's</u> Africans could not have evolved into <u>today's</u> Eurasians in only 65,000 yrs, then all the more so the <u>more</u> primitive Africans of 65,000 ya could not have done so. Afrocentrists would not want to argue that Africans 65,000 ya were <u>more</u> modern than today's Africans, as that would mean that the Africans who drove all the Eurasians to extinction became even more advanced in Eurasia while some of those same modern Africans, who stayed behind in African, became less advanced. So, if a significant number of today's Africans do not have <u>modern</u> hard and soft tissue, behavioral, and other traits (especially neutral traits), neither did the first modern Africans who supposedly evolved in Africa and then replaced everyone in Eurasia. The reader can refer back to <u>Section II</u>, particularly <u>Chapters 16</u> and <u>18</u>, to see just how primitive today's Africans are. Since today's Africans are not modern, Africans 65,000 ya, must have been even less modern and the OoA position that modern man arose in Africa is false.

In addition to having primitive body features, today's Africans have failed to build, or even maintain, working civilizations, even with the example of the West to work from and hundreds of billions of dollars in foreign aid. Why? Because they lack the most important trait required to create civilizations – a brain of high intelligence that plans for the future and does not demand instant gratification. But, against all reason, OoA supposes that 65,000 ya Africans, who were even more primitive, were nevertheless more advanced than the people living in Eurasia at that time, though Eurasian tools and weapons from those times do not support that contention. Superiority is a necessary supposition because, unless a primitive population vastly outnumbers a more advanced population, it cannot defeat them in battle, particularly when they are defending their home territory. For example, in the <u>Rorke's Drift battle</u> of the 1879 Anglo-Zulu War in South Africa, 150 to 155 British troops and volunteers held off 4000 Zulu warriors, hardly what one would expect from a race that supposedly conquered all of Eurasia. ¹

An immigrating population usually does not invade the territory of an indigenous population by violent conquest, as Genghis Khan's hordes did, but rather it expands and bumps up against them for many generations, gradually absorbing some and pushing others out. Even a gradual takeover is usually possible only if the incoming population is superior at acquiring food in the new territory. But to replace everyone in Eurasia by that method would require much longer than 65,000 yrs and, given the traits that Africans 65,000 ya would have had, it is extremely unlikely that they would be superior at finding food in continents they were unfamiliar with, even if the Eurasians were more primitive. Moreover, it is very unlikely that Eurasians would have welcomed Africans into their territory, so a gradual, peaceful

replacement would not have been possible. But for a tribe of Africans to trek all the way from Africa to SE Asia, then conquer a no doubt more numerous population defending its home territory, is even more impossible.

Finally, let us not forget that Toba erupted 73,000 ya and that the first ice age lasted from about 73,000 ya to about 55,000 ya, so 65,000 ya was hardly an opportune time to invade Eurasia. Large numbers of Eurasians would be migrating south, some into Africa, at the very time that these dauntless, tropically-adapted Africans were allegedly elbowing past them in order to reach the now-abandoned land of ice and snow.

Indigenous Eurasians

The OoA story continues that after African Hss spread over most of Africa, they moved into the Near East 90.000 va. Australia by at least 50,000 ya, and Europe by 40,000 va.² All of that territory was already inhabited, very likely to its carrying capacity, by various varieties of Homo. *Erectus* had been living in West Asia since at least 1.8 mya (georgicus) and also about that long ago in SE Asia (Java Man).



The Neanderthals were living in Europe and western Asia from about 350,000 ya to about 24,500 ya. Figure 22-1 is a map showing the range of the Neanderthals. ³ Although the map shows that Neanderthals did not venture into Africa (though their predecessor, Heidi, did), it would be more accurate to say that no Neanderthal remains have yet been found in Africa. Since the Neanderthals did not go extinct until 24,500 ya, there were still plenty of Neanderthals around for those modern Africans to replace 65,000 ya. The Neanderthals in Europe were large, stocky, highly-muscled, big-brained, well adapted to the environment and colder weather, in possession of tools and weapons and, no doubt, fierce. Heidi, the predecessor of the Neanderthals, possessed aerodynamic (forward weighted) spears dating back to 400,000 ya in Germany (Thieme, 1997), so his Neanderthal descendants would have had them also.

Figure 22-2 is a comparison of a Neanderthal skeleton with а modern Caucasian skeleton. The reader can no doubt discern which is which. One glance at those skeletons should be enough to convince anyone that Africans did not invade Europe and the replace Neanderthals. ⁴ And Asia, according to OoA, was filled with erectus, who would not have welcomed Africans 65,000 ya any more than Asians would today. There are no Neanderthal or Eurasian erectus skeletons with African spears in them, nor have any

African artifacts been found in Eurasia.

One might also wonder what the primitive Asians who were replaced by those modern Africans might have been like. Well, it was not just the Neanderthals who were large and strong. Jinniushan, a fossil found in China (Figure 17-9), was that of a 5' 5 $\frac{1}{2}$ " tall, 173 pound woman, so you can imagine the size of the men. And we have a living example of what some of them may have been like. Figure 22-3 is Nicolai Valuev. the 7 foot, 1/4 inch (214 cm) tall, 330 pound Russian Heavyweight Champion, known as "The Beast from the East."



Figure 22-3

suggests:

(1) At least a portion of Eurasia was previously inhabited by people who had the primitive traits that Valuev has; and



Figure 22-2

(2) Those people did not have African traits, such as wooly hair, black skin, or simian prognathism, i.e., Eurasians are not the descendants of Africans.

Note the

extend

slopes.

his

heavy brow ridges

completely across his forehead, and

much

both Neanderthal traits. ⁵ Valuev is clearly an atavism

(see Bassou on

that

how

forehead

The replacement (called a "sweep") postulated by OoA of indigenous archaic species in Eurasia by African Hss who migrated into their territory means that the African migrants did not interbreed with the archaic species and did not pick up genetic material from them (a "clean" sweep"). Given the hypersexuality of today's Africans (Chapter 11), that alone is hard to believe. The Africans either were just better adapted to their new Eurasian environment than the indigenous Eurasians who had lived there for at least 1.8 million years (e.g., *georgicus*), or they were superior fighters and were able to kill them off, resisting the temptation to mate with Eurasian women (!!!), despite the indigenous humans having larger brains, superior weapons and tools, heavier and stronger bodies, intimate knowledge of their own territory, and no doubt a willingness to defend it to the death. And we know that not all of the indigenous humans could have been wiped out by Africans because Neanderthals were still living alongside Caucasians in Europe 24,500 ya. ⁶ Thus, OoA is wrong in saying that Africans replaced indigenous Eurasian species of Homo when they migrated out of Africa 65,000 ya, because they certainly did not replace the Neanderthals.

It is not likely that the Africans could have brought a deadly disease with them that wiped out indigenous Europeans because many deadly African diseases, such as malaria $\frac{7}{2}$ and sleeping sickness, are caused or carried by parasites (e.g., mosquitoes and the Tsetse fly) that would have been left behind in tropical Africa. Even the viruses in Africa usually come from an animal host (e.g., apes and monkeys) that would have been left behind. Besides, at that time people were not crowded into cities, so it would have been difficult for even a head cold to spread. And deadly viruses and bacteria usually mutate to become less deadly, because the deadlier microbes die with their hosts.

Interbreeding with Indigenous Man

Because interbreeding weakens the entire case for Africa being the birthplace of modern man, the afrocentrists initially insisted that there was no interbreeding between the newly-arrived Africans and indigenous Eurasians. Indeed, until recently there was not much evidence of interbreeding between *Hss* and archaics. Now we know that there was even successful interbreeding between the *Pan* (chimpanzee) and *Homo* (man) lineages. (Patterson, 2006). The ancient traits that today's Eurasians have and today's Africans don't have would have to have come from a northern archaic species (e.g., Neanderthals, *erectus*), making that species, not Africans, an important ancestor of modern Eurasians.

However, if all modern humans in fact came from Africa, then today's Eurasians should be free of non-African archaic mtDNA and nuclear DNA. Since afrocentrists concede that such DNA would require at least some interbreeding, its discovery in Eurasians (Chap. 20, 21 & 25) has forced afrocentrists to reluctantly give ground $\frac{8}{2}$ and concede that some interbreeding may have occurred. Not enough, of course, to refute the essence of OoA, that modern man arose in Africa, but enough to account for the ancient non-African DNA that has been found in Eurasians. The publisher of this concession says, however, that "as much as 80% of nuclear loci have assimilated genetic material from non-African archaic humans," 9 so it seems that "some" is a sizable amount. Other papers 10 concede there was never any "replacement" of Eurasian archaics because archaic Eurasian alleles were found at 80% of the locations along the DNA chains that were studied, which means that Eurasians must have interbred with the archaic humans who were already living there. And an afrocentrist said, "I set up a null hypothesis and the program rejected that hypothesis using the new data with a probability level of 10 to the minus 17th. In science, you don't get any more conclusive than that. It says that the hypothesis of no interbreeding is so grossly incompatible with the data, that you can reject it." (Templeton, 2005). Most of these non-African archaic Eurasian alleles are very old, much older than 65,000 ya, when replacement supposedly began.

Losing African Alleles

Alleles, especially alleles that are not strongly negatively selected, do not disappear quickly. ¹¹ The ancestors of snakes stopped walking about 100 mya and the ancestors of whales left the land about 50 mya, but some snakes and whales still have vestigial legs. Australian aborigines have characteristics that the 1.8 million year old Java man had. Today's East Asians still have the flat face and high cheekbones that Peking Man had ½ mya. Alleles can be lost rapidly if they code for traits that are a disadvantage, but if they code for a neutral trait, they may be retained for millions of years. ¹² Male nipples, which have very likely been around since the first mammals about 200 mya, are useless, but are still there. Our ancestors became bipedal at least 10 mya, but we still have useless toenails. ¹³ Yet, under OoA, Africans lost all vestiges of their African traits in only 65,000 yrs.

Had Africans actually evolved into Eurasians, one would expect at least a few Eurasians to still have at least a few African-specific alleles, but even African alleles that code for neutral traits, such as hair and eye color, that egalitarians tell us are "trivial," are absent. ¹⁴ "There are no distinct African features in early modern Europeans. We cannot point to specific features and say these are African features." ¹⁵ The only Eurasians who have African alleles are those whose ancestors imported African slaves. The absence of African-specific alleles in

the Eurasian population is strong evidence that replacement did not occur.

Moreover, many Eurasian alleles, such as blue and green eyes, blond and red hair, and straight and wavy hair, are <u>recessive</u> to the corresponding dominant African alleles, so <u>both</u> Eurasian parents must have the allele that codes for the Eurasian recessive trait in order for it to be expressed. Thus, it would be especially difficult for those recessive alleles to evolve and spread through the invading African population that, allegedly, replaced the indigenous European population.

Even if an African loses an African-specific allele, it does not mean that he will be left with the corresponding Eurasian allele. For example, if an African loses the allele for black skin, he does not acquire the white skin of a Eurasian, but becomes an albino, because he does not have the Eurasian allele for white skin – all of the African alleles for skin color code for black skin color, ¹⁶ so losing all those alleles leaves no color at all, not Eurasian white skin. Similarly, if an African loses the allele for dark eyes he is left with a colorless iris, not blue or green eyes. The proposed trek out of Africa and into Eurasia would have taken tens of thousands of years, during which time people who had lost their African-specific traits would have been at a severe disadvantage until advantageous mutations had occurred that gave them all the Eurasian-specific alleles.

Surely the Africans who migrated to malariainfested India must have retained their African alleles for sickle cell resistance, as those alleles would be as beneficial there as in Africa? Nope. (Nagel, 1992). Only Eurasians whose ancestors imported African slaves have those Africa alleles. Figure 22-4 (Kulozik, 1986) shows four haplotypes for sickle cell resistance, three of which (circle, diamond, and square) are found in Africa (the circle one is also found in African Americans and Caribbean Africans), and one (triangle) that is found in India and the eastern oases of Saudi Arabia, but not in Africa.

When the alleged African migrants stepped onto Eurasian soil, they would have first moved into tropical Asia, an area for which they would be most adapted. There, in an environment similar to their



Figure 22-4

African homeland, they would not have evolved much at all. Thus, the indigenous people, the aborigines, who today occupy the topical areas of Asia, should look very much like the migrating Africans of 65,000 ya. And, indeed, the Negritos of the South Pacific <u>do</u> have some African features (Figure 27-7); they have even been called "Oceanic Negroes." Unfortunately for OoA, they are actually the people most genetically <u>un</u>related to Africans. ¹⁷

Australian aborigines have occupied Australia for at least 50,000 yrs. If those African migrants were anything like today's east Africans, they would have excelled at long distance running, but would have been poor swimmers and boat makers. Though it is possible, ¹⁸ it would have been difficult for them to make that long Africa-to-Australia journey following the Asian coastline, crossing rivers that flowed into the sea, in the 15,000 yrs between 65,000 ya and 50,000 ya. The Australian aborigines who supposedly descended from those migrating Africans should look a lot like them. Unfortunately also for OoA, at least some of them look much more like primitive Caucasians (Fig. 22-5).

The afrocentrists could say that the aborigines were the only people not replaced by the migrating Africans, but then the aborigines would be unegalitarianly un-modern. Maybe they could say the aborigines evolved from the African erectus that left Africa 2 mva and became modern on their (though they are own not modern), without being replaced by Africans. No, then someone might wonder why all the other Eurasian erectus did not do that as well.

Acquiring Eurasian Alleles

After tens of thousands of years, as the tropical areas of Eurasia approached carrying

Figure 22-5

capacity, the allegedly modern African migrants would have moved north and would have begun to evolve cold-adapted traits. This means that, in an impossibly short 65,000 yrs, they lost all the alleles for the African traits described in Section II and evolved all the alleles for the European and Asian traits described in Section II. The new nuclear DNA mutations included not only eye and hair color and type, but also skull shape, skull capacity, and hundreds, if not thousands, of other traits. Intelligence, as measured by IQ, would have had to have increased by more than two standard deviations, from 67 (and it may have been still lower 65,000 ya) to over 100.

To evolve just <u>one</u> trait, a trait that was <u>strongly</u> selected for in the cold north, such as a stockier body to reduce heat loss, within that time period would be unlikely. But to evolve each and every one of those traits, even traits for which there was little or no selection, within that time period, is not possible, even for neutral traits. That would have easily required well over a million years, and could never have occurred in only 65,000 yrs. ¹⁹

Let us not forget that we know from fossils, cave drawings, and artifacts that Eurasians had at least some of those Eurasian traits for tens of thousands of years, further shortening the time needed to lose African traits and then evolve Eurasian traits. For example, the Cro-Magnons, the immediate predecessor of Caucasians, who had a skull almost the same as today's Caucasians, were living in Europe 32,000 ya, so if Africans left Africa 65,000 ya, they had only 33,000 yrs to evolve the African skull (more primitive than Figures 9-3 & 9-4) into the Cro-Magnon skull (Figure 2-9), which is not believable.

Also, some African traits are specialized for the African environment, but the corresponding Eurasian trait is generalized. For example, to keep the brain cool, African hair is specialized by its shortness, cross-sectional flatness, and the absence of a central duct, which makes it wooly. European and Asian hair is not adapted to serve such a special function and therefore is more generalized. Evolution usually proceeds from generalized to specialized, not the reverse (<u>Chapter 4, Rule 3</u>), and therefore Eurasians would not have evolved from Africans.²⁰

If OoA is correct and some Africans who evolved into *Homo sapiens sapiens* left Africa 65,000 ya, then the Africans who remained in Africa should not have any traits that are adaptive in Eurasia, but are maladaptive or neutral in Africa. But they do. The fact that Africans have a nose supported by external nose bones suggests migrations of early man into Africa. In the tropics, where the air is warm, there is no need for nose bones to support a large nose to



warm the air, and apes do not have them. The nose also moistens the air, but Australopithecus and very early man in Africa walked the savannah when it was dry and managed to do so without external nose bones. Thus, there would be no positive selection for nose bones in the tropics, even where it was dry, and Africans today would not have nose bones had the alleles for nose bones not been brought into Africa by Eurasian hominids who had them. The large size of Africans also suggests the migration of northerners into Africa because, according to Bergmann's Rule, Africans should be small; all pygmies and Negritos are tropical and small (Figure 27-3 & Figure 27-7) and Australopithecus, from which humans are believed to have evolved, were small (between 3'6" and 5'0"); the Hobbits were also small. According to evolution, man did not magically appear on this planet out of nowhere – he descended from a non-human animal and that animal was an ape. Of all the animals on this planet, living and extinct, man is most similar, genetically, anatomically, physiologically, and behaviorally, to the living great apes – chimpanzees, gorillas, and orangutans. Therefore, although man probably has a common ancestor with every living creature on this planet, his common ancestor with the great apes is more recent than his common ancestor with any other living animal, and therefore our most recent common ancestor was almost certainly an ape. This means that all races descended from an ape: every one of us traces our ancestry back to an ape.

During the time between when that ape ancestor lived and today, the lineage of every population has evolved. Whose lineage has evolved the most away from our ape ancestor? Would it be the Africans, the people who lived for that entire time in the same environment that our ape ancestor lived, or would it be the Eurasians, the people who OoA says left that environment and migrated to a very different environment? Even the afrocentrists have to concede that people in Eurasia would have evolved more than the people in Africa, and modern genetics confirms that Africans are mostly closely related to the living apes. This means that even if the people in Eurasia originally came from Africa, today's Africans, whose ancestors did not leave Africa, must have evolved less away from that ape ancestor than those Africans who left Africa. ²¹ That, by itself, casts serious doubt on egalitarianism – everyone cannot be genetically the same when some people are more simian than others.

OoE also says that man evolved from an ape ancestor and, since today's apes live mostly in a tropical climate, that ape ancestor most likely lived in a tropical climate, so OoE and OoA are in agreement that man began in a climate that was at least warm, if not tropical, then some of our ancestors left that climate for the very different northern Eurasian environment. Whether that warm climate was in Africa or in Asia (e.g., India) and when that ancestor left it are the issues. OoA says our ape ancestor lived in Africa; OoE says it lived in Eurasia. OoA says our ancestors left only <u>after</u> they had evolved into <u>Homo sapiens sapiens</u>, about 65,000 ya. OoE says our ancestors left <u>while they were still apes</u>, over 2 mya (and it is possible that they never lived in Africa - Chap. 23).

To summarize Section III, OoA fails on every front; it is a testament only to the power of egalitarianism to corrupt science. Now we examine OoE.

Section IV

Table of Contents

FOOTNOTES

1. (<u>Kemp, 2006</u>, pp. 444-445). "Britain is said to have conquered 100-million people in the Indian sub-continent with 800 soldiers and 2000 Indian auxiliaries." (Roodt, D., "<u>You Can't</u> <u>Have Your Banana and Eat It</u>," *Barely a Blog*, Apr.1, 2005). <u>Back</u>

2. (<u>BBC, Feb. 27, 2007</u>). A Near East date of 90,000 ya is required to account for modern fossils found in Israel. The date is not consistent with the migration date of 65,000 ya, so the afrocentrists say that that migration failed. <u>Back</u>

3. (Richard Klein, *National Geographic*). The range has recently been extended to include southern Siberia. (<u>Krause, 2007a</u>). <u>Back</u>

4. Figure 22-2 is actually a bit misleading because the average Neanderthal was shorter than the average modern Caucasian. Neanderthal = 5'6", 142 lbs; human = 5'9", 172 lbs. (Carey, B., "Scientists Build 'Frankenstein' Neanderthal Skeleton," *Live Science*, Mar. 10, 2005). The larger, stocker size of the Neanderthal skeleton is an example of <u>Bergmann's Rule</u>, that a species is usually larger in a colder climate as a larger body has less surface area per unit volume, so the body loses less heat per unit volume. Bergmann's Rule is due to a relationship known as <u>Kleiber's Law</u>, which holds that as body weight increases, energy requirements decrease as the 0.75 power of body weight. (Lewin, 1998, p. 152). Invading Africans would have been significantly smaller and weaker (a greater height/width ratio) than non-tropical Eurasians. <u>Back</u>

5. OoA proponents would have to take the position that Valuev is a descendant of Africans but, even though he has primitive traits, he has no distinctly African primitive traits. "[I]f one looked long and hard enough through the skeletal collections of the world's natural-history museums, one could find the occasional present-day human with a Neanderthal ... feature." (Schwartz, 1999, p. 157). Back

6. And Java Man, an *erectus* in Asia, lived until 27,000 ya. <u>Back</u>

7. Also, the Asian alleles for sickle cell anemia, which confers resistance to malaria, are different from the African alleles. (See Fig. 22-4). <u>Back</u>

8. (<u>Eswaran, 2005</u>). Others have also proposed models intermediate between the strict OoA and the Multiregional models. (<u>Smith, 1985; Relethford, 2001; Templeton, 2002</u>). <u>Back</u>

9. (<u>Eswaran, 2005</u>). That is, 80% of the loci may have some archaic admixture, not that the human genome is 80% archaic. <u>Back</u>

10. (Harpending, 1998b & 2002; Templeton, 2002). Back

11. Alleles that code for primitive traits are usually switched off, not lost, where "lost" means mutated so that a second mutation is required to reintroduce them (Chap. 3) or lineage sorting, where those who had them had no descendants. In long term evolution (millions of years) the loss of alleles is important (Spinney, L., *New Scientist*, "Evolution: hacking back the tree of life," June 13, 2007), but other than the massive number of deaths during the ice ages and the Black Plague, loss is unlikely to play an important role in the evolution of modern man, as the time period was too short. And, if African alleles were not "lost," but turned off, they should occasionally be turned on again, resulting in Eurasian parents having babies with Negroid traits, but that does not happen, which is good evidence that Eurasians did not evolve from Africans. Back

12. "In a large population, a neutral or indifferent mutation will not ordinarily spread rapidly, nor will it necessarily be lost. It can be expected, all else being equal, to maintain a low frequency

in a large gene pool." (Coon, 1962, p. 47). Back

13. Other examples in humans include the coccyx (tailbone) and the appendix, though the appendix may serve as a safe haven for beneficial bacteria. (*Science Daily*, "<u>Appendix Isn't Useless At All</u>," Oct. 8, 2007). <u>Back</u>

14. When hairless tropical hominids began moving north out of the tropics, they would be under selection pressure to lose the melanin in their skin so their bodies could make enough vitamin D; this would be true whether or not they originated in Africa. (Kappelman, 2008). Back

15. Fred H. Smith, Professor and Chair, Department of Anthropology, Loyola University of Chicago, personal email to the author. <u>Back</u>

16. "...any diversion from eumelanin production (black pigmentation) appears to be evolutionarily deleterious" in Africa, but is neutral outside of Africa. (<u>Harding, 2000</u>). <u>Back</u>

17. (Table 7-1). Nevertheless, "the ancestral allele associated with dark pigmentation has a shared high frequency in sub-Saharan African and Island Melanesians. " (<u>Norton, 2006</u>). The African-Negrito connection is discussed in Chapter 26. <u>Back</u>

18. "The migration from southwestern Asia [i.e., India] to Australia would have taken <5,200 years at 95% confidence, assuming a Poisson mutation process." (<u>Hudjashova, 2007</u>). <u>Back</u>

19. Here is a thought experiment for the reader. It is 65,000 ya and there are no Eurasians. Could you take a few thousand Congoids, the Africans who today have the least amount of Eurasian heritage, reproductively isolate them in Eurasia, selectively mate as you wish to, within 65,000 yrs, produce today's Asian and European races? If not, then natural selection, which would have been far less effective, could not have done so either. <u>Back</u>

20. Note in Section II, that as to most traits Caucasians are in between Africans and Mongoloids, which is expected since whites are more generalized than both tropics-specialized blacks and cold-specialized Asians; Australian Aborigines are both the most generalized people and the most primitive people. (Howells, 1948, p. 221). Thus, according to Rule 3 (Chap. 4), that generalized \rightarrow specialized, all three races could have descended from an Australian Aborigine type, but whites could not have descended from Africans or Asians. Back

21. An interesting way to illustrate this would be to enter the faces of a Congoid, a European, and a NE Asian into a computer and count the number of steps required to morph each of them into the face of an ape (or vice versa). <u>Back</u>

SECTION IV The Out-of-Eurasia Theory



Figure IV-1

The reader should be convinced that OoA is just plain wrong. An alternative theory, Outof-Eurasia (OoE) is proposed; Figure IV-1 gives the OoE tree. ¹ Dotted lines indicate that the genetic contribution was minor; "*Hn*" is the Neanderthals, "*He*" is *Homo erectus*, and "Aus" is *Australopithecus*. Lines are not proportional to time and dates are approximate. ²

If it were possible to draw a tree that showed man's actual evolution proportional to the time that had passed, and the names of all known living and fossil primates were pasted onto that tree, almost all of the names of extinct species would be at the tips of small branches (i.e., dead ends), and the trunk and major branches of the tree would be bare (i.e., fossils that lie in the lineage of later species have not been found). Also, at any given time there would be several branches in existence, so that several species and races would co-exist, but usually not in the same location. Thus, the species named in Figure IV-1 are probably on branches that are not in our lineage, and are just examples of what the species in our lineage may have been like.

The OoE tree is very different from the OoA tree (Figure III-1). In the OoA tree, beginning with a primitive primate, which probably lived in Africa, there was an early expansion of *erectus* out of Africa, then man evolved from *erectus* into modern man entirely within Africa until 65,000 ya, when modern Africans left Africa, replaced non-modern Eurasian *Homo* species, and evolved into today's Asians, who then evolved into today's Europeans.

The OoE tree also begins with a primitive primate, ³ but in Asia, not Africa, and the African, Neanderthal, Caucasian, and Asian lineages split over 2 mya. ⁴ In OoA, the Africans evolved without any contact or help from any Eurasian hominoid, but in OoE Africans evolved very little on their own, and advanced primarily by receiving multiple infusions of Eurasian alleles as a result of interbreeding with more evolved Eurasian hominoids who migrated multiple times in to Africa. Thus, in OoE, there were (at least) four races of *Australopithecus* before man, *Homo*, evolved, and those races evolved into the races we see today. ⁵ Although OoA holds that Europeans evolved from Asian migrants into Europe about 46,000 ya, OoE holds that Europeans and Asians evolved separately all the way back to *Australopithecus* ⁶ over 2 mya, though with significant interbreeding. Also, in OoE there has been some interbreeding between Europeans and Neanderthals but, at least until recently, OoA held that there was no interbreeding.

Although OoA takes the egalitarian view that <u>all</u> the people alive today are modern (*Hss*), ⁷ under OoE, some s-S Africans and South Pacific aborigines are *Hss-erectus* hybrids, archaic *Hs*, or even late *erectus*.

Intelligence-Enhancing Processes

Man is distinguished from all other animals by his disproportionately large brain and high intelligence. Any theory of human origins must explain which environmental factors selected for greater intelligence, from a primitive primate to modern man, at <u>every</u> major advance towards becoming a modern human. A theory of human origins must explain why greater intelligence was selected for at <u>each step</u> of the way, so that more intelligent individuals had greater reproductive success; one cannot simply assume that greater intelligence is always adaptive; it is not (<u>Chapter 14</u>, Intelligence as a Liability).

Every population asymptotically approaches a <u>mixture</u> of traits in which there is a balance of the amount of each trait so that <u>every</u> trait, including intelligence, is at its optimal amount in <u>that</u> mixture for <u>that</u> population, in <u>that</u> environment. If intelligence in man's lineage constantly increased, as it did until recently, then the optimal amount ⁸ of intelligence must have constantly increased, which means that the payoff in reproductive success for having greater intelligence must have constantly increased, which means that the environment must have constantly become more mentally challenging.

As shown in Figure IV-2, the ancestors of man were subjected to a series of environmental changes. each of which resulted in a more mentally challenging environment that required more complex behavior; as a result, the optimal intelligence increased. Those individuals who were more intelligent were better able to engage in that complex behavior and obtain the resources needed for areater reproductive success, passing their alleles for greater intelligence on to the next generation. (Chapter 4, Rule 12). As the population neared equilibrium, where each trait was close to its optimum, selection pressure became less severe and



the population stabilized until the environment changed again, either in the same location or because the population migrated to a new location. In that way, the optimal amount of intelligence kept increasing and selection pressures raised the intelligence of the population. And, once we had started down the path of increased intelligence, rather than some other path, no other animal, not even those who had just previously branched off from our lineage, could ever again surpass us in intelligence; that is why, when it comes to intelligence, we have no peers in the animal world.

What follows is an explanation of how our ancestors repeatedly found themselves in environments where those individuals who were more intelligent had greater reproductive success. The process occurred in two stages, the first in the sub-tropics, which took man to a bipedal ape, and the second farther north, which took man from a bipedal ape to *Hss*.

When the first mammals evolved from reptiles, the dinosaurs dominated the earth and most mammals were prey. Some hid in the day and foraged at night, a new environment that selected for better eyesight. More brain power was needed to process the additional visual information and those who had it, had more reproductive success. Some of these nocturnal mammals found safety underground, but others took to the trees. Of the tree climbers, some clawed the tree and other grasped branches. Of the graspers, those who had hands that better facilitated grasping had greater reproductive success as they could climb on thinner branches and reach and grasp food and carry it without using their mouth. By enabling the brain to more easily manipulate their environment, grasping hands raised the optimal amount of intelligence, and facile graspers had more reproductive success.

After the dinosaurs went extinct 65 mya, the ground became safer and some of our larger ancestors, who were less adept at moving through the trees, began spending more of their time on the ground. There they were more vulnerable to ground-dwelling predators, especially big cats. Those who had brains capable of communicating and cooperating were eaten less and had more reproductive success.

Next came habitual bipedalism and facile walking on the ground; it freed the hands, ⁹ which created another intelligence-enhancing feedback loop. One possible scenario (in accordance with behavior changing first, Chap. 4, Rule 12) is that the graspers carried things in one hand, struggling on two feet and the other hand, then more and more on just two feet. Those most adept at carrying had the advantage in reproductive success. Bipedalism meant that tools, weapons, and food did not have to be discarded when moving, but could be taken

along. As a consequence, tools and weapons did not have to be made then discarded at each new location, so they could be made better, and making them better required a better brain and raised the optimal amount of intelligence. The feedback loop that bipedalism made possible, of larger brain \rightarrow better technology \rightarrow more food \rightarrow larger brain again, continued until bipedalism became facile and the optimal amount of intelligence had been reached for warm, mostly non-seasonal, climates. When those territories had filled to carrying capacity, populations that lived in the northern fringes continued the same intelligence-enhancing feedback loop, but with the "technology" including heat conservation, e.g., control of fire, shelters, and body insulation, e.g., animal skins. ¹⁰

Now, still another intelligence-enhancing feedback cycle began. The optimal brain size and intelligence was not the same in every environment occupied by the bipedal apes. The major difference in optimums was between tropical climates that had a more-or-less single season, and sub-tropical climates that had four distinct seasons. Survival through the winter required hunting and hunting required more intelligence than gathering. ¹¹ The greater the difference between summer and winter, the more mentally challenging the environment was, and the higher was the optimal amount of intelligence. ¹² That is why IQ scores increase with distance from the equator and why the correlation between IQ and mean high winter temperature is -0.76. ¹³

Bipedal ape populations, like all populations, expanded to fill up all available territories to their carrying capacities. ¹⁴ The easily-exploitable southern territories were less mentally challenging and the optimal brain size (and intelligence) was therefore lower than in the more difficult and mentally challenging northern territories. Higher intelligence was selected for in the north because it enabled more of the individuals who had it to survive in the winter, giving them more reproductive success. As northern intelligence increased and body coverings were made, it kicked in the "larger brain \rightarrow better technology \rightarrow more food \rightarrow larger brain" feedback cycle, where the additional food was the meat available in the winter. As they migrated farther north and the environment became increasingly more mentally challenging, the optimal intelligence needed to survive the cold and acquire food in the winter continued to increase. ¹⁵ Winter hunting also required better communicating, organizing, and cooperating, which also increased the payoff for more intelligence, raising its optimum.

If the reader will refer to Figure 14-2, he will see that the first large jump in brain size occurred 2 mya during the transition from *Australopithecus* to early *Homo* (*Homo habilis* and *Homo erectus*), when man became a facile biped and a proficient tool-maker during the "larger brain \rightarrow better technology \rightarrow more meat \rightarrow larger brain" feedback cycle. (Holloway, 1981, pp. 291-292). The second large jump in brain size occurred at about 500,000 ya, when man increased his northern range by using fire (Table 17-2) and animal skins (>70,000 ya) to keep warm.

Eventually, the migrating populations reached the latitude where seasonal differences were at a maximum and, as they moved still farther north past that peak in seasonal differences, seasonal differences decreased again and, as they did, so did the mental challege of living there and the optimal intelligence, ¹⁶ though the optimum in the Arctic was still higher than the optimum in the tropics.

Northern populations, now superior to their southern ancestors in technology and cooperation, expanded back into the south, ¹⁷ conquering, displacing, and being absorbed into their southern ancestors. ¹⁸ The northerners who invaded the south had, of course, a higher than optimal intelligence for that less mentally challenging environment and, because the brain is costly and there was no longer a payoff in reproductive success for the additional intelligence, their intelligence began falling, though not necessarily all the way to the lower southern optimum. ¹⁹ Eventually, after all the populations had reached the approximate optimums for

their environments, with the north higher than the south, the north-south differences in intelligence between contiguous territories $\frac{20}{20}$ were no longer great enough to permit further conquest of the southerners by the northerners, and the process wound down. $\frac{21}{20}$

Intelligence-enhancing processes ceased and even reversed somewhat when huntinggathering gave way to agriculture in the Middle East about 12,000 ya. Although agriculture greatly increased the carrying capacity of the land, increasing numbers, it lowered populations' optimal amount of intelligence, temporarily pitting smaller numbers of more intelligent huntergatherers against greater numbers of less intelligent farmers. When the dust settled, almost everyone was a smaller-brained and less intelligent farmer.²²

An intelligence-enhancing process began again on a smaller scale prior to the Industrial Revolution in Europe when the more intelligent and entrepreneurial individuals in the north were able to have and support more children. ²³ That, and the Industrial Revolution that followed, brought the last great north-to-south migrations, to India, Africa, and the Americas. Today the northerners, thoroughly demoralized, no longer invade and conquer the south, but seek absolution for their sins by permitting and subsidizing the migration of southerners into northern territories. And average intelligence continues to fall. ²⁴

It is difficult to make OoA consistent with these intelligence-enhancing processes because the processes would require much more time than 65,000 yrs. With today's Africans having an average IQ of 67, and the Africans who migrated out of Africa 65,000 ya presumably having an even lower IQ, it is not reasonable to believe that supposedly modern Africans left Africa 65,000 ya and increased their IQ by more than 2 SDs in that short span, especially when selection for higher intelligence was not the strongest selector for most of those Africans most of the time. Moreover, by claiming Africa instead of Eurasia as man's origin, OoA requires man's defining attribute, high intelligence, to have a greater optimum in Africa than in Eurasia, which clearly contradicts today's world-wide distribution of intelligence (as well as Rule 10 in Chap. 4). Thus, the evolution of modern man could not have occurred in Africa. ²⁵

Bipedalism was needed for the south-to-north intelligence-enhancing process to begin, however, because it was not until bipedalism, when tools and weapons, the products of intelligence, could be preserved by carrying them, that a larger brain could pay for its high cost. On land, only bipedal apes have the anatomy, i.e., free hands with opposable thumbs, needed make use of high intelligence and reap its benefits. Thus, from bipedalism onward, man became more human in the north and the flow of his humanizing genes was from the north into the tropics not, as OoA supposes, the reverse.

Chapter 23

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FOOTNOTES

1. In 2000, Ronald A. Fonda made the case for the evolution of modern man in Eurasia on his web site. Also see (Fonda, 2001). Back

2. Dates during which a species lived are often inconsistent in the literature and, for some species, there is only a single fossil so the duration of the species can not be estimated. <u>Back</u>

3. e.g., *Bahinia pondaungensis* (<u>Jaeger, 1999</u>) in Asia. The LCA date may be about 57 mya. <u>Back</u>

4. "Instead, anatomically distinct races capable of interbreeding have evolved over at least the past 2 million years ..." Alan G. Thorne of Australian National University in Canberra, reported by (Bower, B., "Pruning the Family Tree," *Science News*, Vol. 148, No. 10, p. 154, Sept. 2, 1995). "We estimate the divergence time of *H. sapiens* from 16 genetic distances to be around 1.7 Ma [mya]." (Curnoe, 2003). Back

5. <u>Carleton Coon (1962)</u>, also concludes that species came before race, i.e., that a pre-*Homo sapiens* species differentiated into races, and then those races evolved into races of Homo sapiens. Dates from genetic studies are more recent as they do not take interbreeding into account. Chromosome 22 gives an African-Eurasian LCA date of 634,000 ya (Zhao, 2000), while chromosome 1 results show an ancestral link at 757,000 to 805,000 ya. (Yu, 2001). The Neanderthal-*Hss* LCA is "estimated to be 465,000 years, with confidence limits of 317,000 and 741,000 years." (Krings, 1999). The Asian-Caucasian LCA estimate is about 46,000 ya. (Mellars, 2006). When a new species forms it is unlikely to be a clean break with its parent species. Instead, the two species will interbreed on and off until they can no longer do so, either because of physical separation or genetic changes. Even after that, the parent species is likely to linger on for perhaps tens or hundreds of thousands of years before it is completely extinct. Back

6. See (Martinón-Torres, 2007) for dental evidence. Back

7. "Homo sapiens sapiens. All living humans are members of this subspecies." ("<u>The Long</u> Foreground: Human Prehistory," Washington State University, GenEd 110). <u>Back</u>

8. The optimal intelligence for a population is a bell-shaped curve having a mean, standard deviation, and possible a skew, all of which may change as the population's environment changes. <u>Back</u>

9. In the next chapter, it is suggested that from prosimians on there were no quadrupeds in man's lineage. <u>Back</u>

10. The first evidence of woven clothing is from about 27,000 ya in Europe (Soffer, 2000), though animal skins were no doubt used long before that. The human body louse evolved from the head louse about 72,000 ya \pm 42,000 yrs, when temperatures were low, suggesting that by that date humans not only lacked heavy body hair but, at least in cooler climates, had started wearing animal skins. (Kittler, 2003; Coon, 1962, p. 117). Back

11. "In warm-temperature, sub-tropical, and tropical latitudes, zero to thirty-nine degrees from the equator, gathering is by far the dominant mode of subsistence ..." More northern societies relied primarily on hunting and, more recently, fishing. (Lee, 1968, pp. 42-43). Back

12. "...seasonal variation in climate may also have been an important selective force behind the evolution of human cranial capacity." (<u>Ash, 2007</u>). In computer simulations, a varying environment speeds up evolution. (<u>Kashtan, 2007</u>). <u>Back</u>

13. IQ correlates 0.67 with distance from the equator, even within the continental U.S. ("Intelligence and Latitude in the US," *The Audacious Epigone*, Apr. 13, 2007). The argument could be made that the multiple droughts suffered by the Africans also made Africa a mentally challenging environment. The difference, however is that the seasons are highly predictable but the African droughts are not. Africans could store water, but it could be years before the next drought came and the energy put into maintaining the storage, and then successfully defending

that resource during the drought, would probably be wasted. Back

14. (Templar, 2006). Man populated all the earth, but changing seasons gave him birth. Back

15. By analogy to one of "<u>Murphy's Laws</u>" (stuff accumulates to fill the space available) all populations expand their numbers to fill the territory available to them. But territory is not available if it is already occupied by an equally fit population. <u>Back</u>

16. This south-to-north intelligence-enhancing cycle can also work in other directions, of course, provided the migration is into a more mentally challenging territory. For the Neanderthals, this happened when they moved west to east. Western Europe was warmed and moistened by the Atlantic Ocean, but Eastern Europe, far from a large body of water, was cold and dry and more mentally challenging. (<u>Hoffecker, 2002</u>-, pp. 3, 36, 249). <u>Back</u>

17. Note in <u>Table 14-1</u> that although the Asian IQ averages 105, the Inuit (Eskimo) IQ average drops to only 91; however, the Eskimo visual memory is better than that of Caucasians. (<u>Kleinfeld, 1971</u>). <u>Back</u>

18. This process of going north, increasing in size and intelligence, returning south and interbreeding with the less advanced southerners, followed by selection of the hybrids, occurred repeatedly. (One can see an example of this with the success of the Chinese in Malaysia.) However, these migrations by northerners into the south were smaller and more localized than migrations into the south due to the two ice ages, and were probably more violent because they occurred over a shorter period. Back

19. Figure 21-1 suggests some of this north-to-south conquest. "Throughout history, most of the instances of people from one region attacking and conquering substantial portions of another region have involved 'northerners' invading more southerly lands." (Hart, 2007). "It is noteworthy that the expansion process was dominated by males, as is shown by a greater contribution to the Y-chromosome than the mtDNA from northern Hans [Chinese] to southern Hans." (Wen, 2004). "... the male line of descent (as seen in the Y-chromosome) tends to derive from north of the homeland of the female line of descent (as seen in the Y-chromosome) tends to derive from north of the homeland of the female line of descent (as seen in the mitochondrial DNA)." (Sailer, 2007b). The general pattern, repeated over and over again (Kemp, 2006), is that a more advanced population (MAP), usually from the north, conquers and dominates a less advanced population (LAP). Interbreeding occurs, weakening the more MAP and strengthening the LAP, which also picks up the culture, tools, weapons, etc. of the MAP. The LAP has numerical superiority and gradually absorbs the MAP, with or without violence and, many years later, the process starts all over again. Back

20. As discussed in <u>Chapter 26</u>, there are some reasons for believing that the intelligence of northerners who migrated into Africa declined. Interbreeding with previous migrants, who had a lower intelligence, would produce a hybrid population having an average intelligence in between that of the previous migrants and the new migrants. The optimal intelligence in the tropics was likely to increase after a northern invasion, however, because optimal intelligence depends upon culture, e.g., skills, as well as traits, e.g., grasping hands and good eyesight, and the optimum for the culture of the new migrants was likely to be higher. The optimal intelligence for chimps corresponds to their average cranial capacity 390 cc., but the optimal intelligence for *Australopithecus*, of about the same size and living in the same territory as chimps, corresponded to a cranial capacity 375 to 550 cc. Once *Australopithecus* had acquired the anatomy for facile walking, its behavior changed and its optimum, and actual, intelligence increased. (Chapter 4, Rule 10). Similarly, today in the tropics, with modern medicine, tools, and

weapons, the optimal intelligence for man will be higher than it was only a few hundred years ago, though other African traits (e.g., impulsiveness) may limit its benefits. <u>Back</u>

21. Of course, if the northern and southern territories were not contiguous but were reachable by boat, the difference in optimums could be high enough to make conquest feasible. <u>Back</u>

22. The defenders of home territories have a large advantage, not only in knowledge of that territory, but in the will to defend it and, unless the attackers are significantly superior, the defenders usually win. "...the challenger is almost invariably defeated ..." (Ardrey, 1966, p. 3). Back

23. "Although still rugged by modern standards, Mesolithic heads from Portugal and Brittany were diminished in size from those of their Paleolithic ancestors somewhat ..." "... in this part of the Near East, skulls seem to have diminished a further stage in size and ruggedness from the Mesolithic peoples of Europe, essentially if not completely down to a sort of standard Mediterranean form of more recent times." (Howells, 1959, p. 276-279). Back

24. The prosperous, i.e., the more intelligent, had many more surviving children than the poor in medieval and early modern England. (<u>Clark, 2007</u>). <u>Back</u>

25. Another intelligence-enhancing process occurred with the Jews. In Biblical times they were often the losers in tribal battles for territory, forcing them to migrate constantly, which selected for verbal skills. Later prohibitions against farming, but not commerce and finance, continued the selection for verbal and mathematical intelligence, as did other factors. See ("Jewish Genius," by Charles Murray, *Commentary*, Apr., 2007). The Jews are not unique, however, and any population will increase its intelligence if selection for it is strong, though it may require thousands of years. Back

26. Note Figure 2-3 of *Homo ergaster*, who lived for a million years in Africa without improving his tools. Back

Chapter 23 - The Bipedal Apes

"The primate who first walked bipedally Perhaps did not do so too steadily. Using two legs, but not four, Brought him rewards by the score, And so now we all do it quite readily."

David Schildkret

In this chapter, we cover our possible earliest primate ancestors and their possible evolution into bipedal apes, the seminal step on the road to becoming man. ¹ As explained in Chapter 1, walking on two feet created the opportunity to cash in on a larger brain by making grasping hands, forward-directed eyes, pair bonding, and cooperation pay off big time.

Although OoE is primarily concerned with the evolution of <u>modern</u> man from the first species of *Homo*, there are reasons why the <u>entire</u> evolution of man, from a primitive primate onward, may have occurred in Eurasia, not Africa. (<u>Begun, 1997</u>).

The First Primates

Before there were any bipedal apes, tree-dwelling mammals were being selected for increased intelligence in both Africa and Asia. Thus, it is reasonable to assume that the Asian tree-dwelling mammals would be at least as competent as the African tree-dwelling mammals and that African tree-dwelling mammals could not have left Africa and replaced Asian tree-dwelling mammals.

Figure 23-1 (University of Maryland) shows two incredibly cute SE Asian tree shrews. ² Note the more muscular legs compared to the arms, and the vertical posture. Climbing trees means that most of the weight is on the legs, resulting in "the emancipation of the forearms," which are now free to grasp, examine, and hold. (Howells, 1959, p. 124). In a grasping tree mammal, individuals who had smaller claws were selected because they interfered less with grasping and touching; eventually these smaller claws became nails in the primates. (Id., p.123).

The first true primates, *Teilhardina*, originated in Asia about 55.5 mya, then spread to Europe and North America; ³ Bahinia, at the base of the OoE tree (Fig. IV-1) lived 40 mya and is found <u>only in Asia</u>. Another fossil, a 45 million year old tarsier, similar to the tarsiers that still live today on Madagascar, was found in <u>China</u>. ⁴ Some scientists have proposed a "tarsier theory" of bipedalism, that bipedal hominoids evolved from a tarsier-like mammal that clung in a vertical position to the trunk of trees as the tarsier in Figure 23-2 is doing; note its large thigh muscles.



Figure 23-1

The absence of horizontal branches (e.g., bamboo in the Asian tropics) may have favored animals that were more adept in a vertical position. When those animals moved into trees with horizontal branches that could support more weight, they could become heavier and move by hanging from the branches by their arms, still retaining their vertical posture. 5

Note that the eyes of the tarsier (Figure 23-2) are in the front of the head, both eyes looking forward, as in a species that is predominantly a predator, rather than on the side of the head, as in a species that is predominately prey, e.g., the tree shrews in Figure 23-1. The tarsier has large


Figure 23-2

were found in Asia (Jaeger, 1999), we move on to the apes. Although today there are no apes in Europe (the Barbary "apes" on Gibraltar are tailless monkeys) and the orangutans and

eyes because it is nocturnal and a small nose because it relies more on sight than on smell. The eyes of an animal that is habitually in a vertical posture are directed at a 90° angle to its spine, not at a 180° angle as in a quadruped; thus, the foramen magnum (Fig. 9-18) is already in the center of the skull and it does not have to migrate there as it would in a quadruped. ⁶



Figure 23-3



Figure 23-4

gibbons are the only apes in Asia, nevertheless " ... chimp-like apes [once lived] in Europe and Asia as well as in Africa; orangs [lived] in China and India..." (<u>Howells, 1959</u>, p. 107). Where the <u>first</u> ape evolved is not certain, though it may well have been Europe. $\frac{7}{2}$



Figure 23-5

About 20 to 9 mya, the 2 foot tall *Dryopithecus* ("woodland ape") was living in Africa, Europe, ⁸ and Asia. It was not bipedal, but it was believed to have been partially upright (Moya-Sola, 1996). Unlike chimpanzees and gorillas, it did not develop the anatomy for knuckle-walking. Figure 23-3 shows a *Dryopithecus* skull and Figure 23-4 shows a reconstruction. ⁹ Again, note the large, round, forward-directed eye sockets. The large canine teeth are primitive, ¹⁰ but *Dryopithecus* did have a "Y-5" dental pattern (Fig. 23-5), the same as the great apes and humans, ¹¹ as well as

Other aspects of its teeth were also more human than ape-like and its limbs have been described as orangutan-like. (Schwartz, 2005, pp. 29, 49). Dryopithecus was very similar to *Sivapithecus*, an ape that lived 12.5 to 8.5 mya in what is now India and Pakistan, whose cheek teeth also had thick enamel. ¹²

After *Dryopithecus* came *Ramapithecus*, another human and orangutan-like ape, ¹³ also with thick tooth enamel. It is dated about 12 mya and was found in India and East Africa. (<u>Schwartz</u>, <u>2005</u>, pp. 48-49, 138). Thus, tropical India may be a more likely location for the first human-like apes than tropical Africa.

Cookie Monster

The first (at least partially) ¹⁴ bipedal ape was 3'7" tall *Oreopithecus bambolii* ("Oreo," the Cookie Monster, aka the "Swamp Ape"), who lived in swamps, the margins of shallow lakes, and forests near streams and rivers. ¹⁵ Oreo's bones have been found on the island of Tuscany-Sardinia in Italy and also in SW Asia

The

and NE Africa. Oreo, Figure 23-6, ¹⁶ lived from 11.2 to 3.4 mya, ¹⁷ overlapping with *Australopithecus*. Oreo lacked a chin and external nose bones, and the brow ridges were heavy, but he was starting to look a little bit human. (<u>Schwartz, 2005, p. 97</u>).

Oreo had a number of curiously humanlike traits in its teeth, jaws, skull, and hipbone, and its hand was human-like. (Moyà-Solà, 1999). Oreo is also favored as an ancestor of humans because he lived in West Asia (Iran), which is not only centrally located and just south of where *georgicus* was found, but it is where other important advances occurred, e.g., agriculture, early civilizations.

Feeding on aquatic plants and animals is dangerous if crocodiles are present, $\frac{18}{18}$ and even today chimpanzees wisely avoid entering water. A European primate such as Oreo, however, may have lived north of the croc range, where the water was safe and aquatic life provided a rich source of the essential fatty acids needed for



Figure 23-6

growing a larger brain. (<u>Crawford, 2000</u>). Oreo had not yet evolved all of the anatomical changes needed for easy bipedalism on land, but wading on two feet in the water facilitated the transition to land because the water reduced the weight on the legs and made it easier to balance. (<u>Kuliukas</u>, 2001). Aquatic bipedalism also kept the head above the water, gave a better view of what was underneath the water, and permitted feeding in deeper water. ¹⁹

Australopithecus

Because Australopithecus ("southern ape") was not only fully bipedal, but also a long lasting and widespread genus with at least six species, *ramidus*, *afarensis*, ²⁰ *garhi*, *africanus*, *anamensis*, and *robustus*, it is Oreo's logical descendant; it evolved when Oreo, the Swamp Ape, left the water. Figure 23-7 compares the skulls of 10 mya Oreo and 3 mya *Australopithecus africanus* and shows



how similar they are. (Howells, 1959, pp. 129 and 117). Various species of *Australopithecus* lived from 4 to 1.2 mya. (*Wikipedia*, "*Australopithecus*"). The jaws of both skulls occupy a large portion of the face, but Oreo has larger canines and *Australopithecus* has more prognathism. ²¹ *Australopithecus* had more human-like teeth than the chimpanzee, suggesting that the split between *Pan* (chimpanzee) and *Homo* (man) occurred prior to *Australopithecus*. (Figure IV-1). "... australopiths are basically oranglike in their teeth and in many aspects of their skulls...." (Schwartz, 2005, p. 215, 245-246). Like Oreo, *Australopithecus* (Figure 23-8) ²² had heavily enameled teeth (Howells, 1959, pp 117-118), a trait of humans, but not African apes. The robust form, *A. robustus*) had a saggital keel, similar to that of the gorilla. ²³

The pelvis and leg bones closely resemble those of modern man, leaving no doubt that they walked on two feet. They were between about 107 cm (3'6") and 152 cm (5'0") tall with very strong bones. The

finger and toe bones are curved and proportionally longer than in humans, but the hands are similar to human hands in most other details. Females were substantially smaller than males (sexual dimorphism). *Australopithecus* left small, knapped stone tools dated at 3.5 mya. (Coppens, 2004, p. 51). Cranial capacity varied from about 375 to 550 cc. The nose is more prominent, the brow ridges less so, but (minus the hair) the face is not much different from the reconstruction of Oreo in Figure 23-6.

Although different species of *Australopithecus* lived in Africa for 2.8 million years, evidence for their presence in Europe and Asia is, as yet, hard to come by. Their long presence and many species suggest that the absence of *Australopithecus* fossils outside of Africa is due to



Figure 23-8

our failure to find their remains, rather than to their failure to occupy Eurasia. ²⁴ Their presence in Africa could easily be due to their migration there. ²⁵

Knuckle-Walkers or Palm-Walkers?

African apes (chimps and gorillas) walk on feet and knuckles (Fig. 23-9). ²⁶ Asian apes (e.g., the orangutan) do not knuckle-walk – they walk on their palms. So, determining whether humans are more similar to African knuckle-walking chimps or to Asian brachiating orangutans should help answer the question of whether man had an African origin or an Asian origin. ²⁷





Although palmwalking does not require any anatomical changes, knucklewalking requires specialized changes to the fingers, wrist, and forearm bones so that the animal can lock its wrists to support the weight of its



upper body. ²⁸ Figure 23-10 is a graph, the purpose of which is to show whether *Australopithecus* was closer in wrist bone structure to the knuckle-walking African apes or to the palm-walking Asian orangs. ²⁹ The two ellipses at the top center cover the wrist characteristics for the gorilla and "*Pan*," the knuckle-walking chimp, the ellipse at the lower left is for the orangutan ("*Pongo*"), and the ellipse in the lower center is for man ("*Homo*"). The graph shows that early *Australopithecus* ("ER 20419" and "AL 288-1v and 1g") were closer to the knuckle-walkers than to the orangutan, but the later *Paranthropus* ("SKX 3602," now considered to be an *Australopithecus*) and the later *Australopithecus* ("Stw 46") were about equidistant from *Pan* and *Pongo*. Note that the *Pongo* ellipse overlaps substantially with the *Homo* ellipse, but there is no overlap between the Pan or Gorilla ellipses with the *Homo* ellipse.

The authors of the article that graph is from conclude that man's predecessors were knucklewalkers who lost knuckle-walking adaptations, ³⁰ but concede that "vertical climbing adaptation may be 'preadaptive' to bipedalism." That is, man's ancestors may have had a vertical posture in trees, similar to the tarsier (Fig. 23-2). If, as the authors conclude, humans evolved from a knuckle-walking African ape, they would have had to have lost the specialized anatomical adaptations that chimpanzees and gorillas have for knuckle-walking. However, <u>Rule 3 (Chap. 4)</u> says that animals evolve from a more generalized form to a more specialized form, seldom, if ever, the reverse. Humans are the most generalized primates, which suggests that they did not evolve from African apes, who are specialized for knuckle-walking.

No bipedal ape survives today, ³¹ but additional light can be thrown on the answer to the question of whether man descended from a bipedal African ape or a bipedal Eurasian ape by comparing man to African chimpanzees (the common chimp and the bonobo) and to the Asian orangutan.

Genetic Distance

Most paleoanthropologists have concluded that man descended from an ancestor of the chimpanzees, rather than from an ancestor of the orangutans, ³² because the genetic distance between humans and chimpanzees is less than the genetic distance between humans and orangutans. Genetic distance comparisons suggest the tree shown in Figure 23-11. However, it is possible that man descended from an Asian ape even though the chimp-human genetic distance is less than the orangutan-human genetic distance. In Figure 23-11, man and orangutan are in completely different lineages. In Figure 23-12, however, there is a split ("C/H LCA") into a chimp lineage (line C) and a *Homo* lineage (lines H). ³³ Genetic changes in the *Homo* lineage (line O-H) that occurred prior to the orang/*Homo* LCA ("O/H LCA"), ended up in both the subsequent *Homo* lineage (line H) and in the orangutan lineage (line O). In other words, the LCA of humans and orangutans is more recent than the LCA of humans and chimps, but still a very long time ago. (Line length is not proportional to genetic distance in these trees.)



Figure 23-11

Figure 23-12

The reason that the genetic distance between the chimpanzees and humans (*Hss*) is less than the genetic distance between the orangutan and humans is that after the orang/*Homo* LCA, a population in the *Homo* lineage migrated into Africa (line I) and interbred with a population in the chimp lineage. ³⁴ Evidence of interbreeding between the chimp and *Homo* lineages has recently been found. ³⁵ Neither of the ancestral species that actually did the interbreeding is living today. (Since chimps today live only in Africa, it is likely that both the chimp ancestors and the *Homo*

ancestors that interbred were living in Africa.)

The *Homo* ancestor that interbred with the chimp ancestor was at least a bipedal ape and may have even been an *Australopithecus*. ³⁶ Thus, the chimp lineage received DNA from the *Homo* linage, and that DNA would be more recent DNA than the DNA that the human and orangutan lineages shared at the time of the orang/*Homo* LCA.

Since it is more often the males of the more advanced population that interbreed with the females of the less advanced population, the DNA should have flowed mostly from the *Homo* lineage to the chimp lineage and not the reverse. ³⁷ After the split in the chimp-*Homo* lineages, any genetic changes that occurred in the chimp lineage (line C) never got into the Eurasian *Homo* lineage (line H) because, except for slavery, no hominids are known to have left Africa and interbred with the Eurasian *Homo* lineage.

Traits

When orangutans come down to the ground, they walk on feet and palms with bent fingers, but also bipedally (Fig. 23-13), ³⁸ while African apes walk on their feet and knuckles (Fig. 23-9), though bonobos also walk bipedally for short distances.

The sacral index (Table 9-3) increases to facilitate bipedalism; in the orangutan it is 87, significantly greater than in the chimpanzee (77), and is closer to humans (Negroes = 91.4), suggesting that the orangutan is more bipedal and more human-like than the chimpanzee. $\frac{39}{100}$ The femur of the orangutan is also more human-like than that of the African apes. (Harmon, E.H., 2007).



Figure 23-14

of this bonobo looks so human it is difficult to believe that it is a chimpanzee. $\frac{40}{10}$ Is it unreasonable to suggest that after the bonobo's ancestors split from the common chimpanzee's ancestors they interbred with a bipedal ape, perhaps a bipedal swamp ape $\frac{41}{1}$ that had migrated into Africa? Note the muscular thighs. To paraphrase a Nancy Sinatra song, "these thighs are made for walking." Although the bonobo is a knuckle-walker, like the common chimpanzee, its legs are longer $\frac{42}{1}$ and it walks bipedally about a fourth of the time, more easily, with a straighter back, and for longer distances than the common chimp. $\frac{43}{10}$ Bonobos have many human-like traits,



Figure 23-13

including neoteny, a flatter face, a higher forehead, narrower body, pinker lips, longer hair, and smaller ears. Unlike common chimps, female bonobos have more prominent breasts and are

sexually receptive throughout most of their estrus cycle. And, unlike the chimp, bonobos "seemed to learn the symbolic use of words spontaneously, without requiring specific training in the different uses to which words can be put." ⁴⁴

Now let us compare traits that are unique to humans and (common) chimps, but not to orangutans, and traits that are unique to humans and orangutans, but not to chimps; there are only about 7 in the first category but about 40 in the second. (Grehan, 2006). This comparison was made in some detail by Dr. Jeffrey Schwartz, of the Department of Anthropology at the University of Pittsburgh (Schwartz, 1988; Grehan, 2006). Many of the traits unique to humans and orangutans are rather abstruse (e.g., extra holes in the base of the skull, rounded rather than bar-like brow ridges; Randall, 2005), but a few seem quite significant. For example, only humans and orangutans, of all the great apes (including even the gibbon), have a thick layer of enamel on the teeth, ⁴⁵ just as *Dryopithecus*, Oreo, and *Australopithecus* did. The structure of teeth is highly conserved (it does not change much as a species evolves) ⁴⁶ and, unless there is a reason why thick enamel would be selected for in humans and orangutans but not chimps, this suggests that humans are closer to orangutans than to chimps. ⁴⁷

Like teeth, reproductive traits also do not change easily. In chimpanzees, the female genitals swell during ovulation (Fig. 23-14), signaling to males that she is ready to copulate, which does not occur in humans and orangutans (or gorillas Hrdy, 1987). Nipples in humans are farther apart than in African apes, and even farther apart in orangutans. (Schwartz, 2005, p. 154). Chimps, including bonobos, mate in a few seconds in public, front-to-back. ⁴⁸ Orangutan sex is leisurely "with lots of touching with fingers and lips" (Randall, 2005), usually in private, and most frequently front-to-front. Like humans, female orangutans copulate when pregnant ⁴⁹ and any time during the menstrual cycle; female chimps copulate only when in heat. Compared to chimps, the menstrual cycle is shorter in humans and orangutans, but the gestation period can be longer. (Table 23-1, Schwartz, 2005, pp. 154, 244).

Female orangutans play a greater role in choosing their mate than do female chimps. Male and female orangutans pair bond, mating with the same partner, though they separate in between matings and matings can be up to seven

Primate	Bonobo	Chimp	Gorilla	Human	Orangutan
Menstrual cycle (days)	47.7 ± 4.9	33.5 ± 3.9	30.0 ± 2.8	28.4 ± 1.8	27.3 ± 0.5
Gestation period (days)	-	245	260	270	230 to 250 [225 to 275] 50

Table 23-1

years apart. Orangutans live longer than the other great apes (40-50 yrs in the wild and 50-60 yrs in captivity) and have the strongest mother-infant bond. The age of weaning is 6.0 yrs for orangutans, 4.8 for chimpanzees, and only 2.8 for modern humans. (<u>Hawkes, K., 1998</u>). ("... orangutans have the latest age at first birth and are the 'slowest' [maturing] of the non-human great ape species." (Robson, 2008).

Chimps have brow ridges, but humans and orangutans lack them. ⁵¹ Male humans and Sumatran orangutans have beards and moustaches; chimps don't. ⁵² Orangutans and humans have long hair and, like orangutans (Figure 10-12), some humans have a receding hairline over the forehead (Figure 10-11); chimps don't. ⁵³ Next to humans, orangutans have the greatest amount of left-right asymmetry in their brains, which is related to the acquisition of language and handedness (orangutans are predominately right handed; chimps use either hand). ⁵⁴ And, get this, only humans and orangutans smile with a closed mouth. ⁵⁵ (Fig. 23-15). The caption reads, "Since the birth of her off-spring, Jessica has changed. Her previous depression has lifted, and she now smiles most of the time."

Orangutans have culture (van Schaik, 2003), use human tools,



Figure 23-15

copy human behavior, and have a mechanical ability that anticipates humans. They are the Houdinis of the primate world, able to escape cages by tinkering with their locks. ⁵⁶ Unlike chimpanzees, orangutans construct shelters with roofs and sometimes even sides.

More evidence of a human-orangutan linkage comes from endogenous retroviruses. A retrovirus, such as HIV, uses RNA instead of DNA, plus an enzyme, reverse transcriptase. When the virus infects its host, the reverse transcriptase converts the virus RNA into DNA, which is inserted into the host's own nuclear DNA. The host then makes more viruses from the virus's DNA. If the DNA that came from the virus was inserted into a non-reproductive ("soma") cell, it dies with the animal. But if it was inserted into DNA in an egg or sperm ("germline"), it can become a permanent part of all the progeny, an "endogenous" retrovirus. Over 8% of our genome consists of broken and disabled retroviruses.

At least two families of endogenous retroviruses, "PTERV1" (Yohn, 2005) and "CERV2" (Polavarapu, 2006) are found in the African primates (chimp, gorilla, baboon, and macaque), but are not found in humans, orangutans, and other Asian apes (siamang and gibbon). ⁵⁷ Given that the infection occurred many millions of years ago, it is possible that humans and Asian apes were somehow immune to the virus, but a more plausible explanation is that humans and Asian apes share a common ancestor that is more recent than the common ancestor that humans share with African primates. Referring to Figure 23-12, the retrovirus entered the chimpanzee lineage (line C) after the C/H LCA, so it could not enter the orangutan-human lineage (line O-H). The absence of these endogenous retroviruses in humans and Asian apes is further evidence that the human lineage is from an Asian ape, not an African ape. ⁵⁸

Chapter 24

Table of Contents

FOOTNOTES

1. "... man zoologically became man when he first walked erect ..." (Howells, 1948, p. 102). Back

2. A recent genetic study shows that the colugo, which glides like a flying squirrel, is closer to primates. (Janeka, 2007). (Howells, 1958, pp. 65-66; Gebo, 2004). Back

3. (<u>Smith, T., 2006</u>). However, North America could also be the origin of *Teilhardina*; the oldest fossils have recently been found there. (<u>Beard, 2008</u>). <u>Back</u>

4. (<u>Rossie, 2006</u>). Fossil tarsiers have been found in Asia, Europe, and N. America but "no tarsiiforms have ever been found in Africa." (<u>Paleos: The Vertebrates</u>). The tarsier is so primitive that it is the only mammal that has reptile-like scales around the nipples and on the tail. (<u>Schwartz, 2005</u>, p. 117). <u>Back</u>

5. Today's heavier primates walk bipedally in trees, walking on top of branches while grasping other branches with their hands to provide additional support, thereby enabling them to reach fruit at the ends of small branches. (<u>Thorpe, 2007</u>). <u>Back</u>

6. In <u>Table 9-2</u>, note the position of the foramen magnum in the adult and young chimpanzee and gorilla. The embryonic positions of the foramen magnum, the vagina, and the big toe (<u>Chap. 6</u>) suggest that the earliest mammals lived in trees and had a vertical posture. It is possible that there was never a quadruped in man's lineage. (<u>Filler, 2007a & 2007b</u>). In that case, the farther back position of the foramen magnum in some of today's populations may be due to ancient interbreeding between the chimpanzee and human lineages. <u>Back</u>

7. Millions of years ago Europe was warmer and wetter and many species of ape lived there. "Found

in Germany 20 years ago, this specimen is about 16.5 million years old, some 1.5 million years older than similar species from East Africa. It suggests that the great ape and human lineage first appeared in Eurasia and not Africa." (<u>Heizmann, 2001</u>). <u>Back</u>

8. For example, *Dryopithecus brancoi* was found in a swampy area of Hungary. (Kordos, 2000). *Morotopithecus bishopi*, an ape that lived in trees in Uganda 20 mya and walked upright on branches, may have also been in our lineage. (Gebo, 1997). Back

9. Fig. 23-4 is a reconstruction by John Gurche. (Gurche, J., "Flesh from Stone," Scientific American, July, 2003). Back

10. When weapons are used instead of teeth, individuals without prominent canine teeth are at least as reproductively successful as those who have them. (<u>Ardrey, 1966</u>, pp. 262-263). <u>Back</u>

11. "... here is an ape [*Dryopithecus*] who lived throughout the Old World and was almost certainly the ancestor of the chimpanzee and probably of the gorilla and of man as well (and even of the orang ...)." (<u>Howells, 1948</u>, p. 98). <u>Back</u>

12. "The zygomatic possesses [cheek bones] derived characters which reveal that Dryopithecus is related to the Ponginae [Asian apes] and not to the African apes/humans, as recently suggested." (Sola, 1993). "Any one of the species in this genus may have been the ancestor to the modern orangutans." (*Wikipedia*, "Sivapithecus"). Also (Schwartz, 2005, pp. 72-75, 138, 204). Back

13. "... Gregory calls him [Ramapithecus] almost human dentally." (Howells, 1948, p. 99). Back

14. Oreo was first considered to be bipedal, then not bipedal (<u>Coon, 1962</u>, pp. 209-215), and is now believed to be bipedal again. (<u>Rook, 1999</u>). Another fossil bipedal ape, *Orrorin tugenensis*, dated at 6 mya, was found in Kenya. (<u>Richmond, 2008</u>). <u>Back</u>

15. (Kuliukas, 2002). The bamboo lemur, a primate, lives in bamboo forests in Madagascar and one species of lemur, the Bandro, "spends much of its time in water and can swim well." (*Wikipedia*, "<u>Bamboo Lemur</u>"). This is the type of behavior that can select for the evolution of bipedalism. Consistent with man's evolution from Oreo, the Swamp Ape, most early *Homo sapiens* sites are in coastal areas, suggesting that seafood was an important part of their diet. Seafood contains omega-3 fatty-acids, such as docosahexanoic acid (DHA) and arachidonic acid (AA), which are needed for brain health and intelligence. <u>Back</u>

16. Reconstruction by John Gurche. (Gurche, J., "Flesh from Stone," Scientific American, July, 2003). Back

17. A number of Oreo fossils were found on an island in Kenya, dated at 15 to 16 mya. (<u>Harrison, T., 1986</u>). <u>Back</u>

18. If Oreo evolved in a croc-free northern environment, then the Oreo fossils found in Africa suggest that Oreo migrated into Africa from the north, and did not evolve there. <u>Back</u>

19. (Köhler, 1997). Even baboons walk bipedally when they cross water. Some believe (*Wikipedia*, "Aquatic Ape Hypothesis") that during our evolution, we passed through a stage of living in water, citing evidence such as our ability to hold our breath. The traits they cite in support of that hypothesis tend to be neotenic. (Pratt, 2004; Purucker, 1977). Back

20. "Lucy" found in Ethiopia, was an *Australopithecus afarensis*. <u>Back</u>

21. Note that this is the skull of an African Australopithecus. A Eurasian Australopithecus may look

even more like Oreo, but so far none have been found. Back

22. The painting is of Australopithecus boisei. Back

23. On the basis of bone and muscle similarities, humans and gorillas were found to be the most closely related of living hominoids. (Schwartz, 2005, pp. 208, 212). This suggests that man evolved from a robust type of *Australopithecus*, not a gracile type. Humans may be more closely related to *A. anamensis*, a robust *Australopithecus*, than to other species of *Australopithecus*. (Coppens, 2004, pp. 44-47). On the other hand, robust species tend to be primarily plant eaters (e.g., the gorilla), while gracile species eat more meat. Since man is gracile and eats more meat than other primates, one might suppose that he descended from a gracile *Australopithecus*, e.g., *A. afarensis*. Back

24. The absence of evidence is not evidence of its absence. (Carl Sagan). They did not, as did the Neanderthals, conveniently bury their dead so that paleoanthropologists, millions of years later, could find their bones. And, without fire, they were incapable of ousting bears and other critters from caves, as the Neanderthals did, so that their bones would be protected and preserved for us to find. Indeed, they were very likely cannibals, as were later hominids, as the smashed bones of their fossils showed they ate the marrow of their dead and, no doubt, the rest of them as well. The Chinese, foolishly believing that "dragon teeth" were an aphrodisiac, ground them up and consumed the powder, thus forever depriving mankind of knowledge of its past. Back

25. The oldest *Australopithecus* fossils have been found in NE Africa, which suggests that they may have come from SW Asia. (<u>Coon, 1962</u>, p. 304). Gaps in the African fossil record and the sudden appearance in Africa of new hominoid species are more consistent with migration into Africa, rather than to an African genesis. For example, "[The Australopithecines in Africa] are the only primate family lacking a known, proven ancestor who lived before the Pleistocene." (<u>Coon, 1962</u>, p. 217). <u>Back</u>

26. Picture from Origine et évolution de l'Homme on the internet. Back

27. If man evolved from a Eurasian ape similar to Oreo, who presumably became bipedal by wading in water, orangutans who, unlike chimps, love water, are more likely to be on that branch than chimps, who fear it. (Kaplan, 2000; Russon, 2004). Back

28. There are also specializations for bipedal walking. "...the orang-utan is the only ape with a knee joint similar to that of humans. Orang-utans walk by extending their legs and hips to give a straight posture, whereas chimps waddle on two legs with bent knees and torso bent at the hip." (Hooper, R., *New Scientist*, "<u>Walking on two legs evolved surprisingly early</u>," June 9, 2007, pp. 18-19; <u>Thorpe</u>, <u>2007</u>). <u>Back</u>

29. (<u>Richmond, 2001</u>, p. 87; <u>Schwartz, 2005</u>, pp. 82-83). Two species of Australopithecus have a change in the radius [forearm bone] that suggests a knuckle-walking ancestor, but this could have been acquired by interbreeding and they lack other knuckle-walking adaptations. (<u>Richmond, 2001</u>). Also see (<u>Raffaele, 2006</u>). There is some evidence that early Australopithecus in Africa had adaptations for knuckle-walking, which may indicate cross-breeding with an African knuckle-walker. (<u>Collard, 2000</u>). <u>Back</u>

30. Another possibility is that a quadrupedal African ape interbred with a bipedal Eurasian ape that had migrated into Africa; the resulting hybrid population would have had both some quadrupedal adaptations and some bipedal adaptations and knuckle-walking may have been the best posture for the mixture. (Figure IV-1). The long arms of a brachiator and extending the wrists during knuckle-walking shift some weight to the legs and relieve the arms which, compared to the legs; the arms have better tensile strength, but the legs have better compressive strength. In the jungle, where the African apes live, bipedalism would be less useful than on the open savanna. Back

31. However, descriptions of bipedal apes can be found in Asian writings. (Coon, 1962, pp. 207-208). Back

32. The genetic distances from humans to bonobo chimp = 0.017 (1.7%), common chimp = 0.016 (1.6%), gorilla = 0.019 (1.9%), and orangutan = 0.031 (3.1%). (John Steer, <u>Genetic Distances</u> <u>Among Primates</u>, *Evolution Evidence Page*). The "sequence identity" between chimpanzees and humans decreases from 98.6% to 86.7% when insertions/deletions are included; the percent decrease has not been determined for orangutans. (Anzai, 2003). It has been estimated that humans have acquired 689 new gene duplicates (i.e., the gene is duplicated) and lost 86 since our LCA with chimps and gorillas 6 mya, while chimps have lost 729 gene copies that we still have (Demuth, 2006), and the differences may be greater between us and orangutans. There are a number of cases, however, where human DNA is closer to orangutans than to chimps, such as the "LINE1" sequence and Alu copies. (Patterson, 1999, p. 76). Back

33. The C/H LCA may have been between prosimians that had a horizontal posture (the chimp lineage) and those that had a vertical posture (the human lineage); interbreeding between the chimp and human lineages would make the LCA date more recent. <u>Back</u>

34. Also, orangutans have evolved away from the human lineage and <u>Schwartz (2005</u>, pp. 93-94, 188) argues that line O is long. <u>Back</u>

35. (<u>Patterson, 2006</u>; <u>Arnold, 2006</u>). Chimp-human interbreeding occurred for millions of years, finally ending 4.1 ± 0.4 mya. (<u>Hobolth, 2007</u>). <u>Back</u>

36. The chimp-gorilla split is dated at 8.4 to 6.2 mya (<u>Chen, 2001</u>) and bipedal apes, such as *Sahelanthropus tchadensis* ("Toumai") were living in Africa at least 7 mya. "Her [the Dikika baby, an *Australopithecus*] two complete shoulder blades, the first ever found from an australopith, were similar to those of a young gorilla —" ("<u>Childhood Origins</u>," *National Geographic*, Nov., 2006). <u>Back</u>

37. Although there may have been DNA transfer from a chimp ancestor to a Homo ancestor (male chimps have been sexually attracted to women), it would have been confined to the African *Homo* lineage as chimps are African apes. At least one rape of a woman by a chimp has been reported. (Galdikas, 1995). Also see (*Wikipedia*, "Humanzee"). Back

38. (*New Scientist*, June 9-15, 2007, p. 18). <u>Back</u>

39. "No known fossil ape related to the orangutan is adapted for life in the trees, leading researchers to believe orangutans descended from a ground-dweller." (Lovgren, 2004; Chaimanee, 2004). On the other hand, the orangutan's feet (Fig. 4-1, p. 17) are not well adapted for walking. (Howells, 1948, p. 61). Back

40. Note the external genitalia, which are similar to those of the Hottentot women (p. 224). "Physically, their [bonobo] anatomy most closely resembles Australopithecus, our early human ancestor." www.bonobo.org The ear size of the bonobo is smaller than the chimps'. (Coon, 1962, p. 146; also Zihlman, 1978). The foramen magnum is nearer to the front than it is in the common chimp. (Luboga, 1990) The many differences between chimp and bonobo suggest a genetic contribution to the bonobos from a more neotenic lineage and, of the major races, Asians are the most neotenic, followed by Caucasians, but Bushmen and Negritoes are also neotenic. (Figure 26-7). The common chimp and the bonobo were separated about 1.3 mya by the Congo River. Back

41. Bonobos live in the swampy rain forest basin of the Zaire River. (<u>De Waals, 1997</u>, p. 12), "They [bonobos] tend to like swampy areas, where sometimes they dig for grubs or small crustaceons [sic]." (<u>Bonobo Initiative</u>). Another possibility is that interbreeding with, say, Oreo, occurred before the

chimp/bonobo split and that the bonobo and chimp populations were selected from the resulting diverse hybrid population. <u>Back</u>

42. Also, its curial, brachial, and humerofemoral indices are closer to humans than are the common chimps'. (<u>Aiello, 1990</u>). <u>Back</u>

43. The foramen magnum is farther to the front in the bonobo than it is in the chimp, but is still farther forward in the orangutan, though less horizontal. (<u>Luboga, 1990</u>). The bonobo is closer to humans in form and behavior. (<u>Coppens, 2004</u>, p. 13; <u>Patterson, 1999</u>, p. 82). <u>Back</u>

44. (Raffaele, "<u>Speaking Bonobo</u>," Smithsonian.com.; <u>Corballis, 1991</u>, pp. 150, 1001). Bonobos are also less sexually dimorphic than common chimps. (<u>Luboga, 1990</u>). <u>Back</u>

45. (<u>Schwartz, 2005</u>, p. 68, 204; <u>Schwartz, 2000</u>). So similar are orangutan teeth to human teeth that many fossil teeth initially identified as hominids, such as *erectus*, turned out to be orangutan teeth. Also, when the hoax of the <u>Piltdown Man</u> was concocted, an orangutan jaw was used because it is so similar to a human's. (<u>Schwartz, 2005</u>, pp 35-37, 66-67, 72, 138). <u>Back</u>

46. "Our dental pattern emerged at least 60 million years ago." (Schwartz, 2005, p. 116). Back

47. Wrinkled teeth appear in Mongoloids, especially ancient Mongoloids, orangutans, and Australopithecines. (Coon, 1962, p. 357; Schwartz, 2005, p. 94). Back

48. (<u>Kaplan, 2000</u>). Bonobos use front-to-front more than common chimps, but front-to-back is still twice as common. (<u>De Waal, 1997</u>, p. 102). The front-to-front sexual encounters of bonobos are believed to be mostly homosexual. (<u>Schwartz, 2005</u>, p. 14). <u>Back</u>

49. During pregnancy, both orangutans and humans excrete 4 or 5 times more estriol than the African apes; estriol may spur fetal brain growth. (<u>Randall, 2005</u>). <u>Back</u>

50. This broader range is from the <u>Center for the Great Apes</u>. <u>Back</u>

51. (<u>Howells, 1948</u>, p. 66). "The head of the infant ourang outang is like that of a well formed Caucasian child in the projection and height of the forehead and the convexity of the vertea [the crown of the head]." (<u>Cartwright, 1857</u>, p. 45). <u>Back</u>

52. (Moyà-Solà, 1999). Back

53. (<u>Schultz, 1936</u>). And, of course, there is that intriguing red hair that they share with the Irish. <u>Back</u>

54. (Brésard, 1983; Schwartz, 2005, pp. 132, 156-157). But also see Hopkins (2003). Back

55. (Kaplan, 2000), courtesy of the author. Back

56. (Russon, 2004). "[O]ne wild orangutan laboriously dismantled his cage when a screwdriver was accidentally left within reach." Another "stole a small boat, paddled across a stream, held onto the rope while he foraged, and then paddled back again ..." A female orang even learned "a complex, multi-step procedure" for lighting fires. (Randall, 2005). "Unlike chimpanzees, who will physically attempt over and over again to solve a problem, orangutans commonly think through the solution to a problem." (Schwartz, 2005, p. 11). Another indication that orangutans have a more advanced brain: "[There are] anecdotal reports that orang-utans can monitor their own actions – for example, Rob Shumaker from the Great Ape Trust of Iowa in Des Moines says that orangutans will sometimes refuse to continue doing a selection task if they think they have made a wrong choice, holding out

until they are allowed to try again." ("Known Unknowns," *New Scientist*, Dec. 16-22, 2006, p. 31). When orangutans at the Max Planck Institute for Evolutionary Anthropology saw a peanut floating in a plastic tube, they got it out by spitting water into the tube until the peanut came to the top. (<u>Mendes, 2007</u>). Orangutans are a bit more intelligent than chimpanzees (<u>Deaner, 2006</u>) though very slightly less in brain size (397cc vs. 400cc). <u>Back</u>

57. That is also true of the type C viral gene. (Benveniste, 1976). Back

58. Since the chimp and human lineages interbred, the absence of these retroviruses in humans would require the breeding to be between males in the human lineage and females in the chimp lineage, certainly more likely than the reverse. "No African fossil has ever been found that is related to chimpanzees or gorillas." (Lovgren, 2004). "... there are *no* fossil ancestors assigned to the African apes for something on the order of *14 million years* of geological time ..." (Kleindienst, 1975). The absence of fossils of their ancestors in Africa may suggest that their ancestors did not originate in Africa, which would mean that man did not descend from an African ape, even if his ancestor with the chimpanzee is more recent than his ancestor with the orangutan. Back

Chapter 24 - The Origin of the Eurasians

"If we look, first of all, for that part of the world which was the hothouse of races, we can make only one choice. All the visible footsteps lead away from Asia."

(Howells, 1948, p. 295)

In this chapter, we move from the bipedal apes ("...*pithecus*" = ape) to man ("*Homo*"). ¹ Oreo is a good candidate for a bipedal ape in our lineage and, given their overlapping ranges and durations, *Australopithecus* is likely to have descended from Oreo. Oreo lived in the tropics and sub-tropics (i.e., north of the Tropic of Cancer, 22.5° north latitude) and may not have been specialized for either. Since *Australopithecus* had so many species and greater numbers, anatomical specializations for different climates likely began with *Australopithecus*, rather than with Oreo.

The reason it is necessary to go back to *Australopithecus* for the origin of the races is the simple principle of evolution (<u>Chapter 4, Rule 3</u>), that generalized goes to specialized, not the reverse. ² The LCA of all the hominoid populations who ever lived, including those living today, must have been at least as generalized as any of those populations.

Living Africans are specialized for the tropics. They not only have large amounts of melanin, but unique hair (Table 10-1, items (15) to (19)). Both of those traits are found in Africa, in the Andaman Islanders off India (Fig. 26-4), and in the Negritos throughout SE Asia (Figure 27-7). That the most primitive and widely dispersed people (e.g., the Bushmen, Hottentots, and Andaman Islanders) all have these traits in common suggests that these traits are a very old adaptation to the tropics. Since *georgicus*, who lived 1.8 mya much farther to the north, had at least two specializations, shoveled incisors and an occipital bun, the specializations for the tropics must have occurred prior to 1.8 mya because hominids lived in warmer climates before they lived in the north where *georgicus* lived. This means (1) that the tropical specializations of the African and Negrito lineages began in an *Australopithecus* prior to about 2 mya, and (2) that the generalized *Australopithecus* from which the specialized tropical and northern *Australopithecus* evolved lived in between them in the subtropics.

Thus, <u>before</u> the tropics-specialized *Australopithecus* evolved, a generalized *Australopithecus* (who had evolved from a generalized Oreo) occupied the sub-tropics as far to the north as his un-clothed, but hairy, body could survive, and very likely ventured into the tropics as well. ³ After the tropics-specialized *Australopithecus* had evolved, the generalized *Australopithecus*, which was less fit for the tropics, lived only north of the tropics in the sub-tropical regions of Europe and Asia.

The generalized *Australopithecus* who lived at the northern limit of their sub-tropical ranges were under strong selection pressure for anatomical adaptations for the cold, simply because those individuals who could stand the cold had access to territory and food sources that those who were less tolerant of the cold did not have. Northern *Australopithecus* populations living in Europe and West Asia followed the usual evolutionary path for adapting to the cold – a larger and more compact hairy body that has less surface area per unit weight; they were the beginning of the Neanderthal lineage. ⁴

The Australopithecus populations living in East Asia, however, took an alternative evolutionary path for adapting for the cold $\frac{5}{2}$ – they became neotenic. Many neotenic traits (e.g., subcutaneous fat, epicanthic folds, round heads, short legs – see <u>Chapter 6</u>) offer protection from the cold; these *Australopithecus* populations were the beginning of the Mongoloid lineage. $\frac{6}{2}$ That East Asians have so many specializations for the cold strongly suggests that these adaptations are also ancient. Thus, *Australopithecus* evolved at least two species that were anatomically adapted for the cooler north. $\frac{7}{2}$

But the original generalized *Australopithecus* that begot the tropics and cold-specialized species did not go extinct. It yielded the tropics to its tropics-specialized spawn and settled in the sub-tropics, and it yielded the territory farther to the north and east and west of it to its two cold-specialized spawn, the Neanderthals and the Mongoloids, but it clung to survival in between them, ⁸ where being generalized was still an advantage. ⁹ It, and its generalized descendants, specialized not anatomically, but socially, in better communications and organizing, and technologically, in better weapons, tools, and body coverings.

Remaining more generalized, ¹⁰ of course, meant that they could not compete well with tropically-adapted populations in the lower latitudes, nor with cold-adapted populations in the higher latitudes. The best they could do was to migrate north and south with the seasons, and inch their way north as their technology and organizational skills improved. ¹¹ Thus, in Eurasia, three lineages progressed from ape to modern man, a Neanderthal lineage to the north and west, a Mongoloid lineage to the northeast ¹ and a West Asian lineage in between. ¹² Quite naturally, like a prototype, the generalized West Asians ended up in the middle, surrounded by specialized populations. The generalized West Asians eventually became the Cro-Magnons ¹³ and then the Europeans.

These three non-tropical lineages were not, however, completely genetically isolated. The Neanderthal lineage was the most isolated as the West Asians could not safely venture into the territory of such large and powerful people (Figure 22-2), and if the West Asians interbreed with the Neanderthals prior to about 46,000 ya it was probably negligible. After that date, however, when the West Asians had advanced technologically and socially and the climate changed, decimating the Neanderthals, there may have been significant interbreeding, as discussed in the next chapter. The West Asians were, however, able to migrate into East Asian territory from time to time (and vice versa to a much lesser extent), resulting in much more interbreeding with East Asians. That Mongoloids and West Asians (i.e., Cro-Magnons) had a Cultural Revolution and the Neanderthals did not, suggests there was much less interbreeding and gene exchange with Neanderthals than between the Mongoloids and the Cro-Magnons.

Although both the Neanderthals and the Mongoloids had some cold adaptations in common (e.g., shorter arms and legs, shoveled incisors, and probably increased blood flow to the extremities and more meat eating, with the men doing the

hunting), there were also major differences in their adaptations. The Neanderthals increased in body mass, strength, and nose size while the Mongoloids retained fetal traits, such as an epicanthic fold and subcutaneous fat. Figure 24-1 shows the *Australopithecus* splits into tropics and cold-specialized lineages. ¹⁴



Figure 24-1

Europeans, whose lineage originated in West Asia, in between the Neanderthals and the East Asians, are the most generalized of the three major races. Because they came from a zone in between the hot tropics and the cold north they did not become anatomically specialized for either. And, because living Africans and Asians, and the extinct Neanderthals, are all more anatomically specialized than the Europeans, the European lineage must go back to before those specializations occurred, making Europeans the descendents of the generalized *Australopithecus* and the most ancient living people. ¹⁵

The genetic evidence, however, shows a much more recent LCA for man ¹⁶ and suggests that that LCA was in Africa because Africans have the greatest amount of genetic variation. (Figure 19-2). Genetic dating is based on the amount of variation in the alleles – a population that has a greater number of different alleles is assumed to have been around longer because mutations accumulate over time. The assumption that greater variation equals greater age is not always true, however, because there are other ways of accumulating more variation besides mutations. Africans have more variation because, over at least hundreds of thousands of years, all sorts of hominoids have migrated into Africa and mated with populations that were already there, infusing a large variety of different alleles into their gene pool. ¹⁷ Asians have more variation than Europeans not because they are more ancient, but because the Europeans, already smaller in numbers, were decimated much more by Toba and the ice ages than the Asians and lost much of the variation that they had accumulated. (Figure 20-1).

The fossil evidence supporting Figures IV-1 and 24-1 is also inadequate, but one cannot assume that man arose in Africa or China simply because more hominoid fossils have been found in there. ¹⁸ China has more *erectus*, *Hs*, and *Hss* fossils (Figures 17-7 to 17-10 & Table 17-1) and artifacts (Table 17-2) than West Asia, but that may just be due to smaller populations in West Asia, less obliteration by glaciers, and poorer bone preservation (acidic soil, constructed shelters) than in East Asia (caves). (Hoffecker, 2002, pp. 34, 35, 63).

The East Asians have more of some "human-like" traits than do Caucasians, such as being more "K" orientated

(<u>Chapter 11</u>), more neotenic, and less primitive than the Caucasians, but Cro-Magnon/Neanderthal interbreeding would account for at least some of that. ¹⁹ Neoteny, as the Bushmen show (<u>Chapter 26</u>), is not necessarily associated with greater intelligence, though East Asians do have a higher average IQ than Caucasians. (<u>Chapter 14</u>). Also, most of the migrations were west to east, ²⁰ which suggests a western origin for man and the evolution of the more advanced populations in the west. ²¹

Although the theory of modern human origins proposed in this book is Out-of Eurasia, most of the early evolution of Caucasians is believed to have occurred in India, ²² then in SW Asia (Fig. 24-2), and finally in Eastern Europe (Fig. 24-3). ²³

SW Asia, which includes the Fertile Triangle in Anatolia (east of the Mediterranean Sea) and Mesopotamia (between the Tigris and Euphrates Rivers, now Iraq) are good examples of the type of territory where the transformation of a generalized Australopithecus into a generalized Homo could have begun. Here there was food and fresh water, and just enough seasonal change to provide the mental challenges needed to begin the selection for greater intelligence



and behavioral adaptations for the cold. And, when that territory became crowded, some groups would have been pushed east and west and into more mentally challenging areas to the north, e.g., Turkey and Armenia, then the Republic of Georgia, where *georgicus* was found.

All three of the northern populations (Neanderthals, West Asians, and East Asians) were becoming more intelligent as they moved farther north, and the generalized West Asians were becoming more innovative because they were less selected for anatomical cold adaptations and therefore had to rely more upon technology to survive in the cold. The generalized West Asians could not yet compete with the anatomically cold-specialized populations to the northwest (Neanderthals) and northeast (Mongoloids) of them in hunting the mouth-watering large mammals that lived there but, because they relied upon a variety of foods, rather than concentrating on large mammals, they were more easily able to switch to alternative food sources should the numbers of large mammals decline. As circumstances permitted, they spread west into Europe and east into Asia, as well as south.

Thus, there were somewhat-overlapping belts of differently adapted populations that extended east-to-west from Europe to Asia, and the boundaries of these belts changed with time, especially when the climate changed. The tropically-adapted populations inhabited Africa and the lower latitudes of Eurasia, i.e., southern India and southern Asia and the South Pacific Islands. Next came the sub-tropically-adapted, less-specialized Neanderthals and East Asians with the generalized West Asians in between, making a belt from southern Europe across the Middle East and northern India and across China. And, on the top, the cold-adapted populations – the Neanderthal lineage in Europe, NE Europe, and as far east as southern Siberia (Krause, 2007a), and the Mongoloid lineage in Central and East Asia. ²⁴

North of Turkey and Armenia is the Republic of Georgia, once part of the former U.S.S.R. (Fig. 24-4), where *georgicus* lived 1.8 mya. *Georgicus* (Figure 2-4) is a good example of what an early cold-adapted *Homo* in the west was probably like. *Georgicus* is, in some ways, so similar to both the earlier types of *Homo*, *habilis*, and *ergaster* that were found in Africa and to the later *erectus* that some scientists classify *georgicus* as *ergaster*, but others lump him in with *erectus*. (Dennell, 2005).

The Republic of Georgia has both an Alpine climate in the mountains (northern border and south-west) and a subtropical climate on the Black Sea (*Wikipedia*, "Georgia, country"), so early man, e.g., georgicus, could forage and hunt in the mountains during the summer, then retreat to the warmer lowlands in the winter, gradually evolving into a more anatomically cold-adapted population. Like other populations that went north and were selected for greater intelligence by the more mentally-challenging climate, the Neanderthal lineage (georgicus, Antecessor, Heidi, and the Neanderthals) became larger, stronger, and more intelligent than their southern neighbors and expanded back into the warmer climates, including Africa, at least to a limited extent. 25 However, the indigenous tropical populations were better adapted for the tropics and the northerners were absorbed and went extinct. After the Cultural Revolution, the generalized West Asians were able to expand, move north, and eventually displace the Neanderthals from Georgia and Eastern Europe.

Meanwhile, like the Neanderthal lineage in the west, the Mongoloid lineage in the east was also becoming cold-adapted, but by means of neoteny. In Chapter 17 there is a review of the



Figure 24-4

some of the Chinese fossils that have been found, which illustrates the continuity of the Mongoloid lineage all the way back to an erectus. Today's East Asian populations clearly show a "cline" of greater cold adaptation with increasing latitude, due to the more northern populations migrating south $\frac{26}{26}$ and interbreeding; some early Asians migrated as far south and west as Africa, as we shall see in Chapter 26.

Figure 24-5 is a tree that shows proposed population splits and the movements north that higher intelligence, coldadaptation, and better technology and communications made possible, and a few of the movements south again with expanding populations (excluding to Africa). It is difficult to unravel all the populations and migrations involved, so the tree is an approximation. Most of the southern migrations were small and were absorbed by interbreeding, but a few survive to this day. ("AA" = Australian Aborigines, "Andaman" = Andaman Islanders).





Although northern man initially kept warm by means of heavy body hair ("fur"), by the time of the generalized archaics (*Hs*), man had developed sufficient technology to live in the cold (shelters, controlled fire, insulating coverings) without body fur. ²⁷ In the tropics, less hair enables the body to lose heat more rapidly ²⁸ and reduces external skin parasites. (Rantala, 1999; Pagel, 2003). In the colder climates, thick body hair is an advantage, of course, but it also harbors lice, ticks, and fleas, which carry deadly diseases; body lice, for example, carry the bacteria responsible for epidemic typhus, trench fever, and relapsing fever. In addition, hairlessness lets the body receive more sunlight, thereby enabling it to generate more vitamin D. Thus, once early man began using animal skins, body hair, even in the north, was selected against as those who had it did not need it for warmth and were more likely to die from diseases carried by skin parasites. ³⁰

Early man probably lost most of his body hair by about 240,000 ya. (Klein, 2002, p. 203), when a genetic change occurred that stopped the growth of body hair. ³¹ The change would have initially occurred only in a single person in a small group, then spread due to the increased health of the hairless and their selection as mates by others. ³² For the more hairless northern populations, the pay-off in increased reproductive success for developing better clothing and shelter to keep warm would have been greater than for the more hirsute, thus selecting for greater inventiveness and technological skills among the hairless. By about 500,000 ya, insulation was covering the feet of northern hominids, but it was not until between 40,000 and 26,000 ya with the evolution of *Hss* that shoes were used, as indicated by foot bones becoming more gracile. (Trinkaus, 2005). Selection for technological skills led to nets for catching fish and traps and snares for catching small furry mammals that could be skinned for their warm coats. ³³

Early man had to migrate south of the Himalayas in order to reach India and SE Asia, ³⁴ but the generalized archaics (*Hs*) were better able to survive the cold and could take the more difficult route across the steppes north of the Himalayas, at least in the warmer months, as well as the southern route, settling in the more northern, *erectus*-free areas of Asia first. ³⁵ Subsequent expansions of more advanced *Hss* populations forced these generalized archaics south again, where some of them hybridized with *erectus* (Garrigan, 2005) in New Guinea and Australia (Chap. 27). ³⁶

The generalized archaics from West Asia were not anatomically cold-adapted and did not have a uniform layer of fat

or epicanthic folds; in appearance, they looked Caucasian, somewhat similar to Australian desert aborigines (Figures 22-5 & 27-4), but they had control of fire and could live farther north than their *erectus* predecessors. They may still have had to move north and south with the seasons, however, eating plants and small animals in the summer and large herbivores in the winter. Migrating twice a year not only meant abandoning what could not be carried, but abandoning territory. So selection for ability to live farther north, and stay there all year, continued.

Seasonal migrations could be avoided by acquiring the tools, weapons, and shelter needed to survive in both summer and winter, by evolving more cold-adapted anatomy, or by doing both. The advantages of avoiding seasonal migrations was one of the payoffs from the final stage of man's evolution, going from archaic man (*Hs*) to modern man (*Hss*). In the more northern regions occupied by archaic man, those who had the intelligence to make it through the winter without seasonally migrating became *Hss*, modern man. They expanded, took over archaic man's territory, and pushed him south.

In West Asia, modern man was the Cro-Magnons. They acquired the intelligence needed to avoid seasonal migrations, but did not acquire much in the way of cold-adapted anatomy, and they remained generalized in appearance. Instead, they conquered the cold by tailoring and later weaving clothes and constructing shelters. Unfortunately, glaciation was more severe in West Asia than in East Asia and there are fewer traces of them. Glaciers scoured the earth, grinding up, scattering, and burying fossils and artifacts. Also, northern forest soils are acidic, and acid solubilizes the calcium in bones before they can be mineralized. ³⁷

When the second ice age came, the grass-covered steppes north of about Moscow, which fed the large herbivores, disappeared under ice, while shrubby trees replaced much of the grass in the lower latitudes. (Hoffecker, 2002). With the grass gone, most of the large herbivores disappeared, and without them the numbers of the Neanderthals and the Aurignacians (early generalized moderns), who were not as well prepared for the cold, decreased. The generalized moderns that had developed better technology (the Gravettians), however, were better able to cope with the cold.

New genetic studies of Y chromosomal DNA have shown that there were three major migrations of *Hss* into Europe from West Asia (Fig. 24-6). ³⁸ About 80% of the Y chromosomes of Europeans come from the Paleolithic Aurignacians, which confirm "strikingly similar" findings on mtDNA.<



Figure 24-6

At 30,000 to 35,000 ya (earlier migrations are dated at 46,000 ya; <u>Mellars, 2006</u>), the Aurignacian people moved into Europe from Asia (green), followed by the Gravettians 25,000 ya from the Middle East (blue). Keep in mind that the second ice age was from 30,000 to 12,000 ya and peaked at between 21,000 and 18,000 ya. (<u>Hoffecker, 2002</u>, p. 254). Thus, the Aurignacians moved into Europe just as the ice age was beginning and took refuge in the areas of the green dots. By the time the Gravettians moved in to Europe the severity of the ice age had increased, but these people, who may have initially come from southern Russia (<u>Kemp, 2006</u>, p.305), had a more advanced culture and could survive better in the cold.

Although the Cro-Magnon lineage had split from the Neanderthal lineage perhaps over 2 mya, there was still some interbreeding, but it was probably mostly between 46,000 ya and 24,500 ya, when the Neanderthals went extinct. Interbreeding between populations in the Cro-Magnon lineage and the Mongoloid lineage, on the other hand, though intermittent, was over a much longer period of time and more extensive. The result was that in the west the Cro-Magnons who migrated into Neanderthal territory absorbed the last of the declining Neanderthals, but in the east the Cro-Magnons who migrated into Mongoloid territory were absorbed and displaced by the Mongoloids, leaving behind only a few traces of their presence, ³⁹ such as the Jomon in Japan and the Polynesians. (Gates, C.E., 1922). Some northern Mongoloid/Cro-Magnon hybrids migrated to the Americas, becoming the northern Amerindians. Interbreeding between these populations made both the European-Neanderthal LCA date (700,000 ya) and the European-Asian LCA date (46,000 ya) seem more

recent than they were.

Individuals in the Mongoloid/Cro-Magnon and Cro-Magnon/Neanderthal hybrid populations had various combinations of advantageous and disadvantageous traits from their parent populations. Natural selection then picked out for reproductive success those individuals who had the combination of traits most adapted for all the various Eurasian environments. In the northeast, it was those who were the most anatomically cold-adapted, e.g., epicanthic fold, fat under the skin (but hairless). In the more seasonal climates of China and Japan, cold-adapted traits were less important and less selected. ⁴⁰ (These migrations and interbreedings show up in the genetic distances between living populations, which are given in Figure 7-2.) Of all the races, the Caucasians were, and are, the most adventurous and risk-taking and did more migrating into the territories of other races; ⁴¹ most of the early explorers were Caucasian and today it is the Caucasians who dominate the "extreme sports."



Figure 24-7

Figure 24-7 (<u>Cavalli-Sforza, 1994</u>, p. 91) is a tree which shows genetic distance. (C.A.R. is Central African Republic). In Figure 24-7, the lengths of the lines are proportional to the genetic distance between the populations. ⁴² Thus, because "f" is much longer than "d," we can conclude that the Chinese evolved more away from the *Hss* rootstock than did the Europeans, consistent with the West Asians remaining generalized while the East Asians evolved from generalized to specialized. If OoA is correct and the races originated only 65,000 ya from modern Africans, the LCA of the races should be near the juncture of lines "a," "b," and "c"; if OoE is correct and the races originated at least 2 mya from a generalized *Australopithecus*, the LCA of the races should be on line c, near its juncture with lines "d" and "e," ⁴³ placing it closer to the Europeans than to the Chinese.

Referring again to Figure 24-7, although Europeans and the Chinese are closely related, Europeans are closer to the African pygmies than are the Chinese. Under OoA, this is hard to explain as the Africans who allegedly migrated out of Africa went to Asia first and became Asians, and then some of those Asians went to Europe. If that were true, one would expect the Chinese to be closer to the Africans than the Europeans. Under OoE, however, there was no migration out of Africa and the Europeans are closer to the Africans because the Europeans remained generalized while the Africans and Asians became specialized, but in opposite directions, one for the tropics and the other for the cold. Note, in Figure 24-7, that the Europeans are in between the Africans and the Chinese. In addition, more European hominoids than Asian hominoids migrated into Africa and interbred with indigenous African hominoids. Had Eurasian-African interbreeding not occurred, line "c" would be much longer. And, if Eurasians came from Africans only 65,000 ya, as OoA holds, why are Africans so genetically different from Eurasians in Figure 24-7? ⁴⁴ The only explanation that OoA has for the length of line "c" is that Africans and Eurasians did a whole lot of evolving after Africans left Africa and became Eurasians.

Jomon and Ainu

The Ainu are primitive stone age people who live in northern Japan. They are believed to be the remnants of interbreeding between Koreans and the Jomon, a maritime people who spread around Polynesia (and possibly to the Americas). The Jomon, in turn, may be the remnants of the generalized *Hs* West Asians who migrated into Asia. The Ainu (Fig. 24-8) $\frac{45}{10}$ have prominent brow ridges and large teeth, which are primitive *Hs* traits, as well as a somewhat wide nose and epicanthic folds, but their skin is whiter and less yellowish; a few even have grey or blue eyes.



Figure 24-8

The Ainu are among the hairiest people on earth. Their hairiness in relatively mild Japan suggests that their *Hs* ancestor was hairy. Other East Asians have very little hair, but the Ainu were mostly isolated from the hairless East Asians. ⁴⁶ The 9200 year old Kennewick man (<u>Figure 20-6</u>), found in the eastern part of the state of Washington, may have been genetically close to the Ainu. The Ainu language is strangely similar to the Basque language (<u>Ainu & Basque Language</u> <u>Correlation</u>); today, the Basques live between France and Spain, but they could easily have been the <u>Solutreans</u> who came to America. ⁴⁷

Waves of Koreans invaded stone age Japan in about 1500 B.C. and then again about 400 B.C. The interbreeding of those Koreans with the more primitive Jomon people then living in Japan also produced the modern Japanese (80% Korean-20% Jomon – less Jomon than the Ainu) in only about 2500 to 3500 yrs. ⁴⁸ Modern Japanese have traits picked up from the Jomon, such as more hair and "squared" canine teeth, and a few Japanese men even have brow ridges.

Chapter 25

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FOOTNOTES

1. There is no sharp dividing line between ape and man and it would not be unreasonable to include within the genus *"Homo"* an ape that was habitually bipedal, such as *Australopithecus* or perhaps even Oreo. <u>Back</u>

2. "A comparison of the skeletal and muscular features of living apes and humans shows that apes have developed a more complex and specialized anatomy, while humans have preserved a primitive mammalian simplicity, with only the cerebrospinal system, necessary for the manifestation of selfconscious intelligence, being highly developed. If apes and humans descended from a common ancestor, that ancestor must have had a more generalized anatomical structure than modern apes." (Anatomy and origins, Pratt, D. Human Origins: The ape-ancestry myth, Feb., 2004). Back

3. Their northernmost territory may have been farther north than one might think. The golden snub-nosed monkey lives in China in snow at high altitudes and, in winter, the temperature falls to 5°F The northern Japanese Snow Monkey lives in a climate where the snow can be more than a meter deep (though hot springs are available), so *Australopithecus* may have lived in such climates as well. Human artifacts dated at 1.2 mya have been found in China along the Nihewan Basin near Mongolia. (Deng, 2007). It is also possible that the generalized *Australopithecus* arose from a tropics-specialized *Australopithecus* that became more generalized by neoteny (Rule 3, Chapter 4, FN 17), but it is more parsimonious to retain the generalized *Australopithecus* than to re-evolve it. Back

4. "...the Neandertal sequence is actually further away from either of the two chimpanzee sequences than the modern human sequences are. My calculations show that every one of the human isolates that I used was "closer" to chimp than was the Neandertal." (Australian biochemist John P. Marcus, personal communication). This is consistent with Caucasians remaining generalized from their LCA with Neanderthals, while the Neanderthals evolved cold specializations that moved them farther away from that LCA. <u>Back</u>

5. However, the absence of body hair is also neotenic, and East Asians lack body hair. This suggests that they relied less on body hair to keep warm and more on subcutaneous fat. Also, the loss of body hair may have occurred after animal skins were used as garments, when it became a net disadvantage because it harbored disease-carrying lice. <u>Back</u>

6. It is likely that before the Neanderthal and Mongoloid cold specializations evolved, a somewhat cold-specialized *Australopithecus* had spread across both Europe and Asia. That would account for some of the similarities (e.g., occipital buns, shoveled incisors) found in both Asian *erectus* and *georgicus*. <u>Back</u>

7. Of the Mongoloids: "Everything has been done to flatten the face, to decrease the area of exposure to frostbite, and to pad it." (<u>Howells, 1959</u>, p. 288). <u>Back</u>

8. It is difficult to say whether these two species were advanced enough to be called "*habilis*" or "*erectus*," but *Australopithcus* seems more likely, given the nearly 3 million years that the genus lived. <u>Back</u>

9. "Central and Eastern Europe was occupied by people who manufactured a crude pebble chopper and flake industry... These people may have represented a separate Homo population – similar to Asian Homo erectus ..." (<u>Hoffecker, 2002</u>, pp. 93, 98). <u>Back</u>

10. "... the first East European modern humans ...came from southern latitudes and warmer climates, and did not represent a specialized northern variant of Homo." (<u>Hoffecker, 2002</u>, pp. 139–140). <u>Back</u>

11. Some cold specializations still occurred, such as a larger, narrower nose, physiological processes to increase body heat, and an increase in body size, which was also needed to accommodate a larger brain. Back

12. "The establishment of larger social networks allowed the replacement of Neanderthals [by *Hss*] in the Caucasus [south of Russia and north of Iran, between the Black and Caspian Seas]." (Peresani, 2008). Back

13. Because the East Asians were cold-specialized, they were able to move north earlier than the generalized West Asians. This enabled them to increase their intelligence earlier and expand south again, interbreeding with tropically-adapted species, resulting in hybrids, some of which eventually migrated into Africa. (Chap. 26). <u>Back</u>

14. "The Whites do not give us any particular trouble. They would seem to have been entrenched in southwest Asia, perhaps more specifically in Persia [Iran] and Afghanistan, from their beginnings, apparently with the Neanderthals to the north and west of them." (Howells, 1948, p. 296). Back

15. All hominid remains of the last 100,000 years belong to one of these two species, i.e., Neanderthals or *Hss.* (Waechter, 1990, intro. by Roe). Back

16. Note the similarities to the gene-generated Cavalli-Sforza tree of Figure 16-7. Back

17. The large number of different haplogroups in Europe (H, I, J, K, T, U, V, W, X) suggests, by the afrocentrist rule that more variety equals greater age, that Europeans either have ancient roots or interbred with Neanderthals or both. <u>Back</u>

18. But see the discussion in Chapter 25 about the 3 million yr old inversion. Back

19. Similarly, interbreeding between an ancestor of the chimp and a more advanced Eurasian primate in the human lineage would give the chimp ancestor advantageous alleles that would be positively selected and would make it appear that African chimps have evolved more than humans. "... the number of positively selected genes is substantially smaller in humans than in chimps ..." (Bakewell, 2007). Back

20. Unfortunately, there is as yet no good evidence for *Australopithecus* in Eurasia, though they almost certainly would have been there, given their large numbers and varieties and the presence of Oreo and other apes in Eurasia. Fossils are usually not found unless paleoanthropologists look for them and, since most paleoanthropologists believe that all humans arose in Africa, that is where they look for them. ("It's amazing what you can see when you look." Greg Palast, investigative reporter.) "The best place to look would be in Africa, whence, it is thought, modern humans migrated." (Arsuaga, 2001, p. 289). Also, there is more funding for digs in Africa than in most other places. A good territory for the early evolution of man in East Asia is the Hengduan Mountain region in western China. It is a hotbed of plant evolution due to its multiple climates at different altitudes (similar to the climate where *georgicus* was found). <u>Back</u>

21. "The late Neanderthals at Saint Césaire and Vindija are markedly less robust than the early ones, and the early 'moderns' such as Dolní Vestonice are markedly more robust than living Europeans." (C. Loring Brace, Professor of Anthropology and Curator of Biological Anthropology, Letter to *Scientific American* dated Mar. 20,2000). Also, (Smith, 2005). Back

22. (Howells, 1948, pp. 252). Note Fig. 21-1, which suggests west-to-east migrations. That Caucasians are more generalized and East Asians are more specialized also argues against east to west migration since evolution is almost always generalized to specialized, not the reverse. (Chap. 4, Rule 3). So great a threat was migration from the NW that the Chinese built the Great Wall of China, the only man-made structure that is (or was until optics improved) so large it could be seen from space. Genghis Khan is a significant exception, and even he had red hair. (*Wikipedia*, "Genghis Khan"). (Attila the Hun arose in NW Asia, not NE Asia.) Linguists have tried to identify the "mother tongue" of all languages and its location, "proto-World." "Until recently, proto-World was located in the Near East [the Middle East] at about 35,000 years ago, ..." (Corballis, 1991, p. 161). Back

23. However, after the arrival of agriculture, about 12,000 ya, the East Asians advanced faster technologically than the Europeans, and got about 1000 years ahead in some areas, such as military technology. Europeans later caught up and advanced more until very recently; now the East Asians are pushing ahead again. Back

24. (Shishir Arya, "Did early man originate in India?" Times News Network, India, May 30, 2007). Back

25. (*Wikipedia*, "<u>Southwest Asia</u>" and "<u>Eastern Europe</u>"). "Eastern Europe" is not well-defined, but for the purposes of this book, it includes areas north of Turkey and Iran, including Kazakhstan, Russia, and Poland in the west. The area around and north of the Caspian Sea was once Khazaria, possibly the homeland of the European Jews. (Koestler, A., 1976, *The Thirteenth Tribe*. Random House). <u>Back</u>

26. North Central Asia was relatively uninhabited because it was not close to either the Atlantic or Pacific Oceans, making it both cold and dry, a hostile environment for man. (<u>Hofffecker, 2002</u>). It was this separation that kept the Neanderthals from interbreeding with the East Asians and provided the generalized populations in between with a territory to the north where they did not have to compete with either of those two populations. <u>Back</u>

27. "On anatomical grounds, it is argued that the relatively small-brained and lightly built Dmanisi hominins [*georgicus*] may be ancestral to African and Far Eastern branches of H. erectus showing more derived morphology." (Lordkipanidze, 2006). The Hobbit on Flores (Fig. 17-11) is most similar to *georgicus*, suggesting the extent of the migrations of these early hominids. <u>Back</u>

28. There is now evidence that all three populations, the Neanderthals (<u>Rosas, 2006</u>), the Europeans (<u>Seldin, 2006</u>), and the East Asians (<u>Xue, 2006</u>; <u>Zhang, 2007</u>), have distinct north and south genetic differences in their populations. <u>Back</u>

29. Counterintuitively, hairiness in both Europe and Asia increases as one goes from north to south, perhaps because hair was less of a liability in the south as fewer garments would be needed and it would therefore be easier to see and remove skin parasites. <u>Back</u>

30. Hair is cooler than no hair for an animal that is not sweating (*Wikipedia*, "<u>Aquatic Ape Hypothesis</u>"), but if an animal is sweating, hair is warmer. Only man and horses sweat and horses have very short hair. In the tropics, *erectus* may have lost his hair when he began to run and sweat and it became a disadvantage. (<u>Jablonski, 2006</u>). <u>Back</u>

31. So important was it to be rid of lice that Egyptians and some Europeans shaved their heads and wore wigs. Large numbers of people died from typhus carried by lice in English camps in the Boer war in South Africa, Confederate camps in the War of Northern Aggression, and in Nazi camps in WWII. <u>Back</u>

32. (Klein, 2002, p. 203). The "hair or no-hair" gene (KRT41P) can be switched on or off relatively easily. Our tropical prosimian ancestors likely had short body hair, our bipedal tropical ancestors had very little body hair, our sub-tropical, but

no-garment ancestors acquired thick body hair, and our temperate, but animal-skin-clad ancestors lost body hair again. Back

33. Many men and most women are disgusted by body hair in the opposite sex, perhaps because it is associated with harboring disease-carrying parasites. Back

34. The skeletons of small mammals found with human artifacts were often still articulated, indicating that they had been skinned, not eaten. The archaics also had needles for sewing hides together. <u>Back</u>

35. Like Oreo, they may have been a coastal people, living near lakes, rivers, seas, and oceans. Their reliance upon seafood would give them the incentive to build rafts and boats, which would eventually enable them to follow coastlines and reach Africa, India, Japan, and Australia. There are two types of head lice which diverged about 1.2 mya; one lived on *He* and the other on *Hs* and, when *Hs* interacted with *He*, *Hs* got the *He* head lice. (Reed, 2004). Since *Hs* lived north of *He*, this suggests that *Hs* migrated south. Back

36. Generalized West Asian *Hs* migrated east, where he was eventually absorbed and replaced by Mongoloids, though traces remain to this day. "In the Far East, we first find *H. erectus*, then a generalized *H. sapiens* and later *H. sapiens* sapiens with Mongoloid features, but no Neanderthal presence." (Roe in <u>Waechter, 1990</u>). <u>Howells (1948, p. 296</u>) suggests that the Ainu and the Polynesians were a generalized form of whites who traveled east from West Asia (<u>Howells, 1959</u>, p. 276) through Central Asia into China before the Mongoloids had developed their specializations for the cold. They may have also contributed to the American Indian gene pool. <u>Back</u>

37. "In the Far East there are two great land funnels, one in the north and one in the south, and we know very well that peoples have flowed out through them, to America and Oceania respectively." (<u>Howells, 1948</u>, pp. 295-296. <u>Back</u>

38. However, recently 42 to 45 kya artifacts have been found in Russia, about 250 miles south of Moscow. (<u>Anikovich</u>, <u>2007</u>). <u>Back</u>

39. (Semino, 2000). Asian traits, such as round heads, can be found in many Slavic populations and in the Middle East. Note that these Eastern Europeans did not acquire the cold adaptations (e.g., uniform layer of fat, epicanthic fold) that East Asians have, suggesting that migrations into the west by East Asian populations was minimal. The Finns, however, are one-fourth Siberian. (Carpelan, C., "Where Do Finns Come From?", *Free Republic*, Sept. 26, 2007).

40. "In fact these earliest modern human inhabitants of China were anatomically similar to the Cro-Magnons of Europe... " (Haywood, 2000, p. 49; Wang, 2000). Caucasian mummies were found in China. (Xinjiang Uygur Autonomous Region of China; Wikipedia, "Tarim Mummies"; Kemp, 2006, pp. 33-35). Also, ("China striving for mummy identification," Science Daily, Dec. 24, 2006). Fifteen percent of the population in the SE portion of that NW province are reported to have blue eyes and wavy or curly hair. (Ch'eng-K'un, 1946). Back

41. "... the best explanation of the strong mongoloid stamp of the whole Far East lies in the expansion of a segment of the northern population ..." (<u>Howells, 1948</u>, p. 289). Scientists have discovered a novelty-seeking area of the brain, but racial differences in its development are not yet known. (<u>Wittmann, 2008</u>). <u>Back</u>

42. (Kemp, 2006, Chap. 6). A good example is the early migration by the more advanced northern Aryans into India, where they became the upper caste of Indians, the less advanced southern indigenous people becoming the lower caste, the untouchables. By prohibiting intermarriage, the caste system in India was able to preserve the genetic integrity of the two classes in India, though today it is breaking down. <u>Back</u>

43. However, the length of the lines depends upon the method used to calculate them. Also, Fig. 24-7 includes interbreeding, which can shorten the lines considerably. <u>Back</u>

44. Two types of changes occurred between the OoE LCA and today: (1) evolution from primitive to modern, and (2) evolution of specializations. Africans did less of (1) than Eurasians and Europeans did less of (2) than Africans and Asians. Back

45. Note that Melanesians ("black islanders," i.e., South Pacific negritos) in Fig. 24-7 are the least related to Africans, who would be located near the Zaire (now "Democratic Republic of the Congo") Pygmies. Also note that "Pygmies" are used for the tree rather than a more typical African tribe. One cannot help suspecting that the reason was that, as we shall see in the Chapter 26, some of the pygmies have substantial white heritage and are closer to Eurasians than other Africans, i.e., had Congoids been used instead of pygmies, the Africans would be even more distant from the Eurasians. In Fig. 7-3, the "Mbuti Pygmy" (same as the "Zaire Pygmies" in Fig. 24-7) is also the most genetically different from the Eurasians. Back

46. From the (Frederick Starr collection, by H.C. White Co. of Vermont, 1906). Back

47. The Ainu became isolated from people on continental Asia about 14,000 to 18,000 ya, when sea levels began to rise again after the second ice age. (Figure 5-1 Back

48. (*New Scientist*, Aug. 11-17, 2007, p. 41). Although they look a bit Caucasian, genetically they are not Caucasian, perhaps because their LCA with Caucasians was a long time ago. <u>Back</u>

49. This "rapid evolution" also occurred in Africans (Chap. 26) and African Americans (Lind, 2007; Silva, 2006), when Eurasian males mated with African women. The reverse, where a numerically superior, but less advanced, population kills off the males of the more advanced population and takes their women has also occurred, but much less frequently. Back

Chapter 25 - Neanderthals

"There once was a man, not so tall, Who lived in a valley, a "thal." Greet him, he snubs you, Cross him, he clubs you; And now he's around not at all."

In this chapter the relationship between the Neanderthals and the generalized moderns of West Asia, i.e., the Cro-Magnons, is examined in more detail. From about 350,000 ya until about 24,500 ya Europe was occupied by Neanderthals, but about 46,000 ya their numbers began to dwindle and Caucasians appeared in their place.

Contrary to the initial impression of Neanderthals as ignorant brutes, a better appreciation of their culture and accomplishments has humanized them. They made ornaments, bone tools (Zilhão, 2006a) and even a 43,000 to 82,000 year old flute (Fig. 25-1) from the bone of a cave bear. ¹ Their brains were larger than ours (but not when body weight is taken into account), though the earliest modern humans were taller and more slender. They had full control of fire and the ability to flake stone to make the sophisticated weapons, e.g., front-weighted spears (Thieme, 1997), needed to kill big game, and the tools needed to butcher the carcasses to supply their heavily meat-based diets.



Figure 25-1

Neanderthals took care of their injured and elders and "were the first people known to have buried their own dead," ² sometimes with artifacts, ochre (a red iron pigment), or flowers. (<u>Arsuaga, 2001</u>, pp. 272-275). Unlike *erectus*, who could not survive in the cold north, the modern behavior (and anatomical cold-adaptations) of the Neanderthals enabled them to survive there for hundreds of thousands of years. ³

The migration of the Cro-Magnons, the generalized *Hss* from West Asia, into Europe, discussed in the preceding chapter, began about 46,000 ya and continued in between the two ice ages, when forests replaced grasses, decimating herds of large herbivores (e.g., mammoth, horses, bison, and reindeer) and the Neanderthals sustained by them. The newcomers did not immediately replace the Neanderthals and Neanderthals managed to hang on until at least about 24,500 ya, $\frac{4}{5}$ so the two very different populations of man occupied contiguous, and possibly overlapping, territories for at least 10,000 yrs. $\frac{5}{5}$ How was it possible for them to co-exist in the same territory for such a long time?

One explanation is that they had different hunting strategies and therefore did not hunt the same prey at the same time, that the newcomers followed the herds, picking off the young, the old, and the ill, while the Neanderthals were ambush hunters, perhaps chasing large herbivores towards hidden hunters, who would suddenly raise massive spears, impaling the beasts. ⁶ Neanderthal spears, some with large and heavy stone points, would require thick, heavy wood, ⁷ but Neanderthals had strong bones and a heavily-muscled forearm ⁸ that gave them a powerful grip. (Balbirnie, 2005).

Another suggestion was made by Dr. W.W. Olson (by email), that Neanderthals may have been night hunters. Although most cold-adapted species, such as the East Asians, have smaller eyes that are less vulnerable to cold, Neanderthals, though they were well adapted to the cold, $\frac{9}{2}$ had unusually large eyes. Also, one of the defining characteristics of Neanderthals is their occipital bun, the bulge at the back of their skull, where the brain processes visual information. (Figure 9-12).

Although their bones were thick and dense, they often show signs of fractures that forensic anthropologists have described as similar to those suffered by rodeo cowboys who ride bulls and wrestle steers. (Fig. 25-2, $\frac{10}{2}$

Europe was populated by many large herbivores, such as ibex, fallow deer, and mountain gazelle, some of which, e.g., aurochs (wild cattle, the bulls weighing over 2200 lbs), mammoth (16 feet at the shoulder, males over 12 tons), rhinoceros (11 feet long, two horns), and wild boar (~ 600 lbs, with tusks), were also very dangerous. Putting all these clues together, Neanderthal men may have surrounded and stealthily crept up on herds under cover of darkness, then threw or thrust their spears. The resulting pandemonium would have been a man-to-beast battle of considerable violence. $\frac{11}{2}$

It must not have been easy for the more gracile Cro-Magnons to move into the territory of such a formidable adversary. But, although the



Figure 25-2

Neanderthal males were <u>larger and stronger</u> than the Cro-Magnon males, the Cro-Magnon males had spears with lighter stone spear points that could be thrown farther and did not require being as close to prey. (<u>Arsuaga, 2001</u>, pp. 192-193; <u>Shea, 2001</u>). Also, because the Neanderthals' legs were shorter and their bodies heavier, they used about 30% more energy in walking than we do, costing them more energy per mile and making it more difficult for them to keep up with migrating herds. ¹² Due to different hunting strategies, the Neanderthals and the Cro-Magnons could live off the same food source while rarely fighting over it. ¹³ In addition to their greater mobility and superior technology, ¹⁴ the Cro-Magnons had dogs, which the Neanderthals did not have; dogs were a significant advantage in hunting.

Another major advantage was better communications, cooperation, and social networks, and more trade, giving Cro-Magnons access to information and materials that

could not be found locally. The larynx in the Neanderthals was higher in the throat, which would have limited the complexity of the sounds they could make (<u>Arsuaga, 2001</u>, p. 267) and their ability to communicate and exchange information, though they did have a hyoid bone, which is needed for speech. ¹⁵ The Cro-Magnons exhibited symbolic behavior, such as cave painting (Fig. 25-3) ¹⁶ and making jewelry, which is associated with a show of status or group identity, but the Neanderthals did not. ¹⁷

Until the Cro-Magnons had acquired the technology to live in the same territory as the Neanderthals and compete with them, the Neanderthals had no *Homo* competitors but, once the Cro-Magnons had developed the sewn skins and constructed shelters with a fire inside that enabled them to live in the cold north, they were able to move into Neanderthal territory and hunt large mammals, the main stable of the Neanderthals diet, in addition to catching fish and trapping small mammals when large mammals were scarce. (Purucker, 1977, Chap. 7). Thus, the Neanderthals followed the usual path to extinction – anatomically specializing to better obtain a particular food source (large mammals), then dying out when that food source diminished (Chapter 4, Rule 3). The anatomical specializations of the Neanderthals served them well for hundreds of thousands of years, but after the climate changed and new competitors arrived, their specializations became a handicap. It took thousands of years, but eventually the generalized Cro-Magnons caused the extinction of the specialized Neanderthals.

Nevertheless, in a very real sense, Neanderthals did not go extinct, but live on today as part of those of us who are Caucasian. Caucasians can be grateful to the Neanderthals for giving us some of their genome, though the donation may not have been pleasant for the recipients.



Figure 25-3

Genes

Because Neanderthals and Cro-Magnons lived in the same territory for such a long a time, there surely must have been some interbreeding. We know that the *Hss* and Neanderthals were close enough genetically for any mating to result in fertile progeny; ¹⁸ they are, after all, both *Hs*. Yet when scientists analyzed mtDNA they had extracted from Neanderthal bones, they found no sign of Neanderthal alleles in the mtDNA of living Caucasians. ¹⁹ Similarly, no Y chromosome evidence of interbreeding has been found. (Krause, 2007b). ²⁰ Nevertheless, there is some other genetic evidence. ²¹ How is that possible?

It is a general principle of biology that the males of the more advanced and expanding population mate with the females of the less advanced and declining population (<u>Sykes, 2001</u>, p. 125), which suggests Cro-Magnon males mating with female Neanderthals, ²² something easily imaginable when Neanderthal women were hungry and Cro-Magnon males had some excess food or a confrontation occurred, leaving most of the weakened Neanderthal males dead. ²³ The hybrid progeny would have had Neanderthal mtDNA but no *Hss* mtDNA and, if they had been raised by their mothers with the remaining Neanderthal population, no trace of Neanderthal mtDNA or nuclear DNA would have entered the generalized *Hss* population.

Those first hybrids would have had mixtures of various Neanderthal and *Hss* traits ²⁴ and much more variety than either parent population. Only those hybrid individuals who had the best combination of traits for the European environment at that time would be naturally (and probably sexually) selected to pass on their alleles to the next generation. ²⁵ For example, hybrid males who had both the generalized *Hss* cooperative and abstract-thinking mind and some of the Neanderthal strength and courage may have been more reproductively successful than the males in either of the parent populations. The same may have been true of female hybrids who had the gracile features of a Cro-Magnon female and (perhaps) the blond or red hair of a Neanderthal.

After a number of generations, the <u>hybrids</u> would become the more adapted population and would dominate <u>both</u> the Cro-Magnons <u>and</u> the Neanderthals - the hybrids would expand and both the Cro-Magnon and Neanderthal populations would contract. Now the tables are turned, and it is the hybrid males who can take the Cro-Magnon and Neanderthal females. Will they take the few remaining heavy boned and primitive-looking Neanderthal women or the plentiful, delicate, and feminine-looking Cro-Magnon women? If they prefer the latter, <u>their</u> progeny, the Caucasians, would have *Hss* mtDNA and no Neanderthal mtDNA, but will nevertheless have some Neanderthal nuclear DNA. ²⁶ In that way the resulting populations, the Caucasians, could acquire some Neanderthal nuclear DNA without acquiring Neanderthal mtDNA.

Despite the failure to find Neanderthal mtDNA in Europeans, there is nevertheless some genetic evidence of interbreeding. Northern Neanderthals differ genetically from southern Neanderthals. (Rosas, 2006) and Europeans north of the Alps and the Pyrenees Mountains differ genetically from southern or Mediterranean Europeans.²⁷ Of course, the European genetic differences may be due to the selection of different traits in northern and southern climates, but another possibility is that European differences are the result of some Cro-Magnons in the north interbreeding with northern Neanderthals while other genetically-similar Cro-Magnons in the south interbreed with genetically-different southern Neanderthals.

A new study by a group of Icelandic scientists has found a 900,000 base pair inversion (i.e., the DNA string is backwards) in Chromosome 17 that is at least 3 myrs old. (<u>Stefansson, 2005</u>). The mutation is found in about 20% of the Caucasoids tested, is almost absent in Mongoloids, and is rare in Negroids; women who have the mutation have more children.

How did Caucasians get such an old mutation? Under OoA, it would have had to have come from Africans who supposedly evolved into Asians then into Caucasians, but very few of today's Africans and Asians have it, so they must have lost it. But why would Asians have lost it when 20% of the Caucasians did not lose it, and the Asian and Caucasian

environments are similar? A more likely explanation is that the inversion arose before the LCA of Neanderthals, Africans, Eurasians, and Caucasians in an *Australopithecus* that was in the Neanderthal lineage and the Cro-Magnons who migrated into Europe interbred with Neanderthals who had the mutation, giving it to their hybrid children, the Caucasians. Later, some Caucasians gave it to a few Africans and Asians.

Since the mutation was positively selected for (i.e., it was an advantage to have it), but only if the incidence of it in the population stayed below 20%, that suggests that the mutation becomes negatively selected (i.e., a disadvantage) when its incidence exceeds 20%. ²⁸

There are a number of alleles found in Europeans that are not found, or at least are not common, in other races, including alleles that are involved in the development of the central nervous system. These alleles are so different from the main cluster of human alleles that they must have been picked up from archaic humans, such as Neanderthals. ²⁹ An allele of the microcephalin gene appeared in Europeans about 37,000 ya, during the time that Cro-Magnons were moving into Neanderthal territory. This allele has an effect on brain size, and has been strongly positively selected in the Eurasian populations. But a haplotype with that allele is so different from the other variations of that haplotype that it must have diverged from them at least 1 mya. The explanation for this is that that allele first appeared in Neanderthals, not *Hss*. Then, about 37,000 ya a Neanderthal bred with an *Hss*, who picked up the old haplotype. ³⁰

<u>Traits</u>

We do not know all the traits that the Neanderthals had, but we can surmise that if Caucasians have traits that are not found in any other people on the planet from whom Caucasians could have acquired them, then those traits either arose in the Caucasian lineage or were acquired from the Neanderthals. Although those traits include long faces (<u>Coppens, 2004</u>, p. 109), as well as a number of skeletal traits (<u>Trinkaus, 2007</u>), the most unique Caucasian traits are red hair, blond hair, blue eyes, and green eyes.

The origin of a trait is most likely to be where it occurs in the highest percentage (<u>Chapter 4, Rule 11</u>), and light hair and eyes (<u>Figures 25-4</u>) and the Neanderthal range (<u>Figure 22-1</u>) overlap well. ³¹



The fact that blond hair and blue eyes are not found in Asians or Africans, despite some Caucasian interbreeding with them, suggests that those alleles are not ancient in Caucasians. ³² If those traits were ancient in Caucasians it is likely that they would have spread to enough Asians to be expressed occasionally, even though they are recessive, but that does not happen. On the other hand, the alleles would have had over 1.8 million years to arise in the Neanderthal lineage (before *georgicus*). Then there would have been at least 21,500 yrs (46,000 ya, when Cro-Magnons moved into Europe minus 24,500 ya when the Neanderthals went extinct) for the Cro-Magnons to acquire the alleles by interbreeding with the Neanderthals.

To further complicate matters, some desert Australian aborigines not only have blond hair and other Caucasian features (Figure 22-5 & Figure 27-4), ³³ but at least one had blue eyes! ³⁴ On the other hand, some aborigines have uniquely Neanderthal traits, such as the occipital bun and beetle-brows, which go back to *georgicus* (Figure 2-4).³⁵ That may suggest that they got all the alleles responsible for those traits from the Neanderthal lineage, but some aborigines are not only more generalized than the Neanderthal lineage, they are more generalized than Caucasians. <u>Chapter 4, Rule 3</u>, that generalized goes to specialized, not the reverse, tells us that the Neanderthal lineage probably did not produce the Australian aborigine lineage, though they may have contributed to it. Instead, both lineages came from a generalized *Australopithecus* and the uniquely Neanderthal occipital bun and beetle-brows were acquired later by the Australian aborigine lineage, probably from an

ancestor of the Neanderthals, such as georgicus or Heidi. ³⁶ Because blond hair and blue eyes would not be an advantage in Australia, it is likely that these traits were carried there by early Caucasians.

Limited Cro-Magnon / Neanderthal interbreeding accounts for some of the traits that are common to Neanderthals and some Caucasians. 37 The Neanderthal occipital bun is also found among some early modern Europeans 38 and can still be seen today fairly often among Lapps, Finns, and people in southern Lancashire in the north of England (which had been invaded by the Vikings), the same people who are most likely to have blond hair and blue eyes.

If Dr. Olson is correct and the Neanderthal males did hunt wild cattle at night, an adventurous and highly risky behavior, it might also explain why Caucasians are more adventurous and take more risks than NE Asians, behavior that may be responsible for their greater number of discoveries and accomplishments, despite having slightly smaller brains and lower IQs than NE Asians. 39

The afrocentrists initially denied that the West Asians that became Caucasians had interbred with any archaic species of man as it was their position that modern Africans replaced all the archaic species of man without interbreeding. However, if Caucasians evolved from East Asians without interbreeding with Neanderthals, it is difficult to explain why the Caucasian skull is less neotenic than the East Asian skull since East Asian neoteny was beneficial to the East Asians, and the Caucasians lived in a similar environment.

Figure 25-5 is a picture of a reconstructed Neanderthal child that is based on the skull of a Neanderthal child. The child in the picture looks hauntingly different, but she could easily pass for a European living today. 40

An interesting feature possessed by some Neanderthals, fossil some Caucasian skulls (Coon, 1962, p. 504), some and living whites is a type of

prognathism



Figure 25-8

Figure 25-6 Figure 25-7 Figure 25-9

("midfacial"). Compare the nose and jaws of the beautiful unnamed model (Fig. 25-6) with a profile of a reconstructed Neanderthal man (Fig. 25-7) and the Neanderthal child in Figure 25-5. The midfacial prognathism of Neanderthals can be seen in many Europeans and some Asians; even cartoons and comics of beautiful Caucasians often have midfacial prognathism, e.g., Blondie Bumsted.

Figure 25-5

Neanderthal prognathism is in contrast to the simian ("alveolar") prognathism of many Australian aborigines (Figure 27-6), Africans (Figure II-1; Figure 9-3; Figure 9-4;

Figure 9-26; Figure 10-11; & Fig. 25-8), 41 and apes (Figure 6-1 & Fig. 25-9, a baby bonobo). 42 In simian prognathism only the jaw protrudes, but in Neanderthal prognathism both the nose and the jaw protrude and, indeed, the nose protrudes even more than the jaw.

The Neanderthal and Caucasian nose is also longer and narrower than the African and ape nose, extending downward closer to the bottom of the upper incisors. (Figures 10-6 & 10-7; Howells, 1948, pp. 167-168). The profiles in Figure 25-10 illustrate the differences in prognathism.

In the European profile, the jaw does not protrude, but the nose and chin do. In the Neanderthal (Hn) profile, the jaw and nose protrude, but there is very little chin. If the Neanderthal profile is crossed with the European profile, the result is a more attractive Hss/Hn hybrid profile that some Europeans have, with a protruding jaw, nose, and chin. In the simian profile, only the jaw protrudes and the nose is short, flat, and broad. Since Africans and most Asians do not have Neanderthal prognathism, 43 where did those Europeans who have it get it from, if not from Neanderthals?

European Hss/Hn Hybrid Hn Simian

Figure 25-10

The prominence of the nose, rather than the jaw, in Neanderthal prognathism suggests the use of weapons in fighting, rather than biting with teeth. Neanderthal prognathism is a

combination of the partial loss of simian prognathism plus a cold-adaptive increase in the size and length of the nose to warm the cold northern air before it reached the lungs. (Some Caucasians also have large, unusually-shaped noses, e.g., comedian Jimmy Durante, psychic Pam Coronado.)

Interbreeding with Neanderthals offers a good explanation for how Caucasians obtained traits that are not particularly advantageous. It is called "selective sweep" or "genetic hitchhiking" and it works like this. Suppose the Neanderthals, who had lived in Europe for a long time, had only a single allele that was very advantageous for living there. (They probably had many, but let's assume the simplest case.) And suppose that there was only very limited interbreeding between the Neanderthals and the newly-arrived Cro-Magnons. The limited interbreeding would transfer to some of the hybrid progeny not only the very advantageous allele, but also other nearby alleles that may not have been particularly advantageous at all, perhaps those for eye and hair color. The individuals who inherited the very advantageous allele were more reproductively successful than those who did not inherit it so, eventually, most of the expanding hybrid population had it. But those other nearby alleles that came along for the ride also spread with the advantageous allele. So, even though the other alleles were not particularly advantageous, most of the hybrids ended up with them as well. Neat, isn't it? (Schaffner, 2006).

Thus, the hybrid Caucasians have a mixture of Cro-Magnon and Neanderthal traits, 44 but the absence of Neanderthal mtDNA in Caucasians suggests a much greater contribution to the Caucasian genome from the Cro-Magnons than from





	H-O	Normal
Neanderthal	53	47
Australopithecus	0	100
African Eves	0	100
Skhūl/Qafzeh (<i>Hn</i> -Cauc. Hybrid)	0	100
Early U. Paleolithic (> 120 kya)	18	82
Late U. Paleolithic (300 – 30 kya)	7	93
Mesolithic (< 10 kya)	2	98
Medieval Europeans (1500 – 400 BP)	1	99

Table 25-1

Fossil Evidence of Interbreeding The best fossil evidence for Neanderthal interbreeding ⁴⁵ is the presence of a different shape of a hole in the jaw that a nerve goes through to the teeth, known as the "mandibular foramen" ("jaw hole"). This hole comes in two shapes (Fig. 25-11), "normal," which almost all living humans have, and "horizontal-oval" (H-O), which is almost entirely limited to Neanderthals and fossils of Europeans (Lewin, 1998, p. 404). Since the shape of the hole has no functional significance and the H-O shape is very unlikely to have arisen independently by chance in both the Neanderthals and the Europeans, the Europeans must have gotten it from the Neanderthals. Table



Figure 25-11

25-1 shows some of the frequencies of the H-O foramen (<u>Wolpoff, 1997; Frayer, 1992</u>, p. 31). Table 25-1 shows that the H-O foramen was absent in *Australopithecus*, early Africans, and one hybrid, was most frequent in Neanderthals, and decreased in frequency in Europeans from ancient times to the present.

Figure 25-12 is a male skull, about 90,000 yrs old, found at Mt. Carmel in Israel. The Mt. Carmel skull shows features of both Neanderthals and Caucasians and is thought to be a hybrid or intermediate. ⁴⁶ That is, if Caucasians are hybrids of Cro-Magnons and Neanderthals, then Mt. Carmel is a hybrid that had more Neanderthal (<u>Figures 2-6 & 2-7</u>) in it than Cro-Magnon (<u>Figure 2-8</u>). The skull capacity is 1518 cc, larger than the average of Caucasians (1441 cc), NE Asians (1491cc), and Neanderthals (1450 cc), but smaller than Cro-Magnons (~1570).

In 1999, a 24,500 year old skeleton of a 4 year old boy (the "Lagar Velho" child), that was clearly a hybrid between a Neanderthal and a Cro-Magnon, was found in a cave in Lapedo Valley, north of Lisbon, Portugal. (Duarte, 1999). This skeleton shows that Neanderthals and early modern humans intermixed and produced children. The child was buried with a pierced shell and red ochre, which indicates ritual burial, a modern behavior.

Figures 25-13 and 25-14 are two more examples of re-constructed adult Neanderthals. 47

As with the baby-adult chimpanzee comparison (Figure 6-1), the adult Neanderthal is less neotenic than the child (Fig. 25-5). The brow ridges are heavier and the forehead slopes more than in most

Figure 25-12

Caucasians, but even today they could "pass" as Caucasians.

In addition to fossil bones, artifacts have been found that suggest trading between Neanderthals and (West) Asians, and possibly even more intimate contact. Personal ornaments found with older Neanderthal fossils are similar to those found with fossils of Cro-Magnons, though previously the two populations were completely unassociated. (Zilhão, 2006b).

Figure 25-13



Figure 25-14

In the end, there are just too many traits and unusual alleles in Europeans for them to have all come from mutations. Moreover, some of the alleles and traits offer no obvious advantage, so it is hard to see how they could become so common in Europeans just from mutations.

Chapter 26

Table of Contents

FOOTNOTES

1. Picture from Zivulovic, S., *Reuters*. (Fink, 1997). There are also elegant bird-bone flutes as old as 36,000 years from sites in Germany and France. (Edgar, B., "Standing Up to Dance and Sing," *Scientific American*, July, 2006). Back

2. (<u>Howells, 1959</u>, p. 193; Haywood, 2000, p. 41). And they made crayons to draw with. (Jones, D. "<u>Neanderthals wore make-up and liked to chatNew Scientist</u>, Mar. 27, 2008). Back

3. Although Neanderthal behavior was, in many ways, modern, there is no evidence that it met Baker's indicia for creating a civilization. Back

4. That is the date of the most recent Neanderthal fossil, found in Portugal. Neanderthals were still living in Croatia as recently as 28,000 ya and in southern Spain only 30,000 ya. (<u>Hall, 1999</u>). <u>Back</u>

5. Neanderthals and modern humans coexisted from approximately 40,000 ya to less than 30,000 ya. (<u>Hublin, 1995</u>). <u>Haywood (2000, p. 41</u>) says until 12,000 ya. Primitive, but modern, human fossils found at Jebel Qafzeh, near Nazareth, Israel, were 100,000 years old, and Neanderthal remains from the Kebara cave, on Mount Carmel, Israel, were 60,000 years old (<u>Parker, 1992</u>), suggesting co-existence for a longer time. (<u>Wilson, 1992</u>). <u>Back</u>

6. If so, Neanderthals would have had more fast twitch muscle fibers, making them much stronger, but fewer slow twitch muscle fibers, which are useful for endurance. Back

7. (<u>Shea, 2002</u>). Eight foot long lances made from a dense wood were used, perhaps from trees that grew slowly on a north slope that received less sunlight. <u>Back</u>

8. The bones in their forearms were bowed, allowing space for powerful muscles. Back

9. They reached Khotylevo, on the Great Russian Plain, 52 °N. latitude, about 120,000 ya, where the average January temperature is below 14 °F; it was even colder back then. (<u>Arsuaga, 2001</u>, p. 301); <u>Hoffecker, 2007</u>. <u>Back</u>

10. Figure 25-2 is from (*National Geographic*, Jan., 1996). One Neanderthal fossil, "The Old Man of La Chapelle," (Figure 2-Z), who dates to about 50,000 ya, suffered from severe arthritis in his neck, had a deformed left hip, a crushed toe, a broken rib, and damaged patella (knee cap), yet he survived, presumably because others cared for him. <u>Back</u>

11. <u>Isotopic analysis of Neanderthal bones</u> shows that they were primarily carnivores feeding on open-ranging herbivores. One explanation for the sizable nasal opening of the Neanderthals is that it enabled them to inhale large amounts of air during great physical exertion. <u>Back</u>

12. (Steudel-Numbers, 2004). (Hoffecker, 2002, pp. 112, 135, 189-190). "[I]t is estimated that Neandertals required 3,360 to 4,480 kcal [i.e., "Calories"] per day to support strenuous winter foraging and cold resistance costs." (Steegmann, Jr., 2002). Neanderthals also had a wider pelvis, which is less efficient for walking (Figure 22-2). A typical, modern, urban American male requires only 2,600 Calories. Cro-Magnons, like the East Asians, may have relied more on fat and less on muscle. Muscle requires more energy than fat just to be maintained, and uses still more energy when it is working. Thus, very muscular creatures tend to be more sedentary (e.g., cats), except during periods of extreme exertion. Fat is cheaper to maintain and does not require a constant input of energy. Back

13. Even today there are nocturnal primates, such as galagos, tarsiers, lorises, and lemurs. A good example of two closely related species that are able to co-exist in the same territory are the ocelot (*Felix pardalis*) and the jaguarondi (*Felix jaguarondi*). In Mexico, the jaguarondi hunts primarily during the day and the ocelot primarily at night. (<u>Tangley, 2006</u>). <u>Back</u>

14. Superior technology included not only weapons, but constructed shelters with interior hearths, tailored apparel, underground food storage, traps, snares, bone needles, and even rotary drills. (<u>Hoffecker, 2002</u>, pp. 62, 135, 171, 225, 253). <u>Back</u>

15. They also had the same allele of the FoxP2 gene that humans have, which is required for speech. (Krause, 2007b). Back

16. The drawing, from a cave near from Valtorta, Spain, is 13,000 years old. Bows and arrows are <u>at least 18,000 years old</u>. Back

17. (Adler, 2006; Hoffecker, 2002, p. 178). There is little evidence that Neanderthals used symbols or thought symbolically, which would have given the Cro-Magnons a major advantage. (Hoffecker, 2002, pp. 125-126). Back

18. The genetic distance between Caucasians and sub-Saharan Africans can be as large as 0.2%, yet they can interbreed with fertile offspring. The genetic distance between Hss and Neanderthals is less, (<0.08%), so they could very likely interbreed as well. <u>Back</u>

19. (Krings, 1997; Ovchinnikov, 2000; Serre, 2004). However, the analysis of Neanderthal mtDNA has been criticized. (Lubenow, 1998). Back

20. The absence of this evidence, however, does not exclude interbreeding. (Nordborg, 1998; Serre, 2004; Relethford, 2001). "These results do not rule out the possibility that Neandertals contributed other genes to modern humans." (Krings, 1997). The experimentally determined minimal distance between Neanderthals and us is 22 substitutions, i.e., different alleles. (Krings, 1997, p. 24-25). Modern humans can have as many as 24 substitutions among them. We share at least 99.5% of our DNA with Neanderthals. (Noonan, 2006). Also, some Europeans may have much more Neanderthal heritage than others; geneticists should obtain positive results if they test Europeans who have Neanderthal traits. Back

21. (Evans, 2006). "We suggest that the H2 haplotype [of the MAPT gene] is derived from Homo neanderthalensis and entered H. sapiens populations [i.e., Caucasian only] during the co-existence of these species in Europe from approx. 45000 to 18000 years ago." (Hardy, 2005). Also, "... would indicate that archaic populations such as Neanderthals must have made a substantial [5%] contribution to the modern gene pool in Europe." (Plagnol, 2006). Also see the CD4 gene. Back

22. As to the reverse occurring, there are old tales of dwarfs stealing women in the night, and Neanderthals have been described as "<u>compact, dwarfy-like beings</u>." (Gary Sawyer, anthropologist at the American Natural History Museum in NY). Back

23. "When wolves encounter dogs, they usually eat them. ... When they mate it is almost always the male wolf with the female dog." (Whitney, 1999). A Neanderthal man would easily win a one-on-one, hand-to-hand fight, but the Cro-Magnons were likely more populous, could run faster, and could use spears to avoid contact. Back

24. <u>Howells (1948, p. 172)</u> describes male Neanderthal hybrids from Skhul in Israel as "tall, straight-limbed" and a female hybrids at Tabun in Israel as "more primitive and less specialized" so, as expected, there were a mixture of traits in the hybrids. <u>Back</u>

25. (<u>Hawkes, 2006</u>). "The principle is that when a population has been invaded by members of another race the genes that give it its special adaptation to its local environment retain their selective advantage and eventually come to characterize the mixed population through the process of natural selection." (<u>Coon, 1962</u>, p. 34). <u>Back</u>

26. There is some evidence that mental traits are female-linked and are inherited from the mother, which may give the hybrids more Cro-Magnon mental traits. (Goos, 2006). Back

27. (Seldin, 2006; Tian, 2008; also Figure 20-3). Back

28. A similar "frequency-dependant selection" has been reported for **DSC1**, a gene that is closely associated with schizophrenia. (<u>Crespi, 2007</u>). Huntington's Disease may also involve a balancing. (Spinney, L., "<u>Could Huntington's mutation</u> make people healthier? New Scientist, Sept. 7, 2007). Another such balancing may occur with the percentage of sociopaths, which is about 4% in the US. (<u>Stout, 2005</u>, p. 136). <u>Back</u>

29. BRCA1 (breast cancer 1 gene) and the D4 dopamine receptor are examples. (Harpending, 2006). Back

30. (Evans, 2006). Also see the mtDNA polymorphism, EST00083, which increases IQ in Europeans and was acquired 35,000 ya. Back

31. (Beals, 1965). Blue eyes are found in 99% of Estonians and 75% of Germans. The Neanderthals lived as far north as Finland - stone tools were found in Finland in and below layers dated at 340,000 to 300,000 ya. (Schulz, 1998). Similar finds were made in Siberia. Back

32. A genetic study (<u>Eiberg, 2008</u>) suggests that blue eyes are only 6000 to 10,000 years old; the most recent Neanderthal fossil is dated at 24,500, but they could have lived long after that. Also, the genetic study just examined living people; other blue-eyed people could have lived much earlier, but did not leave descendants. Blue eyes are believed to have originated with the Indo-Europeans, who lived around the Caucasus Mountains, between the Black and Caspian Seas. (Anitei, S., "<u>How Blue or Green Eyes Appeared</u>," *Softpedia*). Chinese and Muslim sources of the 7th–12th centuries describe the people of Kyrgyzstan (just west of China), as red or blond-haired with a fair complexion and green or blue eyes. (*Wikipedia,* "Kyrgyzstan"). <u>Back</u>

33. The blond hair (Figure 10-10) of some Australian aborigines may be an ash blond that is not the same as European blond hair. Back

34. <u>Dr. Alex Brown</u>. His mother was European and his father was a full-blooded aborigine, so his father must have had an allele for blue eyes, which are recessive. <u>Back</u>

35. (<u>Baker, 1974</u>, p. 279). Even some African Bushmen have occipital buns. (*Wikipedia*, "<u>Occipital Bun</u>"). Since the Neanderthal lineage, *georgicus* to the Neanderthals, had occipital buns, a southern expansion by any species in that lineage would account for the occipital buns in the Bushmen and Australian aborigines. <u>Back</u>

36. In addition, red hair is believed to have arisen only 8000 to 10,000 ya, after the Neanderthals were extinct. (Owen, J., "British Have Changed Little Since the Ice Age, Gene Study Says," National Geographic News, July 19, 2005). And, although some Neanderthals apparently had red hair, they did not have the same allele for it that modern redheads have. (Culotta, 2007). That does not end the matter, however, as the differences between the *Hn* and *Hss* alleles may have been minor, other Neanderthals not yet found may have had the same allele as *Hss*, and the allele may have entered the *Hss* genome thousands of years before it was expressed and observed. Back

37. (Coon, 1962, pp. 540-541; Bailey, 2002). "... you can still find some Neanderthal features in Europe today." (University of Michigan). Back

38. "...Neandertals and early modern Europeans virtually all exhibit a projection of the back of the skull called an occipital bun..." (Smith, F.H., "The Fate of the Neandertals," *Scientific American*, Apr., 2000, p.107). <u>Back</u>

39. "Since 2000, Americans have won 53 Nobel Prizes, and all the winners were white. The United Kingdom won 12 Nobel Prizes in the same period. By contrast, Japan, a country with a population more than double the UK's, won four Nobel Prizes.

The largest country in the world, China, produced one prize winner, as did South Korea. This means that the white populations of the US and the UK were more than seven times more likely to produce Nobel Prize winners than Japan, 10 times more likely than South Korea, and about 300 times more likely than China." (Jobling, I., "What is the West? Part II," *The Inverted World*, Feb. 8, 2008). An allele, "7R," on the human dopamine receptor gene DRD4, appeared in Caucasians only 30,000 to 50,000 ya, but is over 300,000 years old, and must have come from "a closely related hominid linkage," i.e., Neanderthals. (Ding, 2002). Interestingly, this gene is associated with "the personality trait of novelty seeking," (and attention deficit hyperactivity disorder (ADHD)) which may explain why Caucasians explore and discover more than Asians, and have far more Nobel Prizes (375 to 32). (Kanazawa, 2006). "The 7R allele, for example, has an extremely low incidence in Asian populations yet a high frequency in the Americas." (Ding, 2002). The article does not give the incidence of 7R in Africans but it should be low. Back

40. <u>Reconstructed Gibraltar child</u> by E. Daynès. "Thus, modern Europeans retain some Neandertal genes and they look the most like Neandertals of any extant [living] human population ..." (<u>Boaz, 1997</u>, p. 213). "Despite these adaptive features [i.e., features Neanderthals evolved to protect them from the cold], the Neanderthal faces are essentially Caucasoid." (<u>Coon, 1962</u>, p. 534). "[An] early modern European (center) shares more features in common with a Neandertal (left) than with a modern from the Middle East (right)." (Attributed to Milford Wolpoff, "<u>The Modern Human Origins Morass</u>," *Scientific American*, Jan. 29, 2001). <u>Back</u>

41. (Coon, 1962, p. xx, a pygmy from the Congo). Back

42. (PBS NOVA, "The Last Great Ape"). Back

43. Some African Americans, who are hybrids of Africans and Caucasians, have it. Back

44. Caucasians have more problems with wisdom teeth than do Asians or Africans (<u>MacGregor, 1985</u>) which may be due to some incompatibility between larger Neanderthal teeth and smaller Cro-Magnon jaws, a problem discussed in Chapter 30. <u>Back</u>

45. (Wolpoff, 2004; Soficaru, 2007). Back

46. Skulls at Qafzeh, Tabūn, and Skhūl in Israel, skeletons found in a cave at Shanidar in northern Iraq, at the Cave of the Old Woman, (<u>Trinkaus, 2003</u>), and the Cave with Bones (<u>Rougier, 2007</u>) in Romania, also show mixtures of Neanderthal and modern Caucasian traits. <u>Back</u>

47. Figure 25-13 is a wax reconstruction done at L'Atelier Daynes from the 50,000-year-old French Neanderthal skull shown in the background. The skull in the picture is not aligned at the same angle as the reconstructed face. Figure 25-14 is from the Rheinische Landesmuseum in Bonn using a 42,000 year old Neanderthal skull. <u>Back</u>

Chapter 26 - The Origin of Africans

"Antiquity in the Congo is almost an utter blank, so that we cannot approach the Negro from the past. At the same time we cannot find ancient signs of him anywhere else. We know nothing about the Negroes...."

(<u>Howells, 1948</u>, p. 279, 295, 297)

"In the territory of the Negroes – a major stock of mankind, fully distinguished from Whites or Mongoloids – we find virtually no history at all."

(<u>Howells, 1959</u>, p. 303)

In OoA, today's Africans evolved into modern man (*Hss*) in Africa, left Africa 65,000 ya and migrated to Asia, replaced all the Asians who were already there without interbreeding with them, and lost their African alleles and acquired completely new Asian alleles. In OoE, the Asians and the Caucasians evolved as two separate, but occasionally interbreeding, lineages from over 2 mya, but the African lineage did not so much evolve as it did acquire.

All humans evolved "up, up, and away" from an ape ancestor, but Africans did not evolve as far away, for the simple reason that they remained in the same type of environment that that ape ancestor lived in (i.e., they were close to equilibrium, <u>Chapter 4, Rule 10</u>) and were not subjected to the harsh selection of a northern climate. Furthermore, only a small part of the evolution of Africans was due to the selection of traits coded for by mutations that arose in Africans; instead, Africans mostly received mutations that had occurred in Eurasians when those Eurasians migrated into Africa and interbred with them. ¹ Had no Eurasian hominins ever entered Africa, there would be no members of the *Homo* genus in Africa today.

The migrations of primates from Eurasia into Africa may have begun as long ago as the prosimians, followed by monkeys, quadrupedal apes, bipedal apes, *Australopithecus*, ² *erectus*, northern *Hs*, and finally *Hss*. As time passed, the migrations came from one part of Eurasia, then another, then perhaps back to the first part again, but this time by a more evolved hominoid, and so on, off and on for millions of years.

Because the intervals in between migrations into Africa were not long enough for the newer and older migrants to evolve into different species, interbreeding to produce viable hybrids was possible and common. ³ As usual, only those hybrids who were best adapted for Africa survived. The numbers of more evolved migrants entering Africa at any one time was vastly less than the number of less evolved earlier migrants with whom they could interbreed, so migrants were absorbed, leaving behind few fossils; the only evidence of their presence is their alleles in their hybrid offspring. In this way, over millions of years, a huge variety of more advanced Eurasian alleles entered the genomes of African primates, and that is why Africans have the most genetic variation (Figure 19-2) ⁴ but no ancestors (quotes at the beginning of this chapter). ⁵

As those more advanced hominoids arrived in Africa from Eurasia they, and their hybrid offspring, pushed the less advanced hominoids away from their entry point in NE Africa. The earlier and more primitive arrivals did not go extinct immediately, but retreated to less desirable territories, dwindling in numbers but clinging on for many, many years before they went extinct.

Meanwhile, back in Eurasia, where the alleles were being generated that enabled hominoids to advance into modern humans, a similar process had already occurred, but hundreds of thousands of years earlier than in Africa. That is, when a new allele arose in Eurasia that was more adaptive in Eurasia, perhaps because it gave protection from the cold or the greater intelligence needed to survive the winters (see "Intelligence Enhancing Processes,"

in Section IV), there was also interbreeding between those who had the alleles and those who did not, producing hybrids, and only those hybrids who were best adapted survived, just as in Africa. The difference, however, is that it took hundreds of thousands of years, if not millions of years, for the new alleles to spread to the individuals who would carry them into Africa. Thus, in the journey to become modern man, Africa was always hundreds of thousands of years behind Eurasia.

Now, a fair question is, "Why didn't those alleles also arise in Africa?" No doubt some of the African-specific alleles $\frac{7}{2}$ did and others eventually might have. But when the alleles arose in Africa, they arose as single alleles, so the individual who had them had to succeed or fail on the basis of that one allele. When the allele was brought in to Africa by the Eurasian migrants, it came not as a single allele, one with each individual, but as a set of compatible alleles. Those who had the set succeeded or failed on the basis of the entire set, which would have been much more beneficial than single alleles. Also, the negative effects of a few alleles in the set that were maladaptive in Africa may have been swamped by the positive effects of the remaining adaptive alleles in the package. Gradually, the maladaptive alleles would be lost ⁸ as individuals who lacked them, but not the adaptive alleles, were born. As discussed in "Intelligence as a Liability," in Chapter 14 and later in this chapter, alleles for high intelligence were probably maladaptive in Africa and were lost as even those Africans in NE Africa now have low IQs. (Lynn, 2006a).

The migrants did not arrive with only their genes – they also brought their culture; and, since their culture was more advanced, this gave them a considerable advantage. An allele plus African culture may be a disadvantage, but an allele plus Eurasian culture may be an advantage, even in Africa. For example, an allele for digesting milk is of no advantage if people do not keep herds of herbivorous mammals, i.e., Africa, but is an advantage in Eurasia, where they do.

Although the early primate migrants into Africa were from the Eurasian tropics and could adapt easily to Africa, the later hominids were from a more northern climate and, because they were not adapted to the tropics, e.g., they had no resistance to tropical diseases; most did not survive for long and left few fossils. ⁹ Chapter 23 describes some of the earlier hominoids, up to *Australopithecus*, that may have migrated into Africa. The first *Homo* migrant into Africa may have been an early *habilis* that was better adapted to Eurasia than to Africa, but it had some advantages, such as superior tools and weapons, that were also advantageous in Africa. *Georgicus* is closely related to African *habilis*, *ergaster*, and *erectus* fossils and fossils of Heidi have been found in Africa.

The Eurasian hominids interbred with the disease-resistant natives before the migrants died out, however, producing hybrids with various mixtures of the traits of the parent populations. ¹⁰ The hybrids that had both the disease resistance of earlier migrants and some of the more advanced traits of the Eurasian hominids were selected and survived, gradually advancing the Africans, though they were always hundreds of thousands of years behind the Eurasians. ¹¹ The only trace of all the different migrants who entered Africa over a period of at least 2 million years is the large variety of alleles that are found in today's Africans (Figure 19-2) and the traits they code for. Beginning with quadrupedal apes, the tree in Figure 26-1 shows how Africans advanced by means of waves of Eurasian hominids migrating there, bringing alleles for more advanced traits into the African gene pool, assuming a quadrupedal ape ancestor.



Figure 26-2 shows the location of some of the tribes in Africa; $\frac{12}{12}$ the arrows show the three migratory routes in to (Suez and the Horn) and out of (Gibraltar) Africa.



Figure 26-2

Note that below the "African Whites" zone is a "Zone of Mixture" that extends across the continent, including the Horn of Africa, and most of southern Africa. The Hottentots and the Bushmen of the Kalahari Desert are right in the middle of the "Zone of Mixture." The "Forest Negro" is the Congoids; they lived in the territory around the Congo and Niger River basins, where African Americans came from.

The Sahara Desert was "a nearly complete barrier to human movement north or south" except during the ice ages, when it was "a temperate, watered climate." (<u>Howells, 1948</u>, p. 270). Thus, the only time that the Sahara Desert was habitable and easily crossed was the very time that the ice ages were driving Eurasians south in to Africa.

Note that northern Africa and what is now Egypt were occupied by whites, ¹³ and that migration out of Africa across Gibraltar would have been by whites. If Africans were migrating out of Africa, as OoA asserts, it is hard to explain how so much of northern African could have

been white. Surely, the migrating Africans would not have become whites while still in Ethiopia and Egypt? One would expect all of Africa to have been black, especially the north, which the Africans were supposedly moving in to on their way to Eurasia. The fact that northern Africa was white and that "whiteness" declines as one moves south and west into the Congo suggests that any migrations were by whites in to Africa, not by blacks out of Africa. ¹⁴

Except for unpredictable droughts, African hominoids were in a stable environment, the same tropical environment that Africa has had for millions of years. The more stable an environment is, the less its inhabitants evolve (<u>Chapter 4, Rules 4 and 6</u>). That is, any new and unusual traits that arose in Africa were likely to be less advantageous than the traits African hominoids already had, traits that had worked well in Africa for millions of years.

Figure 26-3 (*World Book Encyclopedia*) shows the climate zones in Africa. The white population in North Africa along the Mediterranean Sea (Fig. 26-2) could have entered Africa from Gibraltar ¹⁵ or Suez (Alexandria) but, once there, moving south was feasible only when the Sahara was not a desert. By entering at the Horn of Africa into Ethiopia, however, movement south was possible at any time. Once in Ethiopia, the east coast of Africa could be followed south around the cape and north again partly up the west coast.



Figure 26-3

There are many very different populations in Africa, ¹⁶ but only a few of the most different ones will be discussed.

Congoids

Because the Congoids are the most simian Africans and live in one of the areas most
inaccessible to Eurasian migrants into Africa, they are likely to be descended from some of the oldest hominoids that migrated into Africa. The tropically-adapted traits of the Congoids, e.g., dark, hairless skin and short, wooly black head hair, were most likely brought into Africa by a tropics-specialized bipedal ape, probably a species of *Australopithecus*. Although *Hs* and *Hss* migrated south into both SE Asia and Africa, displacing more primitive hominids, in SE Asia the primitive hominids were driven onto islands and there was less interbreeding with them. In Africa, however, *Hs* and *Hss* did not survive as well. As a result, fewer *Hs* and *Hss* alleles entered the African genome, especially the more isolated Congoids, who therefore retained more of the simian traits of their ape ancestors.

The Nigerians are the African tribe that is genetically closest to the chimpanzee. (Deka, 1995). Nigeria is on the West Coast of Africa (Figure 17-6), making it difficult to reach from the Middle East, as Eurasian migrants would either have to cross the center of Africa or move south along the African coastline, around the cape, and back up north along the western coast past the equator. 17 Thus, of the Africans, the Nigerians either received fewer infusions of Homo genes from Eurasians or, of the various hybrids that were formed, those with the more primitive traits were better adapted for that territory and the other hybrids did not survive there. The area in which the Nigerians live is "the jungle of the Congo and of the Slave Coast of West Africa," (Howells, 1948, p. 270), the home of chimpanzees and gorillas, suggesting that the known interbreeding between human and chimpanzee lineages 18 occurred in the Congo in the West African lineage. This would account for the simian traits of African Americans, who came from West Africa.



Figure 26-4

Andaman Islanders

To understand the origin of the San and the Hottentots,

it is necessary to look briefly at some Asians. As Asian hominids increased their numbers, they spread west along the coastline, then into Africa. (<u>Olivieri, 2006</u>). One population that did so was descended from a tropically-adapted *Australopithecus* that lived in India. Today, a small remnant of these people still lives on the Andaman Islands (Fig. 26-4; <u>Coon, 1962</u>, p. XVIII), a string of small islands in the bay of Bengal east of India. About 60,000 ya, during the first ice age, the Andaman Islands were reachable from mainland India and these people probably lived in continental India as well. They either expanded their numbers and migrated into Africa or were driven there by more advanced northern hominids, who moved south to escape the ice age.

Although the woman's buttocks are partially concealed in Figure 26-4, it is still obvious that they are enormous. Steatopygia ("fat ass") is a highly unusual and very primitive trait as it is reminiscent of the buttocks of female apes and monkeys that become engorged with blood and bright red to signal ovulation to males. Although it is fat that is stored, probably to live off during periods of famine, the enlarged buttocks are attractive to males, just as the swelling of the buttocks is in other primates. Bustles worn by Victorian ladies in England in the 1800s had a similar effect on males. ¹⁹ Since enlarged buttocks are associated with apes, the presence of steatopygia in living people ²⁰ suggests that a steatopygous hominid, probably a species of tropically-adapted *Australopithecus* in India, was an early migrant into Africa. ²¹

Hottentots

If ancestors of the Andaman Islanders made it to Africa, there could be some traces of that population in Africa. The Hottentots (aka "Khoi") were a tribe closely related to the Bushmen, both using a monosyllabic "click" language. Their Y chromosome haplogroup A is the oldest human lineage (Knight, 2003). The Hottentots lived in Southern Africa near the Cape of Good Hope. Pure Hottentots no longer exist, some dying of smallpox and the remainder interbreeding with other Africans. There were some around in the 1800s, however, so unlike other extinct populations, we have descriptions and drawings of them and not just bones. The females were more unusual than the males; Figure 26-5 shows the most famous female, the "Hottentot Venus." ²² The women, like the Andaman Island women (Fig. 26-4), are characterized by their enormous buttocks. The women also had large external genital flaps ²³ and large areolae with inverted nipples. The face is flat, similar to an Asian's, with only the teeth protruding and the incisors meeting at an angle, as in an African. (Coon, 1962, p. 646). The brain is smaller and simpler. ²⁴



Figure 26-5

Bushmen



Figure 26-6

The Bushmen (aka "San"), a pygmy ²⁵ hunter/gatherer tribe that lives in the Kalahari Desert in southern Africa, are one of the most primitive people on earth. Figure 26-6 is a photograph of a male Bushman. As you can see, even the males are steatopygous. It is steatopygia that ties Andaman Islanders, Hottentots, and Bushmen together as descendants of a single population.

Now take a close up view of another Bushman (actually a Bushman woman) in Figure 26-7. (Coon, 1962, plate V). Although

Bushmen have some African features (large lips, broad nose, small ears, and wooly hair) they also have some neotenic Asian traits (<u>Cruciani, 2002</u>), including light, yellowish skin, eye folds, and a flat face. ²⁶ These traits are cold adaptations that occurred in East

Asians when they became neotenic. Unlike other Africans, the Bushmen are monogamous, a trait of the cold north. Bushmen also have shoveled incisors and many newborn Bushmen even have "Mongoloid spots" at the base of the spine, both

also Asian traits and Bushman DNA is 56% "Near Eastern." ²⁷ Thus, there was likely interbreeding between the steatopygous Andaman



Figure 26-7

Islander lineage and the neotenic East Asian lineage. ²⁸ Interbreeding most likely occurred in Asia rather than in Africa because Bushmen first lived in northern Africa (where Eurasians entered Africa), before they were driven into southern Africa by new migrants. ²⁹ Since the Bushmen were least capable of fending off other tribes, they now occupy the least desirable territory, the Kalahari Desert. However, the desert may have allowed them to escape malaria-carrying mosquitoes ³⁰ and decimation from later, more advanced migrants.

The small size of the Bushmen may be because their tropically-adapted *Australopithecus* ancestors were small, ³¹ or it may be due to long-term calorie restriction, a condition that would have made a large energy-consuming brain a liability. When there is not

enough food, individuals whose bodies require the least amount of energy have the best chance of surviving and individuals with smaller brains require significantly less energy. ³² As a result, brain size decreased, which gave Bushmen the lowest IQ (54) of any population yet measured and the lowest brain to body mass ratio of all human populations (even lower than the South Pacific aborigines).

As the Bushmen show, it is clearly possible to be neotenic, which is not a primitive trait in man, yet have a small brain. Conversely, as the Neanderthals show, it is equally possible to have primitive traits (heavy brow ridges, receding forehead), yet have a large brain.

NE Africans

"But originally they [East Africans] 33 must have belonged to an Upper Paleolithic [40,000 ya], large-skulled White stock of a longheaded variety, ... Men like them were in South Russia in the Mesolithic [20,000 – 18,000 BC], and perhaps in the Near East." (Howells, 1959, p. 313). "To put it simply, if skulls mean anything it is the Whites who have been solidly entrenched in East Africa since the latter Pleistocene, and anyone else is an interloper." 34 This is, of course, consistent with the southward migrations of Caucasians into Africa.

Cro-Magnons, driven south by the ice ages, migrated into Africa ³⁵ and interbred with the populations already there. ³⁶ Figure 26-8 is a picture of a Caucasian-looking Somali (who immigrated to Russia). Although his Caucasian features are obvious, ³⁷ the behavior of NE Africans is African, as is their IQ (Ethiopia = 63, Somalia = 68, Kenya = 72; Lynn, 2002a). The existence of the living populations of Bushmen and Somalis in Africa proves that there were ancient migrations of Asians and Europeans into Africa.



Thus, Africans seem to have descended from at least three species of tropics-specialized *Australopithecus*: (1) an Indian

Australopithecus that had steatopygia, e.g., the Andaman Islanders, (2) an East Asian Australopithecus that was neotenic and had specializations for the cold, e.g., the Negritos of the Pacific Islands, and (3) a more generalized Australopithecus that lacked the specializations of (1) and (2), but was specialized for the tropics. Some of the more generalized African lineages did not interbreed very much with Europeans and retained their simian traits (Congoids), while others interbred to a much greater extent with Europeans and lost more of their simian traits (NE Africans). The Australopithecus LCA of those three species would have been similar to species (3), also adapted for a warm climate but less specialized for the tropics. Having lived in the tropics for millions of years, the species (3) Australopithecus would have had the simian prognathism (Figure 25-10) of their ape ancestors plus the specializations of bipeds for the tropics, e.g., sweat glands, dark, hairless skin, and short, wooly, black head hair.

Figure 26-9 is an interesting tree from (Cavalli-Sforza, 1994).

Figure 26-8



Note that Caucasians are in the center of the tree, strongly suggesting that both East Asians and Africans descended from, or received genetic input from, the generalized Caucasian lineage, as in the OoE theory. As usual, the genetic distance from Caucasians to Africans is large, but note that the Africans that are farthest from Caucasians are the West Africans (e.g., Nigerians) and the Pygmies, indicating that they are descendants of the first migrants into Africa. The short stature of the pygmies is consistent with the short stature of *Australopithecus*. The West Africans live near the chimpanzees and are the most simian of the Africans, which is consistent with an early generalized *Australopithecus* from Eurasia entering Africa and interbreeding with chimpanzees. The next migrants were the steatopygous *Australopithecines*,

probably from the Orient, then India, who became the San (Bushmen and Hottentots). And the last migrants were modern Caucasians, probably from the Middle East, who interbred with earlier migrants and became the NE Africans.

Boskop

An "anomaly" is something that does not seem to fit into a theory or explanation. One can consider an anomaly as an annoyance to be swept under the rug, hoping no one will notice, or as an opportunity, a clue to a deeper understanding. Boskop is an anomaly that any theory of human origins must deal with, though it may not yet be possible to determine which theory of his origins is correct.

There is little information about Boskop (aka *Homo capensis*), just a few pieces of a skull found in the Transvaal region of NW South Africa. Figure 26-10 is the skull (reconstructed by Broom), with the darker areas being the pieces found. Although the skull is dated at only 30,000 to 10,000 ya, ³⁸ the skull bones are thick and the jaw is massive and projecting. 39 It is described as "modern-looking" (neotenic) because the high forehead and larger skull capacity look European, but the protruding heavy jaw is similar to the African skull in Figure 9-4. It has a cephalic index (breadth of skull divided by length times 100) given as 75.1 by one researcher and as 76.19 by another, only slightly higher than that of living Africans (<75, see (4) in Table 9-



Figure 26-10

<u>1</u>), which suggests some Caucasian heritage. However, it had an endocranial capacity estimated at 1860 cc, higher than Europeans (1441 cc), much higher than living Africans (1338 cc), and higher than Neanderthals (1450 cc) or Liujiang (1480 cc). Moreover, Boskop is said to be related to Hottentots and the Bushmen, $\frac{40}{20}$ who have a very small cranial capacity. How did Boskop, living in South Africa, acquire those traits?

Given that Boskop has some Hottentot-Bushman features and some Caucasian features, one possibility is that Cro-Magnons entered the horn of Africa ⁴¹ and migrated south, interbreeding with the natives along the way, though that does not explain the large skull capacity.

What we do know is that today there are no large-brained Africans. The disappearance of large-brained Africans, such as Boskop and the Eurasians who contributed alleles to the Bushmen (IQ = 54, Lynn 2006a, , p. 169) and the Somalis (IQ = 68; Lynn, 2002a), is evidence that the optimal intelligence in Africa is much lower than the optimal intelligence in Eurasia. (See "Intelligence as a Liability," pp. 120-123.) In North Africa, it was the lighter-skinned, somewhat more intelligent (ave. IQ = 84, Lynn, 2006a, p. 80) hybrids who were best adapted, but below the Sahara it was the darker-skinned, less intelligent (ave. IQ = 67, Lynn, 2006a, p. 225) and more erectine individuals who had the advantage. Thus, any large-brained Caucasians who migrated into Africa would be burdened by their excess brain tissue and would become extinct, as Boskop did.

Today, southern Africa, where Boskop was found, is cooler, but

not as cold as Eurasia. Large brains would not be as useful due to the absence of a winter cold enough to cover the ground for many months with snow. Figure 26-11 shows the monthly temperature range for Bloemfontein, the coldest of the major cities in South Africa ⁴² (due to its high elevation), and even there the temperature barely reaches freezing.

However, there were times in the past when the temperature in Africa, at least at higher elevations, was colder and large brains, and greater intelligence, would have been an advantage. Under those conditions, the optimal brain size for Africa would have been greater and



Figure 26-11

large-brained northerners who migrated there to escape the cold of Europe could have maintained or even increased their brain size. As the African climate warmed again, large brains again became a liability and those who had them died out. $\frac{43}{2}$

<u>Grimaldi</u>

Two skeletons found in Grimaldi Cave on the Mediterranean, near Mentone, Italy are another anomaly. They were dated at 30,000 BP and appear to be a Negroid-Caucasoid mixture, but more Caucasoid than Boskop. ⁴⁴ One was a 5'2" woman and the other was a 5'1" teenage boy (Fig. 26-12). ⁴⁵ The Negroid traits are the wide nasal opening, large teeth, forward-projecting incisors and jaw, small



Figure 26-12

chin, and long forearm and legs, and the Caucasoid traits are the high forehead, meeting of frontal skull bones, large cranial capacity (1375 and 1580 cc for the woman and boy, respectively), and prominent nose bones.

A Cro-Magnon was buried above the skulls and a Neanderthal was buried below them, suggesting Neanderthals were there first, then the Grimaldi hybrids came, and finally Cro-Magnons took the territory. A possible explanation is that the ice ages drove Cro-Magnons into Africa where they interbred with Africans forming the Grimaldi hybrids. When the ice receded, the hybrids advanced north around the Mediterranean. They were later replaced by unhybridized Cro-Magnons.

Chapter 27

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FOOTNOTES

1. (Luis, 2004). "Analyses of sub-Saharan African ... suggest that they began diverging from one another upward of 50 KYA." "African populations are shown to experience low levels of mitochondrial DNA gene flow, but high levels of Y chromosome gene flow." Both quotes from (Garrigan, 2007); The divergence occurred as diverse Eurasians migrated into Africa after the Cultural Revolution and the gene flows indicate that it was mainly Eurasian males that entered Africa and interbred with earlier migrants. Back

2. The first "human ancestor," dated at 3.8 to 4 mya, was found in northeastern Ethiopia but, again, that is so close to the Middle East that one cannot assume that it evolved there and did

not migrate there. (Gibbons, 2005). Back

3. Although genetic evidence of chimp (*Pan*) – *Homo* interbreeding (actually, *Pan* lineage – *Homo* lineage interbreeding) has been found (<u>Patterson, 2006</u>), it is likely to have occurred before two human chromosomes fused to give humans 46 chromosomes (<u>Williams, 1999</u>), two less than chimpanzees with 48. Interbreeding between related species with different chromosome numbers can produce fertile offspring, but that is not likely. Two features of the Hottentots and the Bushmen, their steatopygia and the external genitalia of the women (Fig. 26-5 & 26-6), are simian traits and suggest either interbreeding with apes or the retention of simian traits. Referring to the Hottentot Venus, whom he dissected, French anatomist Cuvier said, "I have never seen a human head more like an ape than that of this woman." "... this man [a bushman] had the true physiognomy of the small blue ape of Caffraria." (Lichtenstein, *Travels in South Africa*, Vol. II, p. 224. The quotes can be found <u>here</u> and <u>here</u>, respectively.) Early hominoids entered Africa as populations of males and females; in modern times, it was primarily males who entered Africa and interbred. <u>Back</u>

4. Because Africa has a relatively stable climate, the optimal amount of variation should be low <u>Chapter 4</u>, <u>Rules 4 and 5</u>); multiple migrations of Eurasians into Africa explain why it is not. Analogous situations occur with animals. The voles in the Orkney Islands north of Scotland are "enormously diverse," having "more variation … than in all of western Europe," due to hitching rides on boats from diverse locations during Neolithic times. ("<u>Beastly Tales</u>," *New Scientist*, Jan. 19, 2008, p. 31). <u>Back</u>

5. "And there are no archaeological signs of pre-Neolithic people in the Congo at all, and it might have been empty when the Negritos and Negroes came." (Howells, 1948, p. 299). That is, empty of hominids that could make artifacts. Also, no ancestor in Africa has been found for *Australopithecus* (Coon, 1962, p. 217) or for the chimps (Lovgren, 2004). These ancestors are missing in Africa because they were living in Eurasia. Back

6. "...the fossil record shows that transitional forms of Homo [e.g., *Homo erectus*] were widespread in Africa, even after the time of emergence of modern humans." (<u>Plagnol, 2006</u>). <u>Back</u>

7. In Figure 19-2, the African-specific alleles would be outside the red and green circles but inside the blue circle. Back

8. In Figure 19-2, the lost alleles would be within the red and green circles but outside the blue circle. Back

9. "Occupations and diseases which are fatal to the Europeans are quite harmless to the Negro." (<u>Hunt, 1865</u>, p. 25). <u>Back</u>

10. At least 1800 genes have been under selection pressure in Africa, Europe, and East Asia for less than 50,000 years, which suggests extensive recent evolution of different races. (Wang, <u>E.T., 2006</u>). Although this may indicate environmental change, it may also be due to the introduction of new alleles due to more migrating into other territories. <u>Back</u>

11. <u>Coon (1962</u>) estimates 200,000 years, which would put today's Africans right at the transition between *Hs* and *Hss*. <u>Back</u>

12. (Howells, 1948, p. 271 & inside cover). The map gives the tribes and races at least back to

1492. <u>Back</u>

13. "... in the Upper Paleolithic [40,000 to 10,000 ya] North Africa was racially indistinguishable from Europe, ..." (<u>Howells, 1948</u>, p. 272). <u>Back</u>

14. Note in <u>Figure 10-8</u>, how the broadest-nosed Africans, the most primitive and simian Africans, are in the west and south of Africa, just where one would expect them to be if narrow-nosed Eurasians were entering Africa at the northeast Horn. <u>Back</u>

15. However, Gibraltar is a deep channel and even during the peak of the ice ages was not a land bridge. (Sykes, 2001, p. 278). During ice ages when the seas dropped, the Arabian Peninsula was only a short distance from Africa. Back

16. "The mtDNAs from Africa, Europe, and Asia were found to carry 34.4 ± 2.7 , 35.8 ± 2.1 , and 33.8 ± 2.0 differences from the Neandertal sequence, respectively. The modern human lineages displaying the fewest differences (29 substitutions) to the Neandertal mtDNA were found in Africa, but the closest lineages in Asia and Europe were almost as similar to the Neandertal (30 and 31 differences, respectively)." (Krings, 1999). The two widely disparate differences for Africa (34.4 and 29) suggest the presence of ancient populations in Africa that have not evolved as much away from Neanderthals (29 differences) along with more evolved populations (34.4 differences). Back

17. "Modern Europeans are apparently more closely related [mtDNA] to South American Indians than are western Africans to southern Africans." (<u>Haywood, 2000</u>, p. 44). Note, in <u>Figure 7-3</u>, that the Mbuti pygmies in the Congo are the most genetically distant from the Eurasians. <u>Back</u>

18. (Patterson, 2006; Arnold, 2006). Back

19. "This peculiarity is greatly admired by the men." (<u>Darwin, 1871</u>). Some men make passes at girls with fat asses. <u>Back</u>

20. Steatopygia can also be seen today to a diminished extent in some female Africans and even some female African-Americans. It is a way to store fat without insulating the body, much like a camel's hump. <u>Back</u>

21. Examination of fossils of extinct apes may detect some evidence of steatopygia, such as bones that supported or counterbalanced the weight. <u>Back</u>

22. Reported to really be a "Bushman woman." (Keane, *Ethnology*, 1896, p. 251). The face in Fig. 26.5 may not be accurately drawn as Hottentots are reported to have "a very broad flat nose, …, large mouth with thick pouting lips, pronounced prognathism (64 to 70) [i.e., the facial angle, see Figure 9-26], highly dolichocephalic head [long-headed, Figure 9-7], …" (Keane, *Ethnology*, 1896, p. 251). <u>Back</u>

23. Note the large genital flaps on the bonobo pictured in Figure 23-14. Perhaps identification of the genes responsible for those flaps in the Hottentots and the bonobos will be show whether they are a result of the interbreeding that occurred between the chimp and human lineages. Back

24. Hottentot skulls give a brain size of about 75 cubic in (1229 cc); the brain of the Hottentot

Venus was described as "smoother ... more ape-like." (Huxley, T.H., "On Some Fossil Remains of Man"). Although there is no data on Hottentot IQ, one would expect it to be at least as low as the Bushman IQ, which is only 54. <u>Back</u>

25. Not to be confused with the Pygmies, who live in forested areas of the Congo (<u>Howells</u>, <u>1959</u>, pp. 304-305); they are likely a branch of the Bushmen lineage that broke off during the trek south through Africa. The two populations are linked by blood group genes (DeAnza College, CA), nasal index (103.9 for Bushmen and 103.8 for Pygmies), and average height (5'1" for Bushmen and 4'8" for Pygmies). (DeAnza College, CA). <u>Back</u>

26. <u>Howells (1959</u>, p. 306) questions a genetic connection to Asians because the eye folds of Bushmen have a different structure than the epicanthic folds of Asians. (<u>Baker, 1974</u>, pp. 312, 415). On the other hand, "Bushmen teeth, although very small, resemble those of Mongoloids morphologically more than they do the teeth of Caucasoids, Negroids, or Australoids." (<u>Coon, 1962</u>, p. 364, 362). In the click language (! = click sound) of the Bushmen there are three kinds of mammals: (1) "!a" is an edible animal like a warthog, (2) "!oma" is an inedible animal like a black African or European, and (3) "zhu" is a person, such as themselves. Vietnamese in Botswana were immediately identified as "zhu" by Bushmen. ("<u>Human Diversity and Its History</u>," H.C Harpending and E. Eller for *Biodiversity*, ed. By M. Kato and N. Takahata, in press). <u>Back</u>

27. (<u>Miller, 1994c</u>), citing (<u>Cavalli-Sforza, 1994</u>). Also (<u>Cruciani, 2002</u>; <u>Altheide, 1997</u>; <u>Hammer, 1998</u>, 2001). In <u>Table 7-1</u>, the San (Bushmen) are almost as related to the people of the Near East as the East Africans, who are closest to the Near East. <u>Back</u>

28. The Negritos in the Philippines and other South Pacific islands are also neotenic, as are the pygmies of Australia (next chapter); however, they are not steatopygous, which suggests there was another tropically-adapted species of *Australopithecus* that lived in SE Asia, but not in India. <u>Back</u>

29. (Coon, 1962, p. 590). "... remnants of peoples exist up in East Africa who speak languages of the Bush-Hottentot family." (Howells, 1959, p. 308). "And at a few places in Kenya, skulls suggesting Bushman traits have come from graves or caves of general Neolithic date..." (id., p. 312). "[Findings suggest an] ancient genetic affinity between Khoisan and Ethiopians." (Cruciani, 2002). In NE Africa, the Bushmen and Hottentots may have once been a single population. Back

30. Bushmen lack the sickle cell allele, perhaps due to an early migration into Africa prior to that mutation, with little subsequent gene flow into the Bushman population. (<u>Howells, 1959</u>, p. 266). <u>Back</u>

31. The small size and ancient age of the Bushmen, the Negritos, and the Australian pygmies suggests that East Asian neoteny occurred in an *Australopithecus*; Australopithecines were small and their small stature was simply retained in those environments where it was an advantage. A short lifespan has also been given to explain their size. ("<u>Why Are Pygmies Short?</u>" *PhysOrg.com*, Dec. 21, 2007; Migliano, 2007). Although the neotenic traits were primarily cold-adaptations, they must include at least one trait that was adaptive in the tropics, so that the neotenic Asians were able to survive there. <u>Back</u>

32. On the other hand, a more intelligent brain of the same size uses less energy than a less intelligent brain, presumably because it is more efficient. (<u>Haier, 1988</u>, 1992, & 1993). <u>Back</u>

33. <u>Howells (1959</u>, p. 311) defines "East Africa" as "modern Sudan, plus all the eastern uplands: the Horn (Ethiopia and the Somalilands), British East Africa (Uganda, Kenya, and Tanganyika), and the Ruanda Urundi Protectorate." <u>Back</u>

34. (<u>Howells, 1959</u>, p. 311). Carriers of the U6 mtDNA haplogroup went from the Middle East to North Africa about 39,000 to 52,000 ya. (<u>Maca-Meyer, 2003</u>). <u>Back</u>

35. "Most Ethiopians and Somalis, for example, along with almost all of the inhabitants of India have mainly or partially Caucasoid skulls, while the Khoisan [Bushmen] people indigenous to southwestern Africa have partially Mongoloid skulls (Capoid)." (*Wikipedia*, "Craniofacial Anthropometry"). Back

36. Two out of 85 randomly recruited men named "Jefferson" in England share exactly the same rare class of Y chromosome ("K2") as President Thomas Jefferson. It is found at its highest frequency in the Middle East and Eastern Africa, including Oman, Somalia, and Iraq. (King, 2007). This is consistent with the migration of Caucasians into East Africa. Back

37. The Somali and the Ethiopians of the Horn of Africa (NE Africa) are the least simian of the Africans because they are hybrids formed from a much more recent entry of European *Hss* into Africa. In <u>Table 7-1</u>, the East Africans are closer to non-Africans than are the West Africans. <u>Back</u>

38. (Bosveld, J., "<u>The Extinct Human That Was Smarter Than Us</u>," *Discover*, Mar., 2008, p. 72). <u>Back</u>

39. A similar large skull, "Fish Hoek Man," also found in South Africa, was dated at about 12,000 ya. <u>Back</u>

40. <u>Baker (1974</u>, p. 321) regards the skull as "pre-Bushman." <u>Back</u>

41. Many large-brained Caucasoid skulls dated about 11-12 kya have also been found in north Africa. "The mean cranial capacity of the males is 1,614 cc. for a pooled series of thirty-nine male skulls (Briggs and Ferenbach) and 1,519 cc for seventeen female skulls." (Coon, 1962, p. 607). Back

42. Cape Town and Pretoria are warmer. The Atlantic and Indian Oceans moderate the temperature of South Africa but, except for mountaintops, it is still colder than elsewhere in Africa. <u>Back</u>

43. "Cranial capacity [in sub-Saharan Africa], depending on the mode of its calculation, has decreased by 95-165 cm³ among males and by 74 – 106 cm³ among females between the Late Stone Age (30 –2 ka BP) and modern times (last 200 years). Values of the cranial index did not show any trend over time and their averages remained in the dolichocephalic [long headed] category. The decrease in cranial capacity in Subsaharan [sic] Africa is similar to that previously found in Europe, West Asia, and North Africa, but, unlike the latter, it is not accompanied by brachycephalization [broad headedness]." (Henneberg, 2005). Back

44. "The Grimaldi child was no more Negroid than the Palestinians of Skhul and many living Europeans of the Mediterranean region." (Coon, 1962, p. 584). Back

45. Photos from (Elliot, G.F.S., Prehistoric Man and His Story: A Sketch of the History of

Mankind, 1925). Grimaldi is said to resemble the Hottentots and Bushmen. Back

Chapter 27 - The Origin of Asian Aborigines

"But in the South Seas, where there are only separated islands, an earlier people may be preserved against being entirely swamped by a later one, simply because the later may not reach all of their island refuges."

(<u>Howells, 1948</u>, p. 281)

Tropical aboriginal populations are the last remnants of tropically-adapted erectus populations, pushed south by more advanced *Hs* and *Hss* northern populations. They survived by seeking refuge on isolated and less desirable territories, such as islands, mountains, and dense forests. As they retreated and diminished in numbers, they interbred with those northerners, picking up *Hs* and *Hss* alleles and traits. The resulting *erectus* hybrids had traits of both parent populations, but only those individuals who had traits best adapted for the tropics survived. Today, *erectus* hybrids and *Hs* can be found in the aborigines of India, the Andaman Islands, some South Pacific Islands, the Philippines, New Guinea, New Zealand, Australia, and elsewhere in Asia.

Australian aborigines form three distinct populations, one living in the rainforests of North Queensland ("pygmies"), one living mostly in the southern desert areas ("desert aborigines," of macrohaplogroup "N") and the other living mostly in the northern coastal areas ("coastal aborigines" of macrohaplogroup "M"); see Figure 20-3. ¹

As noted in Chapter 5, the last two ice ages occurred between about 73,000 and 55,000 ya (the "first" ice age), and between about 30,000 and 12,000 ya (the "second" ice During those age). two ice ages, vast quantities of sea water were locked up in ice (i.e., water evaporated and fell as snow, but did not melt), which lowered sea levels enough to make crossing from SE Asia into Australia not only feasible but necessary to escape



Figure 27-1

more advanced populations moving south away from the increasing cold. Figure 27-1 shows sea levels during the second ice age (grey areas were dry land).

Toba, 73,000 ya, wiped out a large portion of the people living in SE Asia, making it easier for northern Asians to move south. Who got to Australia first depended upon the severity of conditions and how advanced the SE Asian populations were at that time. The first ice age was not as severe as the second, so the sea levels were higher, but the "N" macrohaplogroup populations, who were from India and northern Asia, ² were more advanced

at that time than the "M" macrohaplogroup populations and, using small rafts to island hop, got to Australia at least 60,000 ya. (Figure 20-3, shows how close Indians (in India), SE Asians, and Australian aborigines are in the N macrohaplogroup.) Later, during the second, more severe ice age, when the seas were still lower (about 25,000 ya), a more primitive, but numerically greater, "M" population in New Guinea was able to cross over to Australia, pushing the earlier arrivals into southern Australia and the desert. No doubt there was some conflict between the earlier and later migrants. Although there was probably some interbreeding between the coastal and desert aborigines, the coastal aborigines today are still more primitive than the desert aborigines.

Figure 27-2 shows skin color for aborigines in Australia and New Guinea, which generally coincides with the M and N macrohaplogroups. (Brace, 2000). The equator (orange line) is just north of New Guinea, so skin colors are reversed in the southern hemisphere, with the darker skin color in the north, closer to the equator, and the lighter colors in the colder south. Because the aborigines in Australia and on South Pacific islands were isolated and did not receive much inflow of more evolved alleles from northern populations, they are among the most primitive populations. When modern Europeans first arrived in the 1600s, the Australian aborigines



Figure 27-2

"had no bow and arrow, to say nothing of such arts as pottery or agriculture," and they cooked by "tossing their meat into the fire." (<u>Howells, 1948</u>, p. 285). The Australian aborigines were the only people who did not make the connection between having sex and giving birth. $\frac{4}{}$

Pygmies

For largely political reasons, the existence of the Australian pygmies is not well known. (Windschuttle, 2002). These pygmies lived in the rainforest until missionaries drew them out and mixed them with other aborigines; now they are almost extinct. The adult males were between $4\frac{1}{2}$ and 5 ft. tall and the women $\frac{1}{2}$ ft to a foot shorter. (Fig. 27-3). ⁵

"Their small size, tightly curled hair, child-like faces, peculiarities in their tooth dimensions and their blood groupings showed that they were different from other Australian Aborigines and had a strong strain of them." (Norman Negrito Tindale. Australian in anthropologist). Their tropical adaptations and small size suggest a lineage from a tropically-adapted Asian Australopithecus, and their "child-like faces" suggest interbreeding with a neotenic Asian Australopithecus, as described in the previous chapter. The presence of people of small stature in Australia, Africa (Bushmen), and in Indonesia (the Hobbits), is consistent with Bergmann's rule, that northern populations are larger.

There are no fossils of these pygmies, so anthropologists assume that they did not arrive in 3 Australia prior to about 40,000 ya. However, their Australopithecine traits suggest that they were in



Figure 27-3

Australia long before that, because Australopithecines had disappeared from mainland Asia

long before then. There were many earlier ice ages that would have provided access to Australia from the mainland. (Figure 5-1).

Desert Aborigines

The tree in Figure 24-5 shows two distinct types of tropical aborigines, the southern desert aborigines (also living on the west coast of Australia, and the open grasslands and parklands of the south and west of the continent.), descended from a generalized archaic, and the coastal aborigines, descended from a tropical *Australopithecus*. The desert aborigines look like primitive Caucasians, with light skin and wavy or straight hair that can be blond. (Fig. 27-4; also Figure 22-5). ⁷ No, the children's hair was not dyed blond. Amazing as it seems, some desert aborigines really do have straight or wavy, naturally blond hair. (Note 17 in Chapter 10). The child on the right has some simian prognathism and the second child from the left has a broad nose with upturned nostrils. Note that the adult in the back, probably a mother of at least

some of the children, has darker skin and hair; Caucasian children also have lighter skin and hair than adults. ⁸

Coastal Aborigines

Unlike the desert Australian aborigines, the coastal aborigines are more anatomically specialized for the tropics and look Negroid, with dark skin and wooly black hair. In those respects, they are similar to the Negritos of the South Pacific, the Africans, Andaman Islanders. and Melanesians (which includes people on New Guinea). They are the descendants of a



Figure 27-4

tropically-adapted *Australopithecus* and a tropically-adapted *erectus*⁹ and have retained many of those traits.

At least 2 mya *erectus* was living in Java and New Guinea (Roberts-Thomson, 1996) and there are Australian and New Guinea natives living today who have more erectine traits than even Africans. The two ice ages were not as severe in Asia as in Europe and the migrations from the north were therefore also less severe, enabling more primitive people to survive on South Pacific islands. The lower sea levels during the first ice age would have enabled *erectus* to reach New Guinea and other islands, but not Australia. The higher sea levels in between the two ice ages would isolate them, but the still lower sea levels during the second ice age would permit them to walk from New Guinea to Australia (Fig. 27-1). They, in turn, pushed the desert Aborigines away from the coast and into the central desert, the same fate that befell the Bushmen in Africa.

The northern coastal aborigines are "tall, dark, less hairy, and very lanky." (<u>Howells, 1959</u>, p. 326). They have some erectine features, such as marked protruding jaws and brow ridges,

small cranial capacities, low IQ, and curly hair. ¹⁰ Figure 27-5 black, compares the skulls of a recent (after 1800), but more primitive, northern coastal Australian aborigine (Pintubi-1, from the Great Sandy Desert of Western Australia) to a modern Caucasian. 11 The primitiveness of the robust aborigine skull is unmistakable and it would not be unreasonable to classify it as Homo *erectus*. ¹² Note the brow ridges, sloping forehead, protruding jaw, and large eve sockets, though those traits are not as pronounced as in some older erectus skulls; only its chin is modern. 13



Figure 27-5

Figure 27-6 is a photograph ¹⁴ of a contemporary coastal Australian aborigine. The aborigine in Figure 27-6 has many primitive features, such as considerable simian prognathism (p. 215) and a small broad nose. The South Pacific aborigines, e.g., the Negritos of



Figure 27-6

One can easily understand how the smaller, primitive people in the tropics would have been displaced and defeated by the larger and more advanced people who migrated there from the cooler climates.

As mentioned previously, although the Negritos look like little Africans, they are genetically the most unrelated people to Africans on the planet. ¹⁸ The large genetic distance between Africans and Negritos suggests that their LCA was likely a tropically-

Malaysia (the "Semang") and the Philippines (the "Aeta"), and the highlanders of New Guinea, also have some of these traits, but are even more erectine, having a smaller cranial capacity, ¹⁵ thick, heavy bones, ¹⁶ large teeth, a smaller chin, a broad nose, very

black skin, and frequently short curly or woolly black hair. Figure 27-7 shows a European standing between two Negritos. <u>17</u>



Figure 27-7

adapted Australopithecus that lived more than 2 mya and possessed the tropical traits that the aborigines and the Africans have in common.

Modern man, Hss, evolved from a primitive mammal because, at each stage in his journey, the next step paid off with greater reproductive success. Now, in the final section, we

see whether man will continue down the same path, becoming ever more "human," or whether reproductive success will take us back to where we came from.

Section V

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FOOTNOTES

1. "Dr. Birdsell [1993], who knows these people thoroughly, believes they are actually composed of two strains, equally primitive." (<u>Howells, 1959</u>, p. 326). <u>Back</u>

2. (<u>Howells, 1948</u>, p. 285). Mungo Man (<u>Figure 20-4</u>) was a member of the "N" population. (<u>Baker, 1974</u>, p. 279). If the Neanderthals were also in "N," that would support Cro-Magnon interbreeding with Neanderthals. <u>Back</u>

3. One can find in the literature a number of different dates for the first occupation of Australia by the aborigines, but it would probably have occurred when sea levels were lowest, between 65,000 and 55,000 ya, with the 65,000 date being the most likely. There is mtDNA evidence for 60,000 to 119,000 ya. (Ingman, 2003). Back

4. (Kemp, 2006, p. 332). When Europeans first arrived on Tasmania, 125 miles south of Australia, which was often cool and damp, the natives did not know how to start a fire. (Arsuaga, 2001, p. 270). Back

5. (Windshuttle, K. & Gillin, T., "<u>The extinction of the Australian pygmies</u>," *Quadrant*, June, 2002). Anthropologist Joseph Birdsell, on the left, is 6'1" and the 24 year old on the right is 4'6"; the picture was taken in North Queensland, Australia, in 1938. <u>Back</u>

6. The volume of a sphere, V, is $(4\pi r^3)/3$ and its surface area, S, is $4\pi r^2$, so as the radius, r, doubles, its surface-area/volume ratio, S/V, halves and, since heat loss is proportional to surface area, bigger is warmer. <u>Back</u>

7. Picture from: http://www.calarts.edu/~shockley/talgai.html (no longer available)> "The other, concentrated in the south, is fleshier and stockier, very hairy, and not so very dark; and Birdsell [1993] believes it is an antique White strain, related to the Ainu, and derived from North China or Manchuria." (Howells, 1959, p. 326). Table 9-3, shows that the sacral indices of the aborigines and the Europeans are similar. <u>Back</u>

8. <u>Coon (1962</u>, p. 426) refers to "the juvenile and female blondism of the aborigines living in the central desert;" "And yet the possibility of the Australians being an extremely archaic brand of 'White' has been suggested by my colleagues often enough and with justice." (Howells, 1959, p. 335). This is also true of New Zealand aborigines. "If anything, the 'White' appearance is strongest in the Maoris of New Zealand, who are well bearded and look like nothing so much as a brunet European." (id., p.321). <u>Back</u>

9. Both tropical India and Asia were occupied by erectines "with wooly hair, black skin, and Negro features." (<u>Howells, 1948</u>, pp. 252-253). See cover. <u>Back</u>

10. The anterior nasal spine (Figures 9-20 and 9-22) is present in Eurasians but is absent is

Africans and is sometimes absent in coastal Australian aborigines; it is also absent in *Australopithecus africanus* and the orangutan. (<u>Baker, 1974</u>, pp. 283-284). <u>Back</u>

11. Picture from ("<u>The Canovanogram Research Paleoanthropology Report</u>," July, 2002). <u>Back</u>

12. Some Australian Aborigines have an occipital bun and some are beetle-browed, suggesting a linkage to the *georgicus*-Neanderthal lineage. <u>Back</u>

13. A good guess would be that the modern population that <u>Mungo Man</u> was part of got to Australia first, then interbred with later, more primitive arrivals. <u>Back</u>

14. Photograph by Sheila Smart, Australian photographer. Back

15. "One still finds recent aboriginal female skulls with cranial capacities of 930 cc., 946 cc., and 956 cc whose owners apparently met the demands of their culture well enough to live to maturity." (Coon, 1962, p. 410). Back

16. "The woolly-haired races are subdivided into those with tuft-like hair (Hottentots, Papuans), and those with fleecy hair (African negro, Kafir [tall people from South Africa])." (<u>1911 *Catholic Encyclopedia*</u>). The Papuans are people from New Guinea. That both these primitive, but widely separated people, Papuans and Hottentots, have "tuft-like hair" suggests an ancient LCA. <u>Back</u>

17. The picture is from (Lord Moyne, *Walkabout: A Journey in Lands between the Pacific and Indian Ocean*, London, 1938). Back

18. (Figure 24-7, and Table 7-1). Africans and Australian aborigines are "about as far apart as two human populations can be" in blood chemistry ((Shreeve, 1995, p. 60) as well as in DNA itself. This is strong evidence that the LCA of Africans and Australian aborigines lived a long time ago, and supports the OoE theory that the LCA was an *Australopithecus*. (Chapter 24 & Chapter 26). Back

SECTION V Policy

Readers who think this book is already shockingly politically incorrect should buckle up their seat belts as it is about to become even more so. From the information and conclusions presented so far in this book, the reader may make his own inferences as to the direction in which *Homo sapiens sapiens*, as a successful species, should proceed in order to continue to be a successful species, and perhaps become an even more successful species. What follows is the author's opinions on this subject.

Since the Asians have wisely limited immigration into their homelands by other races and their interbreeding with them, while Caucasians have foolishly done the opposite, Asians do not face the problems that are becoming more and more apparent in Caucasian homelands. For that reason, this discussion of policy is primarily directed at Caucasians in the West.

One of the conclusions put forth so far in this book is expressed in its title, that primitive man still lives, not just on some isolated islands in the Pacific, but right in your town or even your neighborhood. Africans and part-Africans live throughout the Caucasian homelands. They are not just like everyone else. They have ape-like features and behavior, not by accident, but because, although everyone evolved from an ape ancestor, they did not evolve quite so far. Unlike the Eurasians, they still have strong erectine physical and behavioral traits. And, as their alleles spread by miscegenation, the civilized Western world will become more erectine and less *sapiens*.

Given the preceding sections of this book, what policies should be adopted? There are three possibilities: (1) Adopt policies that encourage the spread of *Homo erectus* alleles, (2) Adopt policies that limit the spread of *Homo erectus* alleles, or (3) Adopt no policies and let nature take its course. Because the *Homo erectus* that walks amongst us is genetically more "r" orientated than Caucasians (<u>Chapter 11</u>), and Caucasians will not let them starve, adopting no policy is akin to encouraging the spread of their alleles with the likely outcome of a behavior and an average IQ too low to support an advanced civilization. Adopting policies that encourage the spread of their alleles will, of course, bring about that result even sooner and amounts to not only racial suicide, but also the end of modern civilization, at least in the West.

Chapter 28

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Chapter 28 - Homo africanus

"...all men belong to the same species." UNESCO Statement, July 18, 1950

Taxonomy is an obscure word, but it has a simple meaning – the classification of living things. Scientists classify plants and animals using the Linnaeus classification system, where each species is identified by a Latin genus and species name, such as *Homo sapiens*. Occasionally, a Latin name for the sub-species will also be added, such as *Homo sapiens* sapiens. Here is the classification for man: $\frac{1}{2}$

Kingdom: <u>Animals</u> - living things other than bacteria and plants Phylum: <u>Chordates</u> - protected spinal chords

Subphylum: <u>Vertebrates</u> – boney spines and skulls

Class: Mammals – warm-blooded with hair and a four-chambered

heart; ² females nourish their young from mammary glands

Order: <u>**Primates**</u> – mammals with an opposable thumb, e.g., man, apes, monkeys, lemurs, tarsiers

Family: <u>Hominids</u> – bipedal primates, e.g., extinct bipedal apes and man, and living man

Genus: <u>Homo</u> – tool-making hominids, e.g., habilis, ergaster, erectus, archaic man and living man Species: <u>sapiens</u> – extinct nearly modern man, Neanderthals, and living man

Sub-species: <u>sapiens</u> – modern man

There are no labels on plants and animals, however that tell us what their classification is. Nature does not classify her critters; only man classifies things that are, or were, living. The decision as to how something should be classified is made by taxonomists according to how different a population is from related populations, which is bound to be somewhat arbitrary.

As evolution does its magic, old species, orders, and even phyla die out and new ones arise. There is, however, no sharp dividing line between a preceding species and the species it evolves into. Even if a species splits into two populations that become so different as to be classified as separate species, it is usually not clear into which of the three species individuals who lived near the time of the split belonged. When a species evolves, it gradually changes, though a few of the changes may be "sudden" in geological time; i.e., they may occur in one individual, then spread throughout the population in tens of thousands of years instead of millions.

Changes from one generation to the next are almost always so small that no individual can justifiably be placed in a different species from its parents. Even if we knew the genome of each and every individual in our lineage, it would be difficult to point to particular mothers and say, "She and her child are different species." Paleoanthropologists spend a significant amount of their time arguing over whether a fossil is a member of an existing species or is a new species. Often the line that divides species is drawn where in-between fossils have not yet been found. But even if the bones of every individual from the first to the last were available and in the correct sequence, placing lines that divided the sequence into species would still be arbitrary.

Many people believe that if two animals cannot interbreed they are different species and, conversely, if they can interbreed they are the same species. If two animals cannot interbreed they are always classified as different species. ³ But if two animals can interbreed, they may or may not be classified as different species. There are many examples where taxonomists have classified two animals as different species even though they can and do interbreed. Even most dictionaries will not define "species" as populations that are incapable of interbreeding. Indeed, one dictionary ⁴ specifically states, "… related organisms or populations potentially capable of interbreeding … " Many "species" can interbreed, but typically do not. For example, many species of birds, such as the pintail (*Anas acuta*) and the mallard (*Anas platyrhynchos*), can interbreed. The wolf (*Canis lupus*) and the dog (*Canis lupus familiaris*), the coyote (*Canis latrans*), and the common jackal (*Canis aureus*) have different species names (*lupus, latrans*, and *aureus*), yet they can all interbreed and produce fertile progeny. Even the two species of orangutan (*Pongo abellii* from Sumatra and *Pongo pygmaeus* from Borneo) can interbreed (Angier, 1995), despite having different chromosome numbers, ⁵ and so can the two species of chimpanzee, the common chimpanzee (*Pan troglodytes*) and the bonobo chimpanzee (*Pan paniscus*). ⁶ So the fact that all human races can interbreed to produce fertile progeny does not mean that they should be classified as a single species. ⁷

The determination of when a population has become sufficiently different from another population to be classified as a "new" species or sub-species is especially important at the interface between archaic man, *Homo sapiens*, and his immediate predecessor, *Homo erectus*, and between archaic man and modern man (*Homo sapiens sapiens*). None of the populations thus classified suddenly leaped into a different classification. *Erectus*, for example, was around for about two million years and gradually changed from a very primitive early *erectus* (*ergaster*) to a less primitive late *erectus*, after which taxonomists decided to call him archaic "*sapiens*" instead of "*erectus*." So, although early *erectus* might not have been able to produce hybrids with *Hss*, certainly late *erectus* could have. Some scientists estimate "that periods of around 2 million years are required to produce sufficient genetic distance to represent speciation." (Curnoe, 2003).

Again, man alone decides whether a population is or is not distinctive enough to be classified as a different species. ⁸ However, we can ask taxonomists to at least be consistent in making these decisions. That is, whatever their criteria are for labeling one population of living things as a "species" they should apply that same criteria in deciding whether another population of living things is or is not a "species." This is clearly not the case now, ⁹ as there are many "species" of birds that can interbreed but differ so slightly in coloration that only an expert can tell them apart, while the differences between the races are so great that even a 3 month old baby can tell the difference, ¹⁰ and adults can correctly determine the race of a person 85% of the time just from his silhouette. (Davidenko, 2007). Taxonomists should not apply one criterion of speciation to animals other than man, and a different criterion to man himself. ¹¹

Ample evidence is provided in this book and its citations to support the conclusion that race is real, not a delusion concocted by evil racists. But that same evidence raises another question: Is the evidence adequate to classify Africans not just as a different race, but as a different species, *Homo africanus*? ¹²

Another way to think about the re-classification of Africans (and primitive Asian aborigines ¹³) is to imagine that they were extinct and the only evidence we had of them was their bones and their DNA. Then, comparing the differences between them and modern living Eurasians, would their classification as a separate species be justified?

To the egalitarians this question itself will be outrageously offensive and they will selfrighteously condemn anyone even posing the question. But, long before egalitarianism came to dominate anthropology, the question had already been considered by anthropologists. Although the consensus was that Africans were <u>not</u> a separate species, a few believed they were. ¹⁴ Until recently, species were classified based on their morphology, i.e., their form and appearance. This was not always accurate since populations that are not closely related can undergo parallel evolution, that is, they can be unrelated on even the phylum level, yet still look very similar as, for example, a bird, a bat, and an insect, or a shark and a dolphin. In classifying humans using morphology, were the taxonomists objective and unbiased and did they apply the same standards to humans that they applied when classifying other species? Well, not exactly.

"The differences in morphology (cranial and facial features) between human races are typically around ten times the corresponding differences between the sexes within a given race, larger even than the comparable differences taxonomists use to distinguish the two chimpanzee species from each other. To the best of our knowledge, human racial differences exceed those for any other non-domesticated species. One must look to the breeds of dogs to find a comparable degree of within-species differences in morphology."¹⁵

We no longer need to rely on morphology, however, to distinguish between different species. DNA analyses can be used to determine the genetic difference between populations, a better way to classify species. ¹⁶ While this has not yet been done, a less subjective classification system might say that a genetic distance of less than "x" is a sub-species (race, variety, or breed), of less than "y" but more than "x" is a species, of less than "z" but more than "y" is a genus, and so on.

Applying a bit of egalitarianism, let us begin with the proposition that the same standard of classification should be applied to the classification of all living things. That is, a population of birds, for example, should not be divided into a great many species because of small genetic differences, while populations within Homo, the genus of humans, are classified as a single species, even though the genetic differences between them are greater than the genetic differences between the species of birds.

Applying that bit of inter-species egalitarianism to humans and gorillas, and using genetic distance as the standard to classify populations, ¹⁷ since the genetic distance between the two species of gorilla, *Gorilla gorilla* and *G. beringei*, 0.04%, ¹⁸ is nearly six times less than the genetic distance between (sub-Saharan) Africans (Bantu) and Eurasians (English), 0.23% (<u>Table 7-1</u>), either Africans and Eurasians should be classified as two different species or gorillas should be classified as a single species. The genetic distance between the common chimp and the bonobo is 0.103% (<u>Curnoe, 2003</u>, Table 2), less than half the English-Bantu genetic distance of 0.23%, and therefore either (at least some) sub-Saharan blacks and Eurasians should be classified as different species or the common chimp and the bonobo (and the two species of orangutan) should be classified as the same species. ¹⁹ Although wolves (*Canis lupus*) and dogs (*Canis lupus familiaris*) are a different species (*lupus*) than coyotes than there is between the various ethnic groups of human beings..." (Coppinger, 1995). It seems that

taxonomists have been bending their objectivity a bit. Now let's see how taxonomists have classified Neanderthals. Until the 1960s,
Neanderthals were classified as *Homo neanderthalensis*, a different species from us, *Homo sapiens*. But the genetic distance between *Homo sapiens* and *Homo neanderthalensis* (<0.08%)²⁰ is less than the genetic distance between the two chimpanzee species (0.103).²¹
Today, Neanderthals are classified as *Homo sapiens neanderthalensis*, ²² a sub-species of our species, while we are another sub-species, *Homo sapiens sapiens*. The genetic distance between (sub-Saharan) Africans and Eurasians (0.2%) is more than twice the genetic distance between living humans and Neanderthals (0.08%)²³ so, at the very least, Africans should be classified as a sub-species, *Homo sapiens africanus* and Eurasians as another sub-species, *Homo sapiens eurasianensis*.

Finally, the genetic distance between *Homo sapiens* and *Homo erectus* is estimated as 0.170²⁴ (mean given as 0.19), ²⁵ about the same as the genetic distance between the Bantu Africans and the Eskimos, but the genetic distance between living Africans and Eurasians is 0.23 (Table 7-1, p. 45). Thus, *Homo sapiens* is more closely related to *Homo erectus* than Eurasians are to sub-Saharan Africans. Either *erectus* should be reclassified as *Homo sapiens erectus* or sub-Saharan Africans should be reclassified as *Homo africanus*. ²⁶

Chapter 29

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FOOTNOTES

1. Some recent reshuffling has limited "Hominids" to gorillas, chimps, and humans, added a sub-family, "Homininae" or hominins, for humans plus any (extinct) creature closer to us than a chimp, and a super-family, "Hominoidea," or hominoids, the hominids plus gibbons and orangutans. The old classification may prove more accurate, however. <u>Back</u>

2. Birds are also warm-blooded and so are some fishes. The bluefin tuna "is one of the few warm-blooded fishes." (Ellis, R., "<u>The Bluefin in Peril</u>," *Scientific American*, Mar., 2008, p. 72); birds also have four-chambered hearts. <u>Back</u>

3. Ernst Mayr, in 1942, defined "species" as a reproductively isolated groups of organisms, where the isolation can be purely geographical, i.e., populations that *do not* interbreed are different species, even if they *can* interbreed. <u>Back</u>

4. (Webster's Ninth New Collegiate Dictionary). Back

5. The gibbon and the siamang can also interbreed to produce a hybrid, although they differ more in chromosome numbers than do humans and chimps. (Myers, 1979). Also, (Chandley, 1975). And some species that are not even in the same genus can still interbreed. (McConchie, 1994). On the other hand, some populations that include individuals with different chromosome numbers, but can still interbreed to produce fertile offspring, have been classified as the same species, e.g., *Lemur fulvus*. (Tattersall, 1993). Back

6. Email from Professor William H. Calvin. The common chimp and the bonobo were separated by the Congo River 2.5 mya. (<u>Arsuaga, 2001</u>, p. 8). <u>Back</u>

7. An enlightening definition of "species" is: Two competing populations are different species if a genetic improvement in one of the populations would threaten the survival of the other. Suggested by <u>Schwartz (1999</u>, p. 254). <u>Back</u>

8. Darwin himself dismissed "species" as a term that is "arbitrarily given, for the sake of convenience." Back

9. Humans are at the top of the list in genetic diversity, which supports the conclusion that the same classification standards are not applied to humans that are applied to other species. "Racial morphological distances within our species are, on the average, about equal to the

distances among species within other genera of mammals. [Except for races created by human selection, e.g., breeds of dogs], I am not aware of any other mammalian species where the constituent races are as strongly marked as they are in ours." (<u>Sarich, 2004</u>, p. 170). <u>Back</u>

10. (<u>Bar-Heim, 2006; Kelly, 2005</u>). And people become more racially conscious as they grow older. (<u>MacDonald, 2006</u>). <u>Back</u>

11. The egalitarians demand that all living humans must be classified as the same species, but paleoanthropologists who discover a new fossil hominoid want it classified as a different species to enhance the importance of their discovery. (<u>Curnoe, 2003</u>). <u>Back</u>

12. The author presents this idea with some trepidation because it was not previously well-received by the Church; Bruno (1591) was burned at the stake and Vanini (1619) had his tongue cut out and was strangled. <u>Back</u>

13. And possibly also the Bushmen. (<u>Baker, 1974</u>, pp. 323-324). <u>Back</u>

14. E.g., American physician and natural scientist Samuel George Morton, Dr. Samuel A. Cartwright, German medical geneticist Fritz Lenz, British geneticist R. Ruggles Gates, and Louis Agassiz, the founder of the American Association for the Advancement of Science. Also, "The typical negroes of adult age, when tried by this rule, are proved to belong to a different species from the man of Europe or Asia, because the head and face are anatomically constructed more after the fashion of the simiadiae [apes] and the brute creation than the Caucasian and Mongolian species of mankind, their mouth and jaws projecting beyond the forehead containing the anterior lobes of the brain." (Cartwright, 1857, p. 45). "[T]here is as good reason for classifying the Negro as a distinct species from Europeans as there is for making an ass a distinct species from the zebra; ... there is a far greater difference between the Negro and the European than between the gorilla and chimpanzee." (Hunt, 1865, p. 23). Back

15. (<u>Sarich, 2004</u>, p. 9). Humans are much more genetically diverse than dogs; the observed heterozygosity for humans is 0.7, but it is only 0.4 for dogs. (John Goodwin, "<u>The Race FAQ</u>"). <u>Back</u>

16. (<u>Curnoe, 2003</u>). That is, individuals in the same lineage, or branches of the same lineage ("phylogeny") would be divided into species, genus, etc. according to a uniform standard of genetic distance. " ... a percentage threshold of common DNA can be stipulated for speciation." (Ross, K.L.,"<u>Human Evolution</u>," 2006). <u>Back</u>

17. As discussed in the introduction to Section IV, interbreeding between lineages can reduce genetic distance so, if genetic distance is used to define species, genus, etc., it will not show actual descent unless genetic similarities due to interbreeding can be subtracted from genetic distance. <u>Back</u>

18. (Guillen, 2005; Jensen-Seaman, 2000). Back

19. (<u>Curnoe, 2003</u>). These numbers will be different when insertions/deletions are considered. (<u>Anzai, 2003</u>). <u>Back</u>

20. (<u>Caramelli, 2003</u>, Fig. 2; <u>Gutiérrez, 2002</u>, Table 3; <u>Curnoe, 2003</u>). Moreover, this genetic distance may actually be less because ancient Neanderthal DNA may be damaged. (Id.). "... the Neanderthal and human genomes are at least 99.5% identical ..." (<u>Noonan, 2006</u>). <u>Back</u>

21. The mtDNA sequence differences between modern humans and the Neanderthal is about half of that between modern humans and modern chimpanzees. (<u>Cooper, 1997</u>). <u>Back</u>

22. Though some favor the older classification. (Harvati, 2004). Back

23. "Thus, the largest difference observed between any two human sequences was two substitutions larger than the smallest difference between a human and the Neandertal." (Krings, 1997). Back

24. (Curnoe, 2003, Table 3). Back

25. (id, p. 214). <u>Back</u>

26. Although DNA from *Australopithecus* is not available, the differences between at least some of the many species of *Australopithecus* may also be less than the differences between the Africans and Eurasians. <u>Back</u>

Chapter 29 - Miscegenation

"And every race must fall which carelessly suffers its blood to become mixed."

Benjamin Disraeli

Miscegenation ("mix race") is the interbreeding of the races, especially blacks and whites. Miscegenation was illegal in many states until 1967 when the U.S. Supreme Court overruled a Virginia court and declared those laws unconstitutional ¹ under the <u>unconstitutional</u> Fourteenth Amendment. Not that long ago miscegenation was viewed as akin to bestiality (Chap. 28), but today it is promoted by the video and print media, even in advertising, and columnists despair that there is not enough of it. ²

Evolution "automatically" works against miscegenation. Every population has variation. Over time, the individuals in a population who have traits most advantageous for particular environments concentrate in those environments and become sub-populations. If some of the individuals in one of those sub-populations develop traits that prevent them from interbreeding with individuals in the rest of the population, they will have an advantage over other individuals in their sub-population because they will not waste resources producing progeny who lack the advantageous traits for the sub-population's environment. For that reason, sub-populations evolve traits that discourage or prevent interbreeding with other sub-populations, and the sub-populations eventually become different species. $\frac{3}{2}$

To a physicist, miscegenation brings to mind the Second Law of Thermodynamics, which says that in a closed system, order goes to disorder (i.e., entropy increases). Without getting technical, this means that if you have a gallon each of white, black, and yellow paint, "paint" being a metaphor for a collection of racial traits, and mix them together, it would take many times the age of the universe before the pigment particles in the mixture again separated into white, black, and yellow paints. The uniqueness of those colors would be forever lost. Life, like other acts of creation, is a local lowering of entropy; miscegenation, like death, destruction, and chaos, increases entropy.

When miscegenation occurs, the alleles that make the interbreeding races unique do not necessarily disappear, $\frac{4}{5}$ but, like the pigment particles in the paint, they can no longer be separated again into the unique collections that constituted the original races. The races, as distinct forms of life, are destroyed forever. As argued earlier in this book, it took at least two million years to create and select the alleles that make us different, but it takes only an instant of miscegenation to scramble them up again. The selection of some of those alleles required the suffering and death of hundreds of thousands of people who did not have them, so the creation of racial differences was not without great cost. To destroy this monumental natural creation – us, so thoughtlessly and permanently, is akin to desecrating graves, dynamiting ancient statues, bombing cathedrals, and burning the library at Alexandria. What is the most valuable possession populations have that they can pass on to the next generation? It is not wealth or even knowledge. It is their genome, their ability to reproduce themselves as the unique people that they are. To squander that by miscegenation is the ultimate betrayal of one's heritage. ⁵

To a biologist, the loss of distinct races of humans might bring to mind the relatively recent extinctions of species such as the dodo bird, the Carolina parakeet, the passenger pigeon, and many of the birds of Hawaii, as well as various frogs, mammals, and even the 65 mya extinction of the dinosaurs. Nothing saddens a lover of nature so much as seeing a unique form of life become extinct, and nothing is as gladdening as finding that a species once thought to be extinct (e.g., the ivory billed woodpecker) still lives. (Fitzpatrick, 2005).

Most scientists value diversity as an end in itself, for how dull life would be if they could

study only one kind of star, rock, bacteria, cloud, and so on. No dog lover would want all the breeds of dogs to interbreed, so that all dogs are mongrels. No breeder of race horses would want his thoroughbreds to breed with common riding ponies. No garden lover wants all his flowers to come in only a single color or shape, or his tomatoes or apples in only a single variety, and no oenophile would want only a single red wine and a single white wine to choose from. Only those driven mad by the maladaptive ideology of egalitarianism cheer the loss of diversity that results from their demands for more of it. ⁶ To borrow from the anti-racists, one might call the end result of miscegenation, "Life without rainbows."

Egalitarians love diversity so much that they insist that everything – our corporations, restaurants, hotels, neighborhoods, schools, television, movies, and textbooks ⁷ must all be diverse – everything, that is, except people, who must miscegenate to become the same and therefore equal. They were overjoyed in 2003 when the U.S. Supreme Court ruled ⁸ that "diversity" (i.e., racial quotas) is so important that colleges can legally violate the Fourteenth Amendment, ⁹ but only for 25 yrs, by discriminating against Eurasians in order to achieve diversity in their student bodies. But their love of diversity is different from the love others have for it. Egalitarians love diversity not as an end, but as a means. They do not want to preserve the <u>diversity</u> of the peoples of this planet; they want to destroy it. Making all human contact diverse is simply their means for destroying human diversity. Mix the races physically, and they will mix biologically on their own. ¹⁰ Diversity to destroy diversity. The loss of biological diversity, which most of us would not wish on the living things we love and value, egalitarians wish upon man himself.

Some egalitarians openly encourage miscegenation, while others even condemn the failure to miscegenate as "racist," ¹¹ and still others argue that everyone might as well miscegenate because everyone is already a mixture. In the sense that the races share most alleles (as do people and chimps), everyone is a mixture but, as we shall see in the next chapter, there are major differences between (1) people within a population interbreeding and (2) people from very different populations interbreeding.

It is not necessary to involve the government in people's intimate decisions in order to reduce miscegenation and preserve the uniqueness of the Earth's peoples. People themselves, given their freedom, can accomplish this. They can segregate themselves, as suggested in Chapter 31. ¹² They can boycott movies, television, and books that show or advocate miscegenation. And they can ostracize those who practice, encourage, or condone it. Parents can disapprove of their children dating interracially and withhold benefits, such as weddings, gifts, inheritances, and social support from children who defy their wishes and reject their own people as mates. They can cite statistics showing that they are many times as likely to get a STD from a black as from a white (Chapter 12, Note (4)) and, for females, many times as likely to be beaten, raped, and murdered. ¹³ Many things can be done but, until people come to believe that it is desirable and morally good to preserve their own genetic heritage, nothing will be done.

The race mixers love to point out that white men fear that black men will take "their" women. Of course, they fear that; ¹⁴ for a white man, it's a significant loss in fitness. The biological purpose of a male of any species is to pass on his alleles, and the principal way he does this is by impregnating females. But he gets a big bonus if he impregnates a woman who already has more of the same alleles that he has, i.e., someone of the same race (Chapter 8, FN 4), and his fitness falls if he lets someone of another race impregnate "his" women (and similarly for women). This biological purpose implies, of course, that he must not only compete against other men, particularly men of a different race, but win that competition. If he does not even try to win and, indeed, facilitates his own failure, then his unique collection of alleles,

including the alleles that made him a biological loser, are out of the game. ¹⁵

The incidence of miscegenation is greatly increased by welfare. As we saw in Chapters 5 and 12, Eurasian women normally choose "dads," not "cads," because, until modern times, they and their children could not survive without the support of a man. With the state now supporting them, however, they can choose "cads" and still survive and therefore are more likely to make that choice. Blacks are more likely to be cads, and therefore the absence of welfare would induce Eurasian women to once again choose dads and would significantly reduce miscegenation. ¹⁶ Other studies have shown that partners who are genetically similar to each other tend to have happier marriages ¹⁷ and, without welfare, the importance of having a happy marriage increases.

Another way of looking at miscegenation is from the viewpoint of eugenics. If blacks and whites engage in miscegenation, the mulatto progeny will have characteristics of both races. ¹⁸ Will the two races regard the mullatos as "improved" children? Although there are no polls on this question, other evidence suggests that more blacks would see it as an improvement than whites. ¹⁹ As we have seen, blacks are genetically primitive humans, who have evolved a lesser distance away from our ape LCA. They have alleles that are many millions of years old – chimpanzees and gorillas have them, but Eurasians do not (Chapter 16, FN 17). Admitting those and other primitive alleles into the white genome would undo hundreds of thousands, if not millions, of years of white evolution. ²⁰ Both blacks and whites regard the primitive features of blacks as undesirable (p. 96). Both white and black children prefer playing with white dolls. ²¹ And the push behind integration has been blacks wanting to be around blacks.

Mulattos resent the fact that they can never be "white," and must accept a lower status as a "black." They become hostile towards whites, who are the higher status group, even though they would have an even lower status if they were not partly white. Thus, whites who have mulatto children create enemies of whites, including themselves, another reason for whites to oppose miscegenation.²²

Most mixed race breeding occurs at the margins, where a white woman is undesirable to white men (overweight, ugly, old, addicted to drugs, mentally ill, low IQ, etc.) or has been rejected by a white man, resulting in a deep hatred of all white men, or the black man may be rich and/or famous (e.g., Tiger Woods, O.J. Simpson), though there are some cases where the explanation is not readily apparent (e.g., blond German model Heidi Klum).

Declining Civilizations

Perhaps both the strongest and the weakest argument against miscegenation is that it can destroy an existing civilization. (Simpson, 2003, pp. 746-751). That argument deserves consideration because the outcome is so dire, but the evidence for it is indirect because it is difficult to assign the collapse of an entire civilization to any particular cause, though a lower quality gene pool is certainly a strong candidate. (Gobineau, 1853; Fisher, 1958). And the decline of a civilization is often slow, over hundreds of years, so that people may not even realize it is happening. However, there is good evidence that a lowering of IQ individually (Herrnstein, 1994) or nationally (Lynn, 2002a) will lower living standards as less intelligent people are less productive and consumption cannot be maintained without production (though if you borrow or steal, it can be someone else's production). The reader should keep in mind the "right-tail effect" shown in Figure 14-5 & Figure 14-7. When the average intelligence of the entire population drops, the number of people at the higher end of the bell curve falls much more drastically. With welfare states ensuring the reproductive success of the less intelligent in the temperate zones, the dysgenic effect of miscegenation in reducing the percentage of people in the right tail will never be overcome by natural selection, i.e., the less intelligent will

not lack the means to successfully reproduce. And, when mankind is presented with environmental challenges to his survival, as he inevitably will be, he will no longer have the intellectual wherewithal to overcome them.

Let us examine the past consequences of the right-tail effect of lower intelligence due to miscegenation to see the future that awaits us. Contrary to the OoA theory, Africans did not travel of their own accord into other countries – every country they went to, they went as slaves. (Figure 21-1). As individuals, the slaves no doubt suffered, though they very likely were better off as slaves than if they had been left in Africa. ²³ Biologically, being a slave to Eurasians was adaptive for Africans, as it enabled them to spread their alleles much more widely than they otherwise would have, but all the civilizations they became part of declined.

Today, people in the countries that imported slaves emphatically deny they have any Negro blood and become quite offended at the suggestion that they do. However, their dark skin, short, black, woolly hair, and African alleles betray them.

As discussed in Chapter 26, the multiple migrations of Eurasians into Africa have resulted in a mixed population in Africa itself. And, as discussed in Chapter 15, the accomplishments and achievements of Africans and African Americans have been abysmal, which is not surprising given their average IQs of only 67 and 85, respectively (Chap. 14). So it is not unreasonable to blame the decline of white civilizations on the importation of, and interbreeding with, Africans slaves.

Egypt

The early Egyptians were Caucasian (Figure 26-2). From 3400 to 1800 B.C., Egypt excelled in architecture, mathematics, and science. As Egyptians moved south, up the Nile River, they encountered black Africans (Nubians), who were brought back as slaves. Miscegenation spread, Egyptians became more Negroid, ²⁴ and Egyptian civilization began a decline from which it has never recovered. ²⁵ "The weak, disease-ridden population of modern Egypt offers dramatic evidence of the evil effects of a hybridization which has gone on for 5000 years." (Garrett, 1960, p. 7). Today, Egypt is a Third World country with an average IQ of only 77 to 83. (Lynn, 2006a, p. 80).

The Middle East

The Muslims in the Middle East made many important discoveries and inventions including coffee, the camera obscura, soap, the crank shaft, quilting, the pointed arch, surgical instruments, anesthetics, the windmill, smallpox inoculation, checks, and algebra. ²⁶ When the more powerful men acquired large harems of women, many of the common men were left without wives. From about 600 to about 1000 AD, cheap African slaves were imported as concubines, a practice that did not end until the 1960s. By 1200 AD, Arab advances in the arts and sciences had stopped. "The number of books published in the Arab world did not exceed 1.1% of world production though Arabs constitute 5% of the world population.... No more than 10,000 books were translated into Arabic over the entire millennium [1000 to 2000 AD], equivalent to the number translated every year into Spanish." ²⁷ The average IQ in the Middle East is now about 83. (Lynn, 2006a, p. 80; also Kemp, 2006, Chap. 7, 16, 17).

<u>Greece</u>

Originally white, classical Greece reached such heights that it is still studied today. The IQ in Greece at that time must have been at least 100, but today it is only 92 (Lynn, 2006a, p 173). There is as yet little evidence for the presence of African alleles in the Greek gene pool, though that would explain the drop in IQ. (Kemp, 2006, Chap. 10, App. 4, 6).

Portugal

By 1550, Portugal, then a white country, had become the wealthiest, most powerful nation in the world with colonies in Asia, Africa, and South America. Unfortunately, Negro slaves were brought into Portugal from Africa between the middle 15th century until slavery was banned in the late 19th century (Godinho, 1983), when Africans were about 5 to 10% of the population. ²⁸ Interbreeding occurred ²⁹ and Portugal declined until today it is the poorest nation in Europe and has the lowest literacy score for ages 26 to 65. ³⁰ Of the 346 Nobel Prizes awarded in science between 1901 and 2003, the Portuguese received only one, for prefrontal lobotomy, a now discredited treatment for mental illness. Spain was also affected, but to a lesser extent. The average IQ in Portugal is 95, ³¹ but it is 99 in Spain.

The West Indies

"In the West Indies, the civilization is advanced almost exactly in the degree to which the populations are unmixed with the Negro." (<u>Garrett, 1960</u>, p. 7). Haiti, like most African nations, is a basket case of corruption, poverty, and crime. There are no 'safe areas' in Haiti. (<u>U.S. Department of State Travel Warning</u>, Oct., 2008).

In Jamaica, it has been reported that race-mixing has lead to "physical as well as mental disharmonies." (Garrett, 1960, p. 7; Davenport, 1970).

<u>Brazil</u>

"Let any one who doubts the evil of this mixture of races, and is inclined from mistaken philanthropy to break down all barriers between them, come to Brazil."

Louis Gassiz, naturalist

The northern coastal Bahia region of Brazil, where there is extensive interbreeding between former African slaves, native Indians, and whites, is in poverty and the southern region around San Paulo, which is mostly white, is well-off.



(<u>Garrett, 1960</u>, p. 7). As is true throughout the world, those who are brown or black are poorest, the least educated, and have the lowest IQ. The average IQ in Brazil is 87 but the average IQ of Europeans in Brazil is 95 and the average IQ of Africans in Brazilia is only 70. (Lynn, 2006a, pp 23, 70). Figure 29-1 (*Wikipedia*, "IQ," now withdrawn) shows the overlapping IQ bell curves in the U.S. for (left to right) African Americans, Hispanics, whites, and Asians. The lower mean IQ for Hispanics is due to the interbreeding of Portuguese and Spaniards with Africans and South American Indians (ave. IQ = 86; Lynn, 2006, p. 159).

Europe and the United States

In Europe and the United States the evidence for the de-civilizing effect of miscegenation can be found in the education and crime levels in black schools and neighborhoods. And it is almost certain to become worse. According to a U.S. Census Bureau report, non-Hispanic whites accounted for only 66.4 percent of the U.S. population on July 1, 2006, though they were 76% in 1990 and 88% in 1965.

The U.S. population is predicted to balloon from the current (October, 2006) 327 million people (Abernathy, 2006) to nearly 420 million in 2050. (Census Bureau). Census Bureau projections show that the U.S. white population (IQ = 98; Lynn, 2006a, p. 174) will drop from 69.4% of the population to 50.1%; ³² blacks (African-American IQ = 85, African = 67; Lynn, 2006a, pp. 41, 37) will increase from 12.7% to 14.6%; Hispanics (Mexican IQ = 87; Lynn, 2002a) will rise from 13% to 24.4%; and Asians (East Asian IQ = 105, Southeast Asian = 87; Lynn, 2006a, pp. 147, 99) will jump from 3.8% to 8%. ³³ Thus, the percentage of blacks in the U.S. is already significantly higher than the 5 to 10% that Portugal had when its decline began. The United States is becoming more and more genetically homogenized and there is little hope that the trend can be reversed. The extent that a society is civilized is a function of its gene pool; once the gene pool has been lost, the products of that gene pool are also lost.

Miscegenation (with blacks), by inexorably lowering IQ, is the greatest threat to the survival of whites and their civilizations. ³⁴ Nothing else is more certain to permanently destroy white civilization. Yet few whites recognize the threat and many whites actually welcome it. Unless miscegenation is stopped soon, it will be too late. The center of civilization is already moving from the West to East Asia, i.e., China, Japan, Singapore, and South Korea. Soon, those countries will be the center of art, science, and military power, and the West will be mired in a hopeless struggle to keep up.

Chapter 30

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FOOTNOTES

1. Loving v. Virginia, 388 US 1 (1967). According to Stanford University sociologist Michael Rosenfeld, the number of biracial marriages in the U.S. went from 2% in 1970 to 7% in 2005. (Crary, D., "Interracial Marriages Surge Across U.S.," Associated Press, Apr 12, 2007) The amount of black/white miscegenation has increased in the U.S. from 3.3 per 1000 pregnancies in 1968 to 17.7 in 1996, a 4 to 5 fold increase. (Getahun, 2005). Back

2. As in particle physics, whatever is not forbidden, is required; for miscegenation, that took less than 50 yrs. <u>Back</u>

3. A different and disagreeable odor discourages interbreeding, but as man has become domesticated he has lost some of his sensitivity to odors (as evidenced by the large percentage of inactive genes ("pseudogenes") in our olfactory genome; Keller, 2007), and modern deodorants hide natural odors. The degree with which another race "smells bad," is proportional to the damage interbreeding would do to the genome, by "break[ing] apart those compatible physical and mental qualities which have established a smoothly operating whole in each race by hundreds [millions] of years of natural selection." (East, 1919, p. 245ff). Also see (Simpson, 2003, pp. 737-747). The advantages of preserving unique traits, however, apply more to larger populations. For smaller groups, an optimal balance between inbreeding and outbreeding is more beneficial. See next chapter. Back

4. Alleles may disappear if the individual who has them has no offspring ("lineage sorting"). Back

5. The larger a population is, the more mutations will arise in it, though that affects evolution only if a mutation codes for a trait that is selected. Culture, behavior that is not inherited, can

select traits. Thus, agriculture, the Industrial Revolution, and public health measures have vastly increased human populations, and therefore the number of mutations, and cultures have been selecting some of the resulting traits, though not necessarily desirable traits (Chap. 32). As a result of cultural selection, "Human races are evolving away from each other, ... on a scale of centuries to millennia." (Harpending, H., <u>Press Release</u>, U. of Utah, Dec. 10, 2007). Evolution occurs because better adapted individuals are selected; to the extent that everyone becomes more alike, selection is reduced and evolution cannot occur. Miscegenation, by hampering evolution, is maladaptive, anti-life, and destructive. <u>Back</u>

6. When the first sailors arrived at the Galapagos Islands, they took giant tortoises aboard for eating. Excess tortoises were deposited on different islands than they came from, thereby mixing up the many different races of tortoises. Now scientists are using DNA to sort them out and return them to their home islands in order to preserve their unique races. It is ironic that so much trouble would be incurred to preserve tortoise races while, at the same time, some people deliberately try to mix up and destroy human races. (Nicholls, H., "<u>Galapagos tortoises</u>: <u>untangling the evolutionary threads</u>," *New Scientist*, June 6, 2007, pp. 40-41). <u>Back</u>

7. Textbook publishers now require their school books to be "diverse" to meet state laws for diversity. For example, McGraw-Hill's guidelines for elementary and high school texts specify that "40% of the people depicted should be white, 30% Hispanic, 20% African-American, 7% Asian and 3% Native American." (*Liberty Magazine*, Nov., 2006, p. 7). Also see (Lefkowitz, 1997; Ravitch, 2003). Back

8. (*Grutter v. Bollinger et al.*, No. 02-241, 2003). Back

9. "No state shall ... deny to any person within its jurisdiction the equal protection of the laws." Back

10. E.g., by permitting and encouraging the immigration of non-white races. "One of the biggest threats to global biodiversity comes from invasive species transported from their natural habitats to places they don't belong." (Pain, S., "The last place on earth with no invasive species," *New Scientist*, June 16, 2007, p. 38). And immigrants of African descent are 4.9 times more likely than African Americans to marry interracially. (*Wikipedia*, "Interracial Marriage"). Back

11. Dennis Prager, Jewish radio talk show host, promoting white miscegenation, not Jewish miscegenation. <u>Back</u>

12. Studies have shown that almost everyone marries someone within a very short geographic distance from his or her home, so one method of reducing miscegenation is segregation – permitting ethnic and racial groups to legally limit their communities to people of the same group. Another way is to maintain language differences. A language barrier (e.g., Spanish, Ebonics) is equivalent to living 109 km (68 miles) away. (<u>Barrai, 2003</u>). <u>Back</u>

13. (Chapter 12, "<u>Black on White Crime</u>"). "The incidence of spousal homicide is 7.7 times higher in interracial marriages compared to intraracial marriages." (Burnett & Adler, "<u>Domestic Violence</u>," *emedicine*, Jan. 17, 2006). During the 10 year period from 1975 to 1985, spousal homicide rates were 7.7 times higher in interracial marriages. (<u>Mercy, 1989</u>). <u>Back</u>

14. With good reason. According to the 1990 Census there were 2.5 times more black husband-white wife marriages than white husband-black wife marriages, i.e., 72% of the

miscegenating couples were black man-white woman. Back

15. Surely the people who succeeded in convincing white men to abandon their biological purpose in life are the greatest propagandists ever, far superior to Joseph Goebbels, whose accomplishments pale by comparison. <u>Back</u>

16. In a multi-racial society, welfare is also against the genetic interests of the race with the highest ratio of welfare taxes to welfare payments, i.e., whites. (<u>Salter, 2003</u>). <u>Back</u>

17. (<u>Russell, 1991</u>). The batting average of success for mixed race marriages is 0.127 compared to 0.213 for same race couples (<u>Joyner, 2005</u>). <u>Back</u>

18. If a racial characteristic requires the presence of two recessive alleles, there is less likelihood that a mulatto will have it. For example, straight hair requires two copies of the same allele, so most mulattoes have wooly hair. One reason for the "one drop rule" – that anyone with any visible amount of black heritage is black – may be that whites have more recessive alleles; thus, when it come to the expression of genes, the "phenotype," a person with one drop really is "black." Back

19. <u>A Pew Research Center survey</u> (2007), found that 97% of African Americans believe that interracial dating is acceptable. "Marry light – improve the race," is a black aphorism. Also, (Ross, 1997). On the other hand, here is what two white Americans thought: "There is a natural disgust in the minds of nearly all white people to the idea of indiscriminate amalgamation of the white and black races." (Abraham Lincoln, Springfield, Illinois, June 26, 1857). "... I give ... the most solemn pledge that I will to the very last stand by the law of the State, which forbids the marrying of white people with negroes." (Also Abraham Lincoln; Basler, 1953, p. 402-403). "Blacks ... are inferior to Whites in the endowments of both body and mind. (W)hen freed, the Black is to be removed beyond the reach of mixture." (Thomas Jefferson). Back

20. The number of Americans born with blue eyes has dropped from about half in 1900 to about 1/3 in 1950 to about 1 in 6 today. (Belkin, D. "Don't Make My Blue Eyes Brown, , Oct. 17, 2006). Back

21. See studies done in support of (*Brown v. Board of Education of Topeka*, 347 U.S. 483, 1954). <u>Back</u>

22. Mulattos who are mostly white nevertheless usually see themselves as black and side with black interests, e.g., Colin Powell, just as people with a minor amount of Jewish ancestry often sympathize with Jewish interests. Even people who discover, through DNA testing, that they have a bit of non-white heritage that they did not know they had, e.g., an Indian ancestor, tend to become more sympathetic towards that minority. <u>Back</u>

23. After a match in Africa, black boxer Mohammed Ali (Cassius Clay) famously remarked, "Thank God, my grand-daddy got on that boat!" Black reporter Keith Richburg, author of "Out of America," said, "Thank God my ancestor got out, because, now, I am not one of them [Africans]." African slaves were captured by fellow Africans. They were not put to work as the women did the work (and they could not be trusted around the women) and there was no way of preventing them from escaping. They were either killed immediately or kept until needed as food. <u>Back</u>

24. This is shown by the increasing lengths of the forearms relative to the upper arm. (Zakrzewski, 2003, Table 6). "The change found in body plan is suggested to be the result of the later groups having a more tropical (Nilotic) form than the preceding populations." The Nubian dynasty was 742 to 633 B.C. <u>Back</u>

25. Kemp (Kemp, 2006, Chap. 8 & 9, App. 3). Those of us who are born into an advanced civilization take it for granted, and we don't realize how difficult they are to create and how fragile they can be. Civilizations arise in populations that are genetically homogeneous, intelligent, and cooperative, if not altruistic and, when those factors are lost, so is the civilization. Compare Africa to the way Germany rebuilt itself within a few decades after being destroyed in WWI and WWII. <u>Back</u>

26. (<u>"1001 Inventions: Discover the Muslim Heritage in Our World</u>" a touring exhibition, 2006). Back

27. ("Arab education in crisis," Aljazeera News, October 21, 2003). Back

28. (<u>Pereira, 2000</u>; <u>Simpson, 2003</u>, pp. 816-818). The percentage of sub-Saharan African mtDNA is negligible in Europe, but is 11.7% in southern Portugal. (<u>González, 2003</u>). <u>Back</u>

29. "The Portuguese intermarried freely with their slaves, and this infusion of alien blood profoundly modified the character and physique of the nation. It may be said without exaggeration that the Portuguese of the 'age of discoveries' and the Portuguese of the 17th and later centuries were two different races." (*Encyclopedia Britannica*, 11th ed., 1911, "Portugal"). "Templeton gives a modern-day analogy: the presence of a gene for sickle cell anemia in Caucasians in Portugal. The gene traces back to a mutation that occurred in Africa and spread through interbreeding between Africans and Europeans. 'The Africans didn't come up, reconquer the Iberian peninsula, kill off all the Europeans, and that's why there are sickle cell alleles in Portugal today,' he says. The presence of the sickle cell gene in Portugal 'means that Portuguese and Africans have met and they've interbred, just like humans tend to do.' " (Flanagan, R., Contributing Editor, "Out of Africa," *Earth Magazine*). About one in 12 African-Americans and about one in 100 Hispanic Americans are carriers for the sickle cell trait. (Minority Organ Donation Education Program, Inc.). Back

30. (International Adult Literacy Survey, 1994-1998, Figure 7). Back

31. (Lynn, 2006a, p 174; also Kemp, 2006, Chap. 22, 23, App. 10, 11). The 95 IQ for Portugal is an average of two studies showing IQs of 101 and 88, but in view of the few achievements of today's Portuguese, an IQ of 101 is unlikely to be accurate. In a homogenized population, the "right tail effect" disproportionately reduces the number of people with high IQs, so the 88 figure is more likely to be accurate. (A high IQ is a synergistic trait that occurs when a number of alleles that affect intelligence are assembled in the same person. Thus, a homogeneous mixing of a high IQ population with a low IQ population greatly reduces the odds that that will occur. See next chapter.) Back

32. Between 1900 and 1950, only about 1 in 10 Americans was nonwhite. Today that ratio is 1 in 3. (Belkin, D. "Don't Make My Blue Eyes Brown, , Oct. 17, 2006). According to the Census Bureau, by 2042 whites will be a minority in the U.S. (Ohlemacher, S., "White Americans no longer a majority by 2042," Associated Press, Aug., 14, 2008). Back

33. (Rubenstein, E.S., "Hispanics, Blacks Driving Baby Boomlet," VDARE.com, Jan. 23, 2008).

"A decimated, defeated, or impoverished population can quickly recover if it retains control of its territory, but a large-scale influx of genetically distant immigrants has the potential permanently to reduce the genetic interests of the original population." (<u>Salter, 2002a</u>). <u>Back</u>

34. (Kemp, 2006, Chap. 69, 70, App. 13, 14,and "The Ruins of Detroit"). "[T]he weak members of civilized societies propagate their kind. No one who has attended to the breeding of domestic animals will doubt that this must be highly injurious to the race of man." (Darwin, 1871, p. 128). Back

Chapter 30 - Hybrid Vigor

"There is no evidence that race-mixture as such produces bad results from the biological point of view. The social results of race-mixture whether for good or ill are to be traced to social

factors."

"Statement on Race," United Nations, Unesco, 1950

Egalitarians have argued that people of mixed race are in some ways superior to people of unmixed race, and therefore race-mixing is desirable. This seems inconsistent with their position that there are no significant genetic differences between races, but egalitarians are not strongly committed to consistency. That position is examined in this chapter.

It will no doubt occur to readers that miscegenation seems similar to making a hybrid. We all know that hybrids are improved varieties, possessed of "hybrid vigor," and perhaps other desirable traits. This book takes the position that the Caucasians themselves are hybrids of Cro-Magnons and Neanderthals. (<u>Chapter 24</u>). So why should miscegenation be any different? Won't miscegenation just produce hybrids with superior qualities?

"Hybrid vigor" ("heterosis") is the phenomenon of hybrids growing more vigorously (bigger, stronger, faster) than either parent population (or than the average of the two parent populations). (Ekblom, 2000). In order to understand why hybrid vigor occurs, it is necessary to explain the technical terms "homozygous" and "heterozygous." An individual is 100% homozygous if <u>all</u> of the alleles he inherited from his mother are paired with identical alleles inherited from his father; an entire population is "homozygous" if each individual in the population is homozygous and everyone has the same alleles for every gene. Thus, a 100% homozygous population is "pure" and "breeds true" because every individual has exactly the same alleles – identical "multiplets"; each individual in each generation is genetically identical to prior and future generations. 1

In a 100% heterozygous individual, on the other hand, <u>all</u> of the alleles from the father are paired with alleles from the mother that are different; a population is 100% heterozygous if each individual is heterozygous and no two individuals have the same allele for any gene. Aside from a very few purebreds, all sexually-reproduced living things are heterozygous to some extent and there are no 100% homozygous populations. Similarly, it is unlikely that any population will be 100% heterozygous because some alleles are "fixed," i.e., everyone has them. Thus, real populations will be "more homozygous" or "more heterozygous" than other populations or than they were previously.

Due to mutation and selection, the longer a population has been isolated from other populations, the more likely it is to have acquired alleles by mutation that other populations don't have. Intrabreeding passes those alleles around within the population, so that people within that population are more likely to share alleles than are people from different populations (<u>Chapter 7</u>), i.e., that population is more homozygous than is a population formed by combining that population with another population.

Since an advantageous allele of a gene, i.e., an allele that increases reproductive success more than some other alleles of that gene that are in the gene pool, will increase in frequency in a population, populations will have mostly advantageous alleles. The smaller the population is, the sooner everyone within a population will acquire any advantageous alleles that have arisen and the sooner any less advantageous alleles that have gotten in to the gene pool will be eliminated from the population when the people who have them have less reproductive success. (Ridley, 1996, p. 285; Patterson, 1999, p. 40). Thus, the longer a population is isolated from other populations, the more homozygous it becomes as there will be only a single allele for more genes in the population, i.e., more genes go to "fixation." Less

advantageous alleles are seldom entirely eliminated, however, because they may be only slightly less advantageous, they arise faster than they can be eliminated, they are not expressed until after an individual has (at least to some extent) reproduced, and other reasons.

Now, when two populations interbreed to form a hybrid population, each parent population has accumulated, over tens or hundreds of thousands of years, a unique set of alleles that is close to the optimum for the particular environment it has been in, and that environment includes the environment its own members have created, e.g., their history, culture, and accumulated knowledge. Inevitably, the two parent populations have lived in different environments, and the hybrid population will live in the environment of one or both of the parent populations. Thus, the hybrid population will not have the collection of alleles that are most advantageous for either of those environments, a substantial loss of fitness, i.e., their likelihood of successfully reproducing is lessened. $\frac{2}{2}$

Although populations have different percentages of each allele, those percentages change as the environment changes and selects for different combinations of the traits that the alleles code for. The percentage of each allele in a population increases or decreases, moving asymptotically towards the percentage that is optimum for that population in that environment, where that optimality is constrained by what is genetically and culturally feasible (e.g., removing harmful alleles by preventing carriers from breeding may cause more loss of fitness than letting them breed).

When formerly separated populations in different territories intermix and interbreed, the percentage of each allele in the hybrid population will be approximately the average of its percentage in the parent populations, weighted by the relative sizes of the populations. Those percentages will be farther away from the optimal percentages for each population in their former territories, a loss in fitness for the hybrid population. And, unless the individuals in the hybrid population continue to move about in the combined territories and interbreed, thereby keeping their alleles at non-optimal percentages, individuals will tend to migrate to the territory that they are most adapted to and, by selection for adaptation to that territory, the percentages of the alleles in the population in each territory will once again gradually move towards the optimal percentages. In other words, without continual random interbreeding, two (genetically different) populations will once again form. As soon as nature is permitted to take its course, different varieties, races, and species will evolve all over again – egalitarianism requires a never-ending battle against nature. $\frac{3}{2}$

The longer a population remains isolated, the more inbred (i.e., homozygous), it becomes because, eventually, recessive alleles are either expressed and spread (if advantageous) or are expressed and eliminated (if less advantageous). Thus, isolation and inbreeding not only eliminate less advantageous alleles, but also increase the frequency of the expression of advantageous recessive alleles. Conversely, a population that has a large number of expressed recessive traits, e.g., blue eyes, has likely been isolated for a long time. ⁴

Although the gene pool of an inbred population becomes more adapted to the population's environment, it has less variation; an inbred population is more vulnerable to extinction because it lacks individuals with slightly different traits who can be selected should the environment change and make those traits more advantageous. On the other hand, a population that has less variation will be better adapted to an environment that is stable (<u>Chapter 4, Rule 7</u>) and will be more efficient at exploiting it than a population with unneeded variation. ⁵

Recessive Alleles

When an allele from the father is paired with an allele from the mother that is not identical, one allele may be dominant and the other recessive, so that only the dominant allele is expressed, or a mixture of the two alleles may be expressed. If a deleterious allele is
dominant, it is usually quickly eliminated from a population because its possessor is unlikely to reproduce or raise offspring to maturity. ⁶

Populations will normally have a small proportion of deleterious recessive alleles ("DRAs"). A few DRAs are constantly being introduced into populations by mutation (or interbreeding with other populations) and a few are constantly being eliminated by the failure of the individuals carrying them to reproduce, so the percentage of deleterious recessive alleles in a population tends to reach a stable, equilibrium level. Interbreeding spreads both desirable recessive alleles and DRAs. ⁷

Although DRAs will vary from only slightly disadvantageous to deadly, for the sake of clarity in a simple thought ("gedenken") experiment, let us assume that they are all deadly. Let's say that 50 white women breed with 50 white men and 50 black women breed with 50 black men. Each population maintains a stable level of 100 members, half men and half women. The 100 member white population has two identical DRAs, one DRA in one of the 50 men and one DRA in one of the 50 women, and so does the black population, but the white DRA is not the same as the black DRA. The 2% DRA level in the white and black populations (2% of the members have a DRA) will be maintained and there is a 1/2500 chance (1/50 x 1/50) that a male carrying one of the DRAs will mate with a female carrying the other DRA. If that happens, there is a $\frac{1}{4}$ chance that their child will have two copies of the DRA ($\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$) and will die. If the child dies, those two DRAs will no longer exist in that population until two mutations occur to replace them, one in the men and one in the women.

Now suppose instead that the 100 whites interbreed with the 100 blacks (50 white women with 50 black men and 50 white men with 50 black women). In the resulting 200 member mulatto population, 1% will have white DRAs and 1% will have black DRAs. Although 2% of the population will have DRAs, in the first generation there will be no pairing of the two black or the two white DRAs. In other words, the first generation of the mulatto population will have no deaths due to the expression of the white or black DRAs. (Even if the mixing were less than 100% the number of deaths would still drop, but not to zero.)

Individuals in the resulting mulatto population of 100 men and 100 women now breed among themselves. The percentage of white and black DRAs in subsequent mulatto populations will gradually increase to their stable level of 2% again, i.e. there will now be 4 white DRAs and 4 black DRAs in the mulatto population of 200, i.e., 2 white DRAs and 2 black DRAs in the men and the same in the women. The probability that a male carrying a white DRA will mate with a female carrying another white DRA is 1/2500 (2/100 x 2/100) and the probability that a male carrying a black DRA will mate with a female carrying another black DRA will also be 1/2500, so the probability that one of those two types of matings will occur is 1/1250. The probability that a mulatto child will inherit two copies of either the white DRA or the black DRA and will die is now twice as high as that a white or black child would have died in the two unmixed populations; miscegenation has doubled the chances that a child will die from having two copies of a DRA. ⁸

Most of the time people, even in isolated racial or ethnic groups, need not worry about DRAs being expressed because the probability is low unless their mate is a close relative. Also, if a population has been inbred for a long time, there will be very few DRAs in it anyway.

Although the decrease in deaths in first generation could be (and sometime is) called "hybrid vigor" it is not "vigor" so much as it is a single generation dilution of the two DRAs in the mixed population before the DRAs return to their equilibrium levels. Interbreeding temporarily reduced the percentage of DRAs at the cost of subsequently increasing the number of people who have them, thereby making their elimination more difficult and less likely.

True Hybrid Vigor

True "hybrid vigor" occurs when inbred populations are interbred. The inbred

populations that are used do not have DRAs, but do have advantageous alleles, dominant and recessive. (Simpson, 2003, pp. 601-602). How can that be accomplished? Well, it is accomplished all the time with plants and animals. Here is how it is done.

Start with purebred (i.e., mostly homozygous) parent populations that are not obviously incompatible, e.g., one very large and the other very small. ⁹ Purebred parent populations are used because they "breed true," that is, the offspring are all very much the same as the parents. If you start with mixed breed (mostly heterozygous) parent populations, you will just get a lot of mixed breeds and will produce neither a population with the desirable qualities you want nor hybrid vigor.

Purebred populations are obtained by inbreeding. ¹⁰ Since close relatives have more of the same alleles than non-relatives do, if close relatives breed, some of the offspring will be more homozygous than the parents. (If the desired traits are recessive, the set of individuals who have more of the desired traits will be more homozygous.) If only the individuals who have the desired traits from each generation are selected for breeding, the population will become more and more inbred, because those individuals have more of the same alleles that code for those traits. Eventually, the population becomes homozygous, or nearly so, i.e., it is purebred.

When purebred parent populations are being created by inbreeding closely related individuals, both desired and undesired traits coded for by recessive alleles will be expressed much more than in the parent population because the probability of two recessive alleles ending up in the same individual is greater. But, when that happens, those individuals are bred only if they have the desired traits. Individuals that don't have the desired traits are culled ("purged"), ¹¹ i.e., euthanized or given away as pets. In that way, each succeeding inbred generation has fewer and fewer undesirable traits and more and more desirable traits. ¹²

Now crossbreed two or more purebred parent populations, each having a different set of desired traits, and, *voila*, hybrid vigor! ¹³ To see why, let us take two homozygous populations, "AA" and "BB," where "A" is the complete collection of alleles in the "AA" population and "B" is the complete collection of alleles in the "BB" population and no A allele on any gene is the same as a B allele. When purebred population "AA" is crossed with purebred population "BB," all the individuals in the hybrid population "AB" will have a mixture of all the "A" alleles from the "AA" population and all the "B" alleles from the "BB" population and will exhibit "hybrid vigor," i.e., they will be healthier, stronger, and will grow faster than their purebred parents. ¹⁴ Why?

If two heterozygous populations interbreed, each population having two different alleles for each gene in each pair of chromosomes (AB and CD), and the two populations do not share any alleles, the alleles for each gene in the two chromosomes of each individual in the resulting mongrel hybrids will be different (AC, AD, BC, BD). That is also true of the purebred hybrids, who are all "AB."

If we pick one individual from the purebred hybrids and one from the mongrel hybrids and compare their alleles, we see that both individuals are heterozygous, i.e., each allele of each gene in the chromosome inherited from the mother is different from the corresponding allele in the chromosome inherited from the father. But, in the purebred hybrid all the alleles in one of those two chromosomes were previously together in the mother and, in the other chromosome, they were previously together in the father. ¹⁵ In the mongrel hybrid, however, the combination of completely different alleles and crossover placed alleles in the two chromosomes that had never previously been together in the same individual. This suggests that because the purebreds were inbred, their alleles were together in many previous generations and had been selected for compatibility with other alleles as a necessary part of the process of forming a purebred population with the desired traits. The alleles in the hybrid populations were less compatible because they had not previously been together in the same individual, and therefore could not be, and had not been, selected for compatibility.

In the first generation of the purebred hybrids, all the alleles from each parent are together in each pair of chromosomes, but in each subsequent generation crossover mixes them up so that they are in different chromosomes. As a result, hybrid vigor quickly dissipates, ¹⁶ which is why farmers have to buy new hybrid seeds each year.

Individual humans, however, are a long way from being homozygous and, although races are somewhat inbred, they are a long way from being purebred. ¹⁷ It would simply not be worth the immense cost required to obtain hybrid vigor in humans, even supposing people wanted to do it, especially when the effect quickly dissipates anyway.

Selection and Culling

When man makes a plant or animal hybrid, he carefully selects which offspring he will let survive and reproduce. Nature, too, selects ruthlessly and destroys thousands of crosses from different populations, leaving few, if any, hybrid survivors. (Patterson, 1999, p. 95). When the Caucasians arose, for example, there was no government aid to the less capable, and those who did not possess the most advantageous traits of both the Cro-Magnons and the Neanderthals simply died without issue. The very existence of the Caucasians in Europe proves that they, the hybrids, were more fit in Europe than either the Cro-Magnons or the Neanderthals who begot them.

With miscegenation today, however, few of the hybrids fail to survive and reproduce because food, shelter, medical and dental treatment, and social services are provided for them, whether or not they are sufficiently productive to pay for them. Instead of letting natural selection take its course, as it did when the Caucasian hybrids were born, the state requires the more fit to reduce their own chances of surviving and reproducing in order to enhance the chances of the less fit surviving and reproducing. Any farmer with an ounce of sense knows that all his plants and livestock are not all genetically equal, and so he selects his seed for his next year's crop from only the best of his plants and animals; only egalitarians tell every seed that with a little manure it can be the equal of any other seed, however unfit it is.

In primitive populations that are barely surviving, genetically-defective individuals are quickly culled, but in First World countries, with surplus resources, modern medicine, and welfare, even individuals in whom severe DRAs are expressed, are kept alive and frequently reproduce, ¹⁸ gradually degrading the gene pool. Indeed, the less capable have more reproductive success than the more capable, another byproduct of egalitarianism. With domesticated plants and animals, humans purge individuals with the slightest fault, but with their own species, only the worst cases don't breed, so the undesirable traits of DRAs are expressed at an ever increasing percentage. And, when there are no more resources to keep the unproductive alive they will attack the more productive, killing off the foolish geese that enabled them to do so.

When the races interbreed, there is no plan to produce a human who is more fit or even one who is healthier, more intelligent, or otherwise more desirable, other than, perhaps, being "not white." There is not even a plan to let the offspring fend for themselves and die off if they cannot do so. <u>All</u> the offspring are permitted to breed and no one is stopped from breeding. Worse, the non-productive are more fecund and, still worse, new deleterious mutations arise in each generation. The inevitable result is the enfeeblement of the entire species, a fate that awaits no species save man.

Failing to cull is like trying to create a new breed of dog by putting different purebreds in an enclosure and letting them promiscuously bred while caring for all the pups. ¹⁹ You would not end up with a new breed, just a bunch of mongrels, and you will have destroyed all the hundreds of years of work that were required to create the pure breeds you started with. That is why you pay a lot more for a purebred dog, cat, horse, cow, sheep, or tomato seed, and why

a mongrel dog or cat at the pound is free or nearly free. $\frac{20}{2}$

People inherently understand the concepts involved in breeding and readily apply them not only to plants and animals, but even to their own reproductive choices. Parents, being more objective and experienced than their children, can often instantly tell when their child's choice of a mate is a bad one. Young people, too, may have flings with enticing, but unsuitable mates, yet when it comes to settling down, the genetically-controlled traits in a mate that determine their mate's traits and their children's traits usually become more important. ²¹

The only practical way (genetic engineering would be incredibly difficult) to obtain a population with a high percentage of desirable traits and a low percentage of undesirable traits, is to isolate that population from other populations so that it becomes inbred, then select for breeding only those individuals who have the desirable traits. That is, in fact, what our ancestors have done for us and that is what we are thoughtlessly undoing by miscegenation.

Incest

Another argument raised by the egalitarians is that races are isolated populations that have bred among themselves for tens of thousands of years (true) and they are somewhat inbred (also true). Incest is an extreme form of inbreeding, they continue, and we all know that incest produces horribly sick and deformed people. ²² Race-mixing introduces new blood and is therefore healthy because it is the opposite of incest.

Incest may be culturally abhorrent, but it does not <u>create</u> DRAs – it merely increases the probability that they will be expressed ("inbreeding depression") if they are present. ²³ But some believe that the more inbred a person is, i.e., the more homozygous he is, the unhealthier he will be, even if he has <u>no</u> DRAs. In other words, they are arguing that homozygosity, in and of itself is, for some reason, unhealthy.

There are, indeed, some disadvantages to homozygosity. Because a sexuallyreproducing population that was 100% homozygous would be similar to an asexuallyreproducing population (in both cases, the offspring are genetically the same as the parents), they would have the same problems that asexual populations have – inability to evolve by the selection of alleles already present in the population, vulnerability to predators, and an increased load of parasites who have specialized to attack that unique collection of traits. ²⁴ So, to that extent, the egalitarians are correct, but races are a long, long way from 100% homozygosity, and those problems are not problems with real races. ²⁵

Other than those problems, however, there is no evidence or logical reason why 100% homozygosity is or would be harmful. ²⁶ There is, with few exceptions, no harm in having a <u>single</u> gene in which both copies are identical, ²⁷ so it is hard to see why having <u>all</u> genes with both copies identical would, in itself, be harmful. (<u>Simpson, 2003</u>, pp. 590-598, 606-607). Incestuous inbreeding of animals has been performed for multiple generations without problems. (Id., pp. 599-600). Most commercial plants and animals used for human food are highly inbred, so that all individuals are nearly identical in their nutritional requirements, medical needs, date of maturation, and behavior. No commercial farm could operate efficiently if each animal had its own requirements. If inbreeding were harmful, these farms would not exist.

But there is no need for incestuous inbreeding in order to obtain the advantages of inbreeding. Any isolated ethnic group is inbred, yet can, and usually does, avoid incest. The absence of sexual desires towards people who look or smell too similar or are "nestlings" (raised together, the over-stimulation of familiarity dulling sexual desire), and one sex leaving the home discourages incest. ²⁸

Incompatibility

"Genes do not work in isolation." (Sapolsky, R., "<u>A Gene For Nothing</u>," *Discover* magazine, May, 2007, p. 32). Genes code for polypeptides that are used to make proteins that interact with other proteins and compounds in the body. If those interactions are between fully compatible compounds, the efficiency of the interaction is higher than if the compounds are not fully compatible. Each parent has thousands of collections of interacting compounds that, over many thousands of years, have been selected because they are compatible with other compounds present in that population. ²⁹ Race mixing breaks up the collections of alleles that code for those compatible compounds. ³⁰ During long periods of isolation where individuals in a population breed among themselves, a huge number of different combinations of alleles are expressed, i.e., tried out. Individuals who had combinations that did not work well were less reproductively successful, which eliminated some of the alleles from the genome, leaving behind fewer alleles for each gene, but alleles that worked well with the other remaining alleles. (Pusey, 1996).

Because brain tissue has more complex interactions than other tissues, a decrease in compatibility may have a greater adverse effect on the brain than on other organs. Egalitarians take the position that if a black and a white are both intelligent then, since everyone is genetically equal, it is just as likely that they will have intelligent children as if they were both white. Not so. Certain traits, and intelligence is one of them, are not inherited in such a way that the children tend to cluster around the average of that trait in their parents. Instead, the children are in between the average of their parents and the average for their own population; this phenomenon is called "regression to the mean." ³¹ For example, if the intelligence of both parents is above average, the intelligence of the children is also likely to be above average, but not as high as the parents, and if the intelligence of the parents is below average, the intelligence of the children is above the African average of 67, their children are likely to have IQs between 67 and 85; if a white couple both have an IQ of 85, which is below the white average of 100, their children are likely to have IQs between 85 and 100.

Consistent with the increased incompatibility of alleles ³² that results from race mixing, there is evidence that mixed races have more health and behavior problems. ³³ For example, the child may have small teeth in a large jaw with gaps in between, or large teeth in a small jaw, resulting in crowded teeth. ³⁴ In the brain, specialized areas of the cortex must be the right size relative to other parts of the brain or performance suffers. (See EMX2 gene).

Mismatched alleles in mulattoes can lead to autoimmune diseases, such as arthritis and multiple sclerosis, where the immune system inherited from one parent attacks the proteins made from the other parent's DNA. <u>Ness, 2004</u>. There are rearrangements, inversions, and duplications in the human genome that differ among the races and may cause incompatibility. There are also some non-genetic costs of race-mixing, such as cultural incompatibility and the spread of a disease that one of the parent populations is immune to but the other is not.

The greater the genetic distance between two individuals, the greater is the incompatibility of their alleles. ³⁵ Some part of the excess miscarriages, stillborns, and infant mortality among African Americans may result from "mismatches" between their European alleles and their African alleles, e.g., the father's genes code for one set of proteins and the mother's genes code for a different set of proteins that are not fully compatible with the father's set. Compared to white parents, stillbirths are 17% higher

for white mother/black father, 37% higher for black mother/white father, and 67% higher for black mother/black father; a similar relationship holds for low birth weight and neonatal mortality. ³⁶ As genetic distance between the parents increases, their offspring become more sickly, then are no longer fertile, then are no longer viable, and finally, there are no pregnancies. (Fig. 30-1). By operating at the left side of the graph in Figure 30-1, DRAs are expressed, ³⁷ but are removed from the population if the individuals who have them do not breed; advantageous recessive alleles are also expressed ³⁸ and can more rapidly increase in frequency, which benefits the population.



Figure 30-1

By operating at the right side of the above graph, miscegenation spreads DRAs throughout the mulatto population, increasing the number of individuals who have them and causing genetic incompatibility in the mulatto genome, weakening it; the presence of advantageous recessive alleles is diluted. ³⁹

Chapter 31

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FOOTNOTES

1. A 100% homozygous population is even more identical than identical twins because each twin is most probably not homozygous. Also, identical twins and clones drift apart genetically as they age. (Martin, 2005). Back

2. If an advantageous allele has arisen in one population but not the other, a portion of the hybrids will have it, but that allele may not be accompanied by other alleles that enable it to perform efficiently. <u>Back</u>

3. To put it another way, to prevent populations from evolving and wiping out an egalitarian mongrel utopia, selection must be prevented. It is similar to economic egalitarianism where, once everyone is made equal in wealth and income exchange, if permitted, will soon make them unequal again. ".. if men are free, they won't be equal." (Putnam, 1961, p. 60). Foolish men are no match for persistent Nature. <u>Back</u>

4. (<u>Chapter 4, Rule 14, corollary</u>). If Eurasians express more recessive alleles than Africans (which seems likely, given that Africans have greater variation), that would lend support to the OoE theory because it would suggest that Eurasians were more isolated than Africans and Africans received their alleles from Eurasians, not the reverse. Also, the expression of recessive alleles in Europeans suggests that Europe was not invaded much by people carrying dominant alleles. <u>Back</u>

5. (<u>Chapter 4, Rules 4, 7, and 11</u>). Africans have more variation not because each population in Africa is more varied, but because the entirely of all the many populations in Africa collectively have more variation. <u>Back</u>

6. On the other hand, although a dominant allele that increases reproductive success, such as an allele for health, good looks, or intelligence, would have spread quickly throughout a population prior to birth control, today that is not necessarily the case because those who have the allele may not want to reproduce. <u>Back</u>

7. For example, African Americans, a hybrid population of Africans and Caucasians, have picked up a Caucasian allele that increases their risk of heart disease (<u>Helgadottir, 2006</u>) and they may be at a higher risk of developing multiple sclerosis due to acquiring a European allele on Chromosome-1. (<u>Reich, 2005</u>). <u>Back</u>

8. (Lynch, 1997). Suppose the thought experiment is repeated, but this time the two populations are highly inbred and the non-DRA alleles are the same in all the whites and the same in all the blacks, but none of the white non-DRAs are the same as the black non-DRAs. Now, in the first generation mulatto population, every white non-DRA will be paired with a black non-DRA and none of the advantageous traits that resulted from having the same non-DRAs in all the whites and the same non-DRAs in all blacks will be expressed; i.e., even the first generation mulatto population will be less fit. Back

9. Often, the males are selected from one parent population and the females from the other. Back

10. About 20 generations are required to produce mice that are as similar to each other as identical twins. (Zimmer, C., "<u>Inside the Lab-Mouse Factory</u>," *Discover* magazine, May, 2007, p. 33). <u>Back</u>

11. Purging reduces the genetic load of the population by decreasing the amount of useless and destructive genetic material that must be copied and carried. <u>Back</u>

12. A little physics again - the Second Law of Thermodynamics: in a closed system, entropy increases. As individuals are inbred to produce purebred lineages, their collections of alleles become more and more ordered. That is, out of the total number of alleles in the population, the probability that the sought-after particular collection of alleles would end up by chance in the individuals of the purebred population is very low. The collection of alleles in the individuals of a mulatto population, however, become more random, a much more probable outcome. Thus, hybridization creates a more ordered state, reducing entropy within the culled inbreeding population, while miscegenation creates a more disordered state, increasing entropy within the unculled randomly breeding mulatto population. Hybridization is creation, miscegenation is destruction. Back

13. The assumption is made that alleles in the purebred populations are compatible, i.e., they are closely related, so that the vigor of the hybrids is not reduced by incompatible alleles. <u>Back</u>

14. New species are often formed in nature by this same process. Isolated groups become highly inbreed, then the environment changes so that they come into contact and breed. The hybrids have various mixtures of the traits of the two inbred groups. Only those with the most adaptive traits survive and form the new species. <u>Back</u>

15. That is true even with crossover because the grandparents also had the same alleles. Back

16. "Hybrid vigor," when it does occur, "is the peculiar possession of the first cross." "Further crossing of these hybrids results in a manifest decrease of vigor in subsequent generations. The second crosses are not so vigorous as their hybrid parents." (Crew, 1927; quoted in Simpson, 2003, p. 601). Back

17. With an average of 14 alleles per gene, the percentage of homozygous genes will be small. Back

18. (<u>Dugdale, 1877</u>). This may be why European populations have proportionally more deleterious genetic variations than African populations. (<u>Lohmueller, 2008</u>). <u>Back</u>

19. (<u>Simpson, 2003</u>, pp. 602-605, 732-733). Even after cross-breeding two or more parental stocks that are mostly homozygous and that have compatible and complementary traits that are unlikely to conflict, the resulting hybrids are bred with each other so that any remaining undesirable alleles are expressed and the alleles for those traits can be eliminated. <u>Back</u>

20. It is true that many purebred animals, especially dogs, have genetic problems. The reason is that people will pay a lot for them, even with their problems, and so they are not culled. <u>Back</u>

21. There is some evidence that women are able to discern which men will be dads and which cads just by looking at their faces. (<u>Roney, 2006</u>). <u>Back</u>

22. If inbreeding is harmful then inbred species should not evolve barriers to outbreeding. But they do. Such barriers may include different odors, songs, mating rituals, etc. <u>Back</u>

23. "Continuous crossing only tends to hide inherent defects, not to exterminate them, and inbreeding only tends to bring them to the surface, not to create them." (Castle, 1930). But remember, inbreeding also increases the likelihood that advantageous recessive traits will be expressed. (Chapter 4, Rule 14). Back

24. A loss of vigor has been observed in a few small, isolated natural populations that have become more homozygous, but not in laboratory animals. A natural population, of course, faces parasites and a much more changeable environment than does a laboratory population. Back

25. On the other hand, because inbred parents share so many alleles they can be expected to be more "K" orientated, caring parents. (<u>Thünken, 2007</u>). <u>Back</u>

26. "Further, any racial stock which maintains a high standard of excellence under inbreeding is certainly one of great vigor, and free from inherent defects." (Schwartz, 1999, p. 266). The Mennonites in Kansas have been mentioned as being an inbred, but intelligent and healthy, population. (Moore, 1987). Cleopatra was the seventh generation of brother-sister marriages, and brother-sister marriages were also practiced by the royal Incas, the Hawaiian Alii, and the Singhalese. (White, E. *Doorway Papers by Arthur Custance*, 1988, Chap. 1). Before the DRAs are eliminated, the offspring of incest are unhealthy; after they are eliminated, they are superior. <u>Back</u>

27. Indeed, that occurs in most people. The exception is "<u>balanced polymorphism</u>." Also, most people have multiple copies of some entire genes, which can actually be beneficial. <u>Back</u>

28. A delay in puberty in girls when fathers are in the home may also be an incest-avoidance

strategy. (Matchock, 2006). Back

29. "[G]enes appear to operate in a complex network, and interact and overlap with one another and with other components in ways not yet fully understood." (Caruso, D., "Change to gene theory raises new challenges for biotech," *International Herald Tribune*, July 3, 2007). Back

30. See the explanation for "<u>True Hybrid Vigor</u>," above. An example of an incompatible gene is **LTA4H**. Back

31. Here is a possible explanation: Let's say, for the sake of an example, that 20 genes, each with 10 alleles, determine genetic intelligence. They can combine in 10²⁰ different ways. Assuming each allele is equally likely (a false, but simplifying assumption), if each of those combinations corresponds to an IQ and we plot IQ on the horizontal axis and number of combinations that give that IQ on the vertical axis, we should get a bell-shaped curve. Since each combination is equally likely, only a very few combinations will correspond to a high IQ and only a very few people will have those combinations. Two high IQ parents don't have the same alleles, but they each have combinations of alleles that result in a high IQ. Their children, however, will receive mixtures of their parent's alleles and the children's combinations are more likely to be on the left (lower IQ) side of their parent's combinations than on their right (higher IQ). So the children's IQ regresses towards the more probable combinations, which are nearer to the mean.

Some alleles will be mostly in combinations below the mean and some will be mostly in combinations above the mean. The combinations at the extreme right will have not only a subset of particular alleles, but will have only particular combinations within that subset. Thus, it is easy to knock a combination out of the extreme right end of the bell-shaped curve by simply substituting alleles that are mostly in combinations below the IQ of the parents.

The more closely related the two high IQ parents are, the more likely they are to have the same alleles and the more likely it is that their child will have the same alleles, and the same combination of alleles, that gave the two parents high IQs. Thus, if all four grandparents and all eight great-grandparents had high IQs, the child's IQ is not likely to regress towards the mean as much, i.e., he will "breed true." On the other hand, the more genetically distant the parents are, the more likely the child is to receive different alleles and the greater his combination of alleles will differ from his parent's combinations, so the more he will regress towards the mean. Thus, even assuming that the parents have the same high IQ, the IQ of a child is likely to be higher when both parents are white than when one is white and one is black. Regression to the mean also explains why black children of middle class parents are three times more likely than white children of middle class parents to drop to the lowest fifth in income. (Taylor, J. "Race/IQ Explanation Gap at 'Achievement Gap Summit'," VDARE.com, Nov. 13, 2007). Here are some other examples of regression to the mean: "Black children from the wealthiest families [i.e., higher IQ parents] have mean SAT scores lower than white children from families below the poverty line." "Black children of parents with graduate degrees have lower SAT scores than white children of parents with a high-school diploma or less." (La Griffe du Lion, 2000a). Back

32. It is not only alleles that can be incompatible, but strings of DNA. As discussed in Chapter 4, under "<u>Recombination</u>," in the production of eggs and sperm, strings of DNA inherited from the parents are mixed up ("<u>crossover</u>"), and the strings may be incompatible. This may be the reason that two white-looking mulattoes can have a child that looks black. <u>Epigenomes</u> may also be incompatible. <u>Back</u>

33. (Choi, 2006). See (Richards, 2005 and 2006) and references cited therein. The mating of people with dissimilar genes may result in health problems in the offspring due to the failure of genetically-programmed incompatible biochemical or physiological pathways, a phenomenon known as "outbreeding depression." These problems may increase with subsequent generations as more incompatible combinations of genes occur. "Adolescents who identify themselves as mixed race are at higher health and behavior risk than those of 1 race." (Udry, 2003). Genetic similarity theory (Chap. 7) predicts that white mothers of mulatto children will not feel close to them, which is unhealthy for both mother and child. (Riley, 2006). White mother/black father couples invest fewer resources in their mulatto children than do either black couples or white couples. (Cheng, 2007). "...complexes of genes co-evolve in a population, acting harmoniously with one another to produce a high level of fitness. Different isolated populations may evolve different complexes of genes that interact well within a particular population, but poorly when the genes are mixed through cross-population matings." (Lynch, 1997). "Blacks [i.e., African Americans, who are hybrids] tend to die sooner and younger from almost every cause but osteoporosis [because they have denser bones]. There are reports that even after all known causes are accounted for there is still 'unexplained' poor health among blacks. This difference is often ascribed to the stresses of 'racism,' but this is not a very convincing explanation. Recently, Surgeon General David Satcher appeared on television to point out that in America, black babies are 2-1/2 times more likely than whites to die in the first year of life. It is not clear how infants suffer from the stresses of 'racism.' " (Whitney, 1999). There are also incompatibilities between whites and Asians. (Nystrom, 2008). The higher mortality of left-handers (Ramadhani, 2007) may also be due to incompatibility problems. Back

34. (<u>Bergman, 1998</u>). "It is tempting to suppose that interbreeding would exacerbate malocclusion and increase the number of impactions." (<u>MacGregor, 1985</u>). <u>Back</u>

35. A good example of genetic incompatibility is <u>Haldane's Rule</u>, which says, "when in the offspring of two different animal races one sex is absent, rare, or sterile, that sex is the heterogametic [XY] sex." In birds and butterflies, the female is the XY sex, but in mammals and fruit flies it is the male that is XY. (<u>Birkhead, 2003</u>, p. 150; <u>Ridley, 1996</u>, pp. 406-408). An X from one race and a Y from the other are less compatible than an X from each, so the percentage of male mulattoes resulting from Caucasian-African matings should be lower than the percentage in either parent population. (<u>Holmes, 1927</u>). "Indiscriminate interbreeding between distinct forms, whether 'species' or markedly different races, is not generally beneficial. The defect may show in a change in the sex-ratio of the offspring, probably caused by the early abortion of members of one sex, generally the male in the case of mammals." (<u>Baker, 1974</u>, p.85). <u>Back</u>

36. (Getahun, 2005). Since this study was done in the United States, "black" refers to African Americans, who are already mixtures of about 75% African and 25% European. "Florida health statistics show that in 2005, the mortality rate for black infants was 4.4 times higher than that of white infants ... Researchers found that African women who come to the United States and have babies experience the same low rate of infant deaths as white American mothers [at least partly because they do not have those incompatible white alleles]. " (Ackerman, S., "Stress, Racism may Endanger Black Infants," *The Tampa Tribune*, Sept. 28, 2008). Also, (David, R., 2007). Back

37. Cousins among Muslims in England have more children with birth defects. (Gadher, D., "<u>Minister Warns of 'inbred' Muslims</u>," *The Sunday Times*, Feb. 10, 2008). <u>Back</u>

38. Cousins in Iceland, a more homozygous and isolated island with a population of only 313,400, have more children. (<u>Helgason, 2006</u>); Icelandic men also have the world's highest life expectancy for men at 79.4 yrs (2007). <u>Back</u>

39. "<u>Population genetics</u>" treats the population as a reproductive unit; the optimal balance of inbreeding to outbreeding that will preserve advantageous alleles within the population while permitting the acquisition of advantageous alleles from other populations can be calculated. (<u>Ardrey, 1966</u>, pp. 138-141; Edmands, 2007). <u>Back</u>

Chapter 31 - Segregation

"Integration: the interval between the first black moving in and the last white moving out." Mike Berman

Freedom of association is not explicitly mentioned in the Bill of Rights, though it was implicit in the First Amendment, at least until the passage of the 1964 Civil Rights law. Before that law abolished that Constitutional right, people had the freedom to associate (or not associate) with other people as they chose, for any reason whatsoever. There is nothing in the Constitution that gives the government the power to take that freedom away and the Ninth and Tenth Amendments explicitly state that unless the government is given a power by the Constitution, it does not have it. ¹ But our eviscerated Constitution now lies in shambles and we no longer have the right to buy, sell, rent, hire, or otherwise contract with whomever we wish to. Housing, schools, and the workplace, segregated by race, even if done by a private party and not by a government, and all "public accommodations" are illegal.

Yet a propensity to associate with those who are genetically similar is innate. (Chapter 8). Just as under Communism, where people did not behave the way Communist doctrine said they should, "from each according to his ability, to each according to his need," so under egalitarianism, despite the pervasiveness of the Equality Police, people do not behave as though racial differences were superficial and of no importance. They still choose their friends (including teenage gangs), mates, churches, and neighborhoods based at least partly on race.² Ideology can beat Nature down, but it cannot keep it down. Even children, who have not been encouraged to segregate by race and, to the contrary, have been told not to do so, nevertheless segregate themselves by race at lunchtime and at other times when they are free to choose with whom they associate.³ The two authors of a book on segregation (<u>Steinhorn, 1999</u>), one white and one black, think race is trivial and lament the failure of society to integrate, while admitting that they themselves have been to each other's home only once. Even the most fervent white anti-racist selects a white neighborhood to live in, though he will swear that he does not and that he merely wants a "nice" neighborhood with "good" schools which, just coincidentally, turn out to be white. ⁴ White Christians may profess egalitarianism and universal love, but "11:00 Sunday morning ... [is] the most segregated hour in this nation." (Martin Luther King, from Billy Graham).

One may pose a simple question: Is there less conflict between two groups of racially different people when they are interspersed or when they are segregated? There is little doubt that "stop the hate, segregate" is the answer. ⁵ Many primate species form "biological nations" of related individuals and defend their territory against contiguous nations of others of their species. The conflicts between these populations are often ritualized, rather than physical, and serve the purpose of unifying their populations (<u>Ardrey, 1966</u>, pp. 191-200), much as the leaders of human governments deliberately create external enemies to unify the country behind them. Egalitarians may be surprised to learn that territorial species have more social equality than non-territorial species.

"... through a wide variety of effective primate societies a clean line falls: territorial societies tend toward the [social] equalitarian, exhibit the lowest gradients of dominance, present the fewest example of physical conflict or punishment, and while attaining a maximum of social solidarity and co -operation, sacrifice a minimum of what a human being would call personal freedom." (Ardrey, 1966, p. 223)

Thus, the egalitarians, by embracing multiculturalism and the immigration of non-whites in to

white nations on the basis of the <u>genetic</u> equality of all peoples, undermine their <u>social</u> equality, and create societies of conflict, violence, ethnic cleansing, and civil war.

One might think that insuring domestic tranquility would be an objective of the U.S. government, ⁶ but instead the Judicial and the Executive branches perversely uphold and enforce laws that lead to and, indeed, require, the exact opposite result. ⁷ Even if two or more populations could peacefully occupy the same territory, it is a delusion to think that such a situation would be stable. ⁸

Then there is Gause's Law of Competitive Exclusion:

"Two subspecies of the same species do not occupy the same geographical area. ... To imagine one subspecies of man living together on equal terms for long with another subspecies is but wishful thinking and leads only to disaster and oblivion for one or the other." ⁹

The carrying capacity of the earth will eventually be reached, and it has probably already been reached in some countries. When that happens in white countries, our descendants will be in a life-and-death struggle for survival with the descendants of the non-whites that whites foolishly let in to their homelands at the behest of the egalitarians and the multiculturalists. The actions we take, or fail to take, now, are setting the stage for multiple civil wars in the future.

Most higher animals require a territory to survive. (Ardrey, 1966). So vitally do survival and reproductive success depend upon the possession of a territory that most animals will ferociously fight competitors to defend it. Every distinct population of man also requires a territory, a homeland. Without it, they will be nomads who, like the Gypsies, are despised and hated by those whose territory they cross. The Jews, who have been accused of trying to destroy white homelands by supporting massive non-white immigration into them, 10 nevertheless went to extreme lengths ¹¹ to obtain their own homeland, Israel, into which they carefully restrict immigration to other Jews. Indeed, a homeland is so vital to survival that an ethnic group will go to almost any length to have and hold one. The "youth" in multi-racial cities organize by race and kill each other for trespassing into their territory, a few square blocks of the city, and entire countries follow the same pattern. Examples include the Balkan War that occurred after Tito died in 1980 and Yugoslavia disintegrated, the current civil war in Iraq between the Shiites and the Sunnis, the 1994 Rwanda Massacre between the Tutsis and the Hutus, and the endless slaughter in the Middle East between Israel and its Arab neighbors. The Japanese ¹² and Chinese do not permit others to settle in their country and the Africans are now murdering, raping, and disenfranchising the few remaining whites in Africa. ¹³ As Michael Shermer aptly put it, "As a social primate, we evolved within-group amity and between-group enmity." 14

But, nevertheless, whites are expected to welcome other races to their homelands -Europe, the United States, Canada, Australia, and New Zealand. Non-whites from the Third World are not only permitted to immigrate into white homelands, they are openly welcomed white churches work to bring them over and white governments subsidize them when they have arrived. Indeed, governments give these often uneducated, illiterate, low IQ, disease-carrying, and crime-prone Third-World immigrants more benefits and rights than they give to their own people, then send their own people the bill and punish them severely for any discrimination against the unwelcome immigrants. One might think this is suicidal insanity, though the consensus among the ruling elites is that it is a moral necessity. But moral it is definitely not, for a morality that calls for the extinction of its adherents is fatally flawed. ¹⁵

By bringing non-whites into white territories the egalitarians are creating boiling pots whose lids can be kept held down only by police state tactics. When it comes to violence, status

drives the individual (Buss, 2005; Barkow, 1991) and territory drives populations. (Ardrey, 1966). If whites do not defend their homelands, they will soon have no homelands, and not long after that, there will be no more whites. The left, even the white left, may cheer the demise of whites, which will also be their own demise, but for those of us who dearly love our culture, our accomplishments, and our people, there can be no greater tragedy.

Segregation is just an application of the aphorism, "good fences make good neighbors." ¹⁶ Segregation is something that parents do without thinking when their children are fighting. When Yugoslavia broke up into genocidal ethnic groups, even the United Nations, that bastion of egalitarianism, segregated the warring parties to stop the killing. ¹⁷ In California, new prison inmates were segregated by race for 60 days for their own protection, until the Supreme Court ruled it unconstitutional. ¹⁸ A few months later, there were race riots between blacks and Hispanics in California prisons resulting in serious injuries and at least one death. Egalitarians will not be satisfied until the rest of us enjoy the benefits of being forcibly racially mixed.

The integration of the races in the United States has already resulted in a large number of racially-motivated crimes (Chapter 12, "<u>Black on White Crime</u>)" and, since blacks are 50 times as likely to attack whites as the reverse, the victims are mostly white. (NCF, 2005). What result, other than black envy and hatred of whites, could be expected when the egalitarians blame the under-achievement of blacks on white racism? ¹⁹ To prevent whites from segregating themselves is a deliberate policy of sacrificing a percentage of the white population to rape, robbery, and murder by blacks for the sake of the hopelessly flawed ideology of egalitarianism.

Voluntary segregation would benefit both whites and blacks. (Jackson, J.P., 2004). That statement is easily proved by the fact that races voluntarily separate, not only at school lunchtime, but in churches, neighborhoods, and clubs and, of course, they do so because they benefit from doing so. ²⁰ Even three month old babies prefer people of their own race. ²¹ In schools, white children would no longer have to sit through boring material below their abilities and endure assaults by blacks. ²² Blacks would not suffer the humiliation of always being at the bottom. Each could practice his own culture, speak his own dialect, and otherwise go his own way. As Abraham Lincoln said, ²³ "It is better for us both, therefore, to be separated." Forcing people together who do not want to be together is hardly the way to reduce racial tensions. ²⁴

Diversity, contrary to the multiculturalists, is not strength, but weakness. ²⁵ Who will willingly pay taxes when most of the money goes to other ethnies? Worse, who will risk life and limb defending other ethnies? (<u>Salter, 2004</u>; <u>Putnam, 2007</u>). With a black Congressional Caucus already working in the interests of blacks and a Latino caucus on the horizon, Congress itself will degenerate, if further degeneration is possible, until it becomes an ethnic battleground that mirrors the rest of the country. Have we forgotten "Divide and conquer"? ²⁶

If there is a common enemy and you ask people to put aside their genetic interests for the common good, they usually will. But most of the time there is no common enemy, despite the best efforts of the power-seekers to create one. As we have seen, we are all biologically programmed to promote our own genetic interests - we would not be here today if that programming had not increased our fitness; to believe that it can suddenly be put aside is a delusion.

Let us test the reader's mettle. Suppose a small colony of "Hobbits" (Figure 17-11) is discovered living on a remote Indonesian Island. They stand less than 4 feet tall, walk on two feet, and, except for heavy brow ridges and a sloping forehead, they look human. But they communicate by chattering and facial expressions and are only about as intelligent as a chimpanzee. Visitors flock to see them and it is soon discovered that they have no concept of rights or property and will seize anything that interests them, biting and scratching anyone who resists. Occasionally, they viciously attack and kill people, usually in gangs, apparently defending their territory. The males seize young women, even children, and attempt to mate

with them. A number of people, for reasons of ideology, psychopathology, or notoriety, want to mate with the Hobbits and have mixed children. You must decide what to do. Do you prevent the Hobbits from interacting with the outside world, and vice versa, except for a few scientists? Do you treat them as animals like chimpanzees or do you welcome them in to the human family and let them go where they wish? Do you permit interbreeding with them?

Chapter 32

Table of Contents

FOOTNOTES

1. Ninth Amendment: "The enumeration in the Constitution of certain rights shall not be construed to deny or disparage others retained by the people." Tenth Amendment: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." <u>Back</u>

2. Cross-racial friendships decline with age. (<u>Moody, 2002</u>). Blacks are more ethnocentric than whites. (<u>MacDonald, 2006</u>). <u>Back</u>

3. (<u>Rushton, 2005b</u>). Also see (<u>Hirschfeld, 1996</u>, pp. 97, xi; and Bishop, Bill, *The Big Sort: Why the Clustering of Like-Minded America is Tearing Us Apart*, Houghton-Mifflin, 2008). <u>Back</u>

4. "The single best indicator of violent crime levels in an area is the percentage of the population that is Black and Hispanic." ("<u>The Color of Crime</u>," *New Century Foundation*, 2005). <u>Back</u>

5. (Lloyd, 2006). The egalitarians promoted integration in the naïve belief that once whites got to know blacks, they would discover that they are the same as whites and whites would no longer be "prejudiced" against blacks: "Prejudice ... may be reduced by equal status contact between majority and minority groups in the pursuit of common goals." ("Allport, G., *The Nature of Prejudice*, 1953). However, although familiarity breeds, it also breeds contempt. <u>Back</u>

6. The first sentence of the U.S. Constitution begins, "We the People of the United States in Order to ... insure domestic Tranquility, ..." <u>Back</u>

7. (*Swann v. Charlotte-Mecklenburg Board of Education*, 402 U.S. 1, 1971). Also, (*Wikipedia*, "Desegregation Busing"). Back

8. "Where two races occupy a country side by side, it is not correct to speak of one type as changing into the other. Even if present in equal numbers one of the two contrasted types will have some small advantage or capacity which the other lacks toward a perfect adjustment to surroundings. Those possessing these favorable variations will flourish at the expense of their rivals and their offspring will not only be more numerous, but will also tend to inherit such variations. In this way one type gradually breeds the other out." (Grant, 1970, p 46). Back

9. (<u>Hall, 1960</u>; *Wikipedia*, "<u>Competitive Exclusion Principle</u>"). Also, "The theory of competitive exclusion holds that when there is total niche overlap by two species, one of them will eventually go extinct." (<u>Boaz, 1997</u>, p. 188; <u>Hoffecker, 2002</u>, p. 4). A good example is the Cro-Magnons, who migrated into Neanderthal territory, leading to the extinction of the Neanderthals. Interracial crime is one manifestation of this Law. Even within a species, if animals are too

similar in the food and resources they use, competition drives them apart, despite genetic similarity. <u>Cooper, 2008</u> <u>Back</u>

10. (Blog of Yglesias, M., "Jews and Immigration." *Permalink*, Apr. 6, 2006,). "The non-Europeanization of America is heartening news of an almost transcendental quality." (Jewish Neocon Ben Wattenberg, "*Jewish Hypocrisy and the One-State Solution*," 1985; <u>MacDonald</u>, 2002b). <u>Back</u>

11. E.g., THIS and THIS. Back

12. (Taylor, J. "In Praise of Homogeneity," American Renaissance, Aug., 2007, 18(8)). Back

13. One million whites have left South Africa in the past decade. ("<u>Blight and Flight in South Africa's population</u>," *The South African Institute of Race Relations*, 2005) <u>Back</u>

14. (Shermer, M., "<u>Darwin on the Right</u>," *Scientific American*, Oct., 2006; <u>Simpson, 2003</u>, pp. 453, 798; Ardrey, 1966, Chapter 8; the idea is from Herbert Spencer). <u>Back</u>

15. The conflict between the elites and the people arises because the people define "in-group" and "out-group" according to their own ethnic group, while the elites define it according to who is in their coalition to obtain and maintain political power. Thus, the elites sacrifice the interests of other whites for their own benefit. <u>Back</u>

16. (Robert Frost). Nations formed with straight line borders, rather than "squiggly" borders according to ethnicity, had "lower per capita GDP, greater political instability, and poorer quality of life overall." (Alesina, 2006). "Our research shows that violence [in ethnically mixed populations] takes place when an ethnic group is large enough to impose cultural norms on public spaces, but not large enough to prevent those norms from being broken." (Lim, 2007). Back

17. "In areas where that [ethnic] separation has not yet occurred, politics is apt to remain ugly." (Muller, J.Z., "<u>Us and Them: The Enduring Power of Ethnic Nationalism</u>," *Foreign Affairs*, Mar., 2008; also, Buchanan, P., "<u>The Return of Ethnic Nationalism</u>," *VDARE.com*, Feb. 25, 2008). <u>Back</u>

18. (*Johnson v. California et al.*, No. 03-636. February 23, 2005). Back

19. Miles Davis (black jazz musician): "If somebody told me I had only one hour to live, I'd spend it choking a white man. I'd do it nice and slow [sic]." (Lubinskas, J., "Expressions of Ethnic Animosity," *Front Page Magazine*, Nov. 24, 1999). Between 1972 and 1974, 71 whites were stalked and killed in the San Francisco area by a gang of blacks. (Lubinskas, J., "Remembering the Zebra Killings," *Front Page Magazine*, August 30, 2001; Howard, 1979), killings that most Americans never heard of because the media suppressed reporting them. Feminism creates an analogous situation, where women hate men because they have been convinced that their failings could not possibly be due to their own deficiencies, and therefore must be due to the evil sexism of men. (Sommers, C.H. "Academic Inquisitors," *The Wall Street Journal* Online, Oct. 16, 2007). Back

20. (Taylor, J., "Integration Has Failed," American Renaissance, Feb., **19**(2) and Mar., 2008, **19** (3)). A modest proposal: Since ethnic neighborhoods preserve cultural diversity, perhaps the preservation of ethnic neighborhoods could be legally facilitated by permitting their formal

establishment and preservation? Back

21. (Kelly, 2005, Bar-Haim, 2003). Back

22. "This suggests ..., perhaps, that rearing in close proximity to black children adversely affects white children." (Levin, 1997, p. 111). Back

23. Said by Lincoln to a group of blacks invited to the White House in 1862; Lincoln tried to convince them to go to Liberia. Back

24. Trevor Phillips, Commission for Racial Equality in Great Britain, said, "We've done work here which shows that people, frankly, when there aren't other pressures, like to live within a comfort zone which is defined by racial sameness." (Easton, M., "Does diversity makes us unhappy?," *BBC News*, May 30, 2006). <u>Back</u>

25. See (Taylor, J., "<u>Is Racial Diversity Good for Canada?</u>," *American Renaissance*, 2007) The Japanese are a good example of a monocultural society. (Taylor, J. "<u>In Praise of Homogeneity</u>," *American Renaissance*, Aug., 2007, Vol. 18, No. 8, p. 1). <u>Back</u>

26. The judicial system is already becoming corrupted. Not that long ago white juries refused to convict whites of crimes against blacks and now the reverse is happening, e.g., O.J. Simpson. (<u>Butler, 1995</u>). <u>Back</u>

Chapter 32 - Eugenics

"The nation which first subjects itself to a rational eugenical discipline is bound to inherit the earth."

Francis Galton

"Eugenics" ("good birth.") is the science of improving inherited traits. The word "improving" in the definition implies that someone is doing something to change those traits and that that person has made a judgment as to which traits constitute an "improvement." Eugenics does not occur when a race or breed evolves of its own accord, even if it becomes more complex, beautiful, intelligent, healthy, or reproductively successful. Eugenics requires a goal and evolution by itself has no purpose or goal; ¹ ultimately, it is just chemicals reacting. Thus, if humans simply let evolution take its natural course, humans will still evolve, but we may not like the results. Eugenics implies overruling nature and altering the purposeless course it would otherwise follow in order to achieve a desired collection of traits.

When it comes to choosing a goal for eugenics, what can be said is that failing to choose the minimum amount of those traits that are necessary for reproductive success is maladaptive. ² Now, what about traits above and beyond those minimum amounts of necessary traits?

Complexity, beauty, intelligence, and even health are not "free" in nature. They cost resources and if "spending" resources on those traits does not bring more reproductive success than other ways they could be "spent," those traits are less adaptive. To support eugenics means that you must value certain traits above other traits and must be willing to sacrifice a bit of some of the other traits you also desire in order to obtain proportionally more of those traits that are more important to you. ³ Eugenics says nothing about what those more important traits are. For some people, they may include beauty, for others, height or strength. Everyone may favor "health" but, as noted, more "health" is not free, as it requires a better immune system, more DNA repair mechanisms, and so on, so some amount of another trait or traits must be sacrificed to increase it, and that may reduce reproductive success more than the additional health increases it. Similarly, almost everyone favors more intelligence, but a more intelligent brain is a heavier and more resource-costly brain. In the end, people will differ in which traits they desire and which other traits, and how much of them, they are willing to sacrifice in order to obtain the traits they want.

Because the environment may change, making a valuable trait worthless, most people will select a mixture of traits (beyond the necessary traits), rather than maximizing just one single trait. Nevertheless, because man has been so successful primarily because of his intelligence, not his robustness, speed, agility, or some other trait, and we are even more likely to need intelligence to continue surviving, most people will put intelligence near or at the top of their list. ⁴ However, like other traits, there are diminishing returns for intelligence. That is, for each additional unit (e.g., an IQ point) increase in intelligence, an ever-increasing greater amount of other traits must be sacrificed to achieve it. Not only that, but each additional unit increase in intelligence will have less value to you than the preceding unit increase, e.g., once you have an IQ of about 120, success depends more on other factors, such as persistence, open-mindedness, etc., than on more intelligence. You would not want a child with a brain so huge that he had trouble walking, but who is only slightly more intelligent than another child with a brain half his size.

But since we know that intelligence (high IQ) correlates positively with increased living standards, less crime, and many other desirable qualities, ⁵ selecting for more intelligence, at least until those correlations no longer hold, offers the best chance of avoiding an unpleasant

future. There is certainly no other trait that has any chance of affecting our future in a positive way as much as intelligence. Yet, our government decision makers ("I am the Decider," G.W. Bush), at the urging of the egalitarians, continue to promote a dysgenic, low IQ future for our country.

A minimum birthrate of 2.1 children per woman is required to maintain a population. Based on 2004 fertility rates, non-Hispanic white women will have 1.847 children; non-Hispanic black women, 2.02 children; and Hispanic women, 2.82 children. Almost half the children in the U.S. under age 5 are non-white. ⁶ As those numbers show, whites are going extinct ⁷ and there will be fewer and fewer people with red and blond hair ⁸ and blue and green eyes.⁹

Given that the average IQs of the increasing ethnic groups is lower (except for East Asians), the average IQ in the U.S. will fall, the standard of living will decrease, crime will increase (Schuster, 1982), the U.S. will no longer be competitive in highly technical industries, and it will no longer be a world military power. ¹⁰ As IQ drops, so does productivity, because high IQ people are more productive than low IQ people – that is why their income is higher. (Herrnstein, 1994). And, since one cannot consume what is not first produced ("If you don't work, you don't eat."), consumption (Gross Domestic Product per person), which correlates 0.73 with IQ (Lynn, 2002a), will also fall, until the country reaches Third World levels. ¹¹



passage of the 1965 Immigration Act, and Figure 32-2 shows who the immigrants were in 2000.

Using a British average IQ set at 100, the average IQ in the U.S. in 1960 would have been about 98. (Lynn, 2006a, p. 174). The average IQ in Mexico, where most of the Latin Americans are from, is 87. $\frac{13}{13}$

Average IQ also falls because more intelligent people have fewer children. ¹⁴ Table 32-1 shows that 22% of the white children had a mother whose IQ was over 110, but only 2% of the children of blacks and Latinos did. ¹⁵ On the other hand, 69% of the black children and 64% of Latino children had a mother whose IQ was less than 90, but only 19% of the white children did. As Table 32-1 shows, whites are slightly raising their IQ, while blacks and Latinos are drastically lowering theirs.

Even without the ethnic and racial lowering of IQ shown in Table 32-1, women in the bottom 5% of intelligence have their first baby more than seven years earlier than women in the

top 5%, and they have more thereby children. directly lowering national intelligence. 16 Fully one-third of women in their late 30's with graduate degrees have no children (Lynn, 1996), and that is also true of blacks. 17 The U.S. abortion rate for women 20 yrs of age and older was 44.3 for women with a high school education but only 3.2 for those who had less than eight schooling, further years of lowering national IQ. (Henshaw, 1983, p. 10). As the average IQ in the U.S. falls. SO will achievements. This is. of course, expected as intelligence correlates with achievement.

Table 32-2 (<u>Lynn, 2006a</u>, p. 177) gives attainments in math and science. The results

The Next Generation So Far, for Three Ethnic Groups in the NLSY							
	As of 1990, the Percentage of Children Born to Women with:						
	IQs Less than 90	IQs Higher than 110					
Whites	19	22					
Blacks	69	2					
Latinos	64	2					
National population	33	15					

Table 32-1

	East Asia	Europe	S. America	S. Asia	Africa		
IQ	+0.33	0.00	-0.66	-0.93	-2.00		
Attainment	+0.44	0.00	-2.27	-1.30	-2.44		

Table 32-2

are given in units of standard deviation ("SD"; 1 SD = 15 IQ points) and Europe is taken as the norm (IQ= 100). Attainment falls sharply with even a small drop in IQ. ¹⁸ Eugenics has been practiced with domesticated animals and plants since they were first domesticated, thousands of years ago, and it is practiced today even more rigorously using our knowledge of genetics. We would not have all the protean breeds of dogs, cats, horses, chickens, pigeons, corn, rice, other grains, and so on were it not for selective breeding, i.e., eugenics.

It is only when eugenics is practiced on humans that people are repelled. The reason is that selective breeding of humans requires making a judgment as to which humans have alleles that are worthy of propagating and which do not, and that contradicts egalitarianism, the ideology that all people are genetically equal. Even when a person is genetically severely handicapped or mentally retarded, propagation is considered a basic human right and many people are reluctant to discourage it. ¹⁹

Nevertheless, humans practice eugenics on other humans every day all over the planet, and it is highly likely that the reader himself has done so. Every time a person selects or rejects a person for a sexual relationship, he or she is practicing eugenics. ²⁰ A person's appearance, personality, and success in life all have strong genetic components. Even a prostitute is reluctant to have sex with a person she (or he) considers repulsive. And today, in the West, genetic screening is not uncommon. People who know they are a carrier for a genetic disease may decide not to have children or to abort a fetus that has one or two alleles for the disease. ²¹ They, too, are practicing eugenics.

If no one practiced eugenics and mates were chosen randomly, so that couples had sex without regard for any of the heritable traits of their partner, behavior that would win high praise from the egalitarians, the results would not be pretty. Those who are best at increasing their numbers will do so and, once the earth can no longer support any more humans (and after it is thoroughly polluted and many other species have been driven extinct), those who are best at surviving in those overcrowded and desperate conditions will increase their numbers; when there are too many people, many of them starving, a modern civilization will no longer be possible. Just as fish trapped in a dark cave for millions of years become blind because sight is no longer needed for reproductive success, so humans would lose the alleles for the traits needed for reproductive success in a modern civilization, such as abstract thinking, impulse control, long term planning, altruism, and cooperativeness. ²² At some point, they would be "human," only in the loosest sense of the word. Eugenics, influencing the heritable qualities of the next generation, is not only desirable, but necessary if we are to remain "human."

The reason eugenics is feared, even by biologists who ought to know better, can be answered in a single word, "government." When those who control the government make eugenic decisions for everyone else, the decisions are made on the basis of which traits are most desired by the people who control the government, not on the basis of what traits you want your child to have. And what traits do those who control the government want those who do not control the government to have? Well, like the New Soviet Man, they should be compliant and ready to sacrifice themselves for the government out of the picture, we are left with individuals making their own eugenic decisions, selecting all sorts of different traits that they personally find desirable, based on their own experiences.

In 1980, Robert Graham started a sperm bank that made the sperm of Nobel Prize winners ("geniuses" ²⁴) available to women who wanted to become pregnant. It closed in 1999. Sperm banks have discovered that women do not choose sperm just on the basis of the intelligence or success of the donor. They pick the physical characteristics they want in their child, usually selecting characteristics similar to themselves. They certainly want a healthy good-looking child of above-average intelligence but, after that, they select on the basis of all sorts of quirky things, such as does the sperm donor like cats, was he born on a farm, is he a good swimmer, etc.?

If people make their own eugenic decisions, and the technology is available to implement those decisions, they will generally select for traits that will improve the health, intelligence, attractiveness, and fitness of the next generation. If government bureaucrats do the selecting, a quite different result is likely. Western countries, for example, by paying more welfare for more children ("You feed, we breed"), provide a perverse incentive ²⁵ that encourages people who are incapable of caring even for themselves to have children, passing on to their children the very alleles that made their parents incompetent, which is surely dysgenic. ("The rich get richer and the poor get children.")

If welfare is to be provided then, at the very least, it should be eugenic and not dysgenic. This can be done by making welfare conditioned on not having children, at least while one is on welfare. "Welfare" is nothing but a transfer of wealth from those who created it, the taxpayers, to those who did not, the tax consumers. In other words, the competent are penalized to benefit the incompetent, which is certainly maladaptive. Surely, it is not unreasonable to say that this coerced transfer of wealth will be tolerated only so long as the recipient does not make the situation worse by having more dependents. ²⁶ A person would still be free to have children, but then he or she would not receive welfare. For women, the condition of not having children could be fulfilled in a variety of ways, such as by proof of the use of a contraceptive patch or other verifiable birth control, infertility (the person is infertile or too old to have children), or sterilization. For men, a reversible or irreversible vasectomy would suffice.

Given evidence that high testosterone levels and low serotonin levels are heritable and correlate with violence, another policy that could be instituted without coercion would be to provide incentives to violent felons (who will eventually be let out of prison) if they agree to be sterilized. These incentives could include better prison facilities or privileges, or a slightly lower sentence.

Before we leave the subject of eugenics, let's consider one other issue: Could eugenics itself be maladaptive? That is, by selecting the traits we want in our children could we be making it less likely that they will be able to survive and reproduce? Surely very few parents

would intentionally do that but, since we cannot know the future, it is always possible to make a poor decision. ²⁷ On the other hand, if the selection is voluntary, people can always avoid making any decision at all and let nature take its course, perhaps thereby having more successful children.

Chapter 33

Table of Contents

FOOTNOTES

1. See (<u>Fuerle</u>, 1986) for a discussion of purposeful, goal-directed behavior and its implications. <u>Back</u>

2. The term "maladaptive" is applied to behavior that lessens an individual's fitness, his likelihood of successfully passing on his genes to the next generation. The term is not applied to every mistake an individual makes, nor to behavior that seems to be adaptive at the time, but turns out to be maladaptive later – perfection is not required. But if there is particular persistent behavior in at least a portion of the population that lowers the reproductive success of those who practice it, that behavior is maladaptive. Most maladaptive behavior was adaptive in the past, but the environment changed so that it is no longer adaptive. <u>Back</u>

3. Ignore the programming difficulties for the moment and think of eugenics as a thought ("gedenken") experiment, simulated on a computer. The computer sets the minimum amount of traits required to live and reproduce, and you select traits from the remaining resources, trading off some traits for others until you achieve the mix you want; every trait is obtained in the most efficient manner possible. The computer assumes no initial genetic defects, though some may occur later if you don't select enough DNA repair mechanisms. You compete against other players and the computer (i.e., no eugenics). Whoever is left wins. <u>Back</u>

4. Even our scientific name, *Homo sapiens sapiens* (man the very wise) denotes high intelligence as our defining trait. <u>Back</u>

5. Even for corruption, the correlation with intelligence is -0.708. (Lynn, 2002a). Back

6. (AFP, Oct. 1, 2006). In 1990, children ranked third in importance for a successful marriage; by 2007, they ranked eighth. By nearly 3:1, Americans say that the main purpose of marriage is the "mutual happiness and fulfillment" of adults rather than the "bearing and raising of children." ("As Marriage and Parenthood Drift Apart, Public Is Concerned About Social Impact," *Pew Research Center*, July 1, 2007). "In terms of intergenerational solidarity, the importance of the child as an investment for material support in old age has been limited by the social security and pension insurance system, which has eliminated people's immediate dependence on children..." ("The National Report on Family," *Czech Ministry of Labor and Social Affairs*, Aug., 2004, quoted in "Where Have All the Children Gone?" Ziggi's Corner)."Today, children no longer represent investments; instead, they have become pets ... many young couples ... have consciously decided to have a dog instead of a baby." (Id.) Back

7. Whites are already a minority in 1 in 10 counties in the U.S. (Pollard, K., "<u>10% of U.S.</u> <u>Counties Now 'MajorityMinority</u>"," *Population Reference Bureau*, Aug., 2008), but motherhood could, in theory, make a comeback. Women who don't have alleles for desiring children do not pass on those alleles, but women who have those alleles do. Thus, after a few generations the alleles in the gene pool should be mostly those that induce a desire for motherhood. (<u>Aarssen</u>, <u>2007</u>). (However, one could fairly ask, "Why, then, it is not already so?") <u>Back</u>

8. "As the amount of migration, inter-marriage and mixing increases we will see them [various shades of red and blond hair] all but disappear." Dr. Desmond Tobin, researcher in hair cell biology at Bradford University. Red and blond hair and blue and green eyes are recessive, so the alleles for them will not disappear, but they will be so widely dispersed that only very infrequently will they be expressed. <u>Back</u>

9. "About half of Americans born at the turn of the 20th century had blue eyes, according to a 2002 Loyola University study in Chicago. By mid-century that number had dropped to a third. Today only about one 1 of every 6 Americans has blue eyes, said Mark Grant, the epidemiologist who conducted the study." (Belkin, D., "Don't it make my blue eyes brown," *The Boston Globe*, Oct. 17, 2006). Back

10. (Sailer, 2006). Three distinguished American scholars compared massive evidence of national I.Q. score averages worldwide and warned against the decline of any nation whose population reflects declining intelligence. Taking into consideration the differential birthrates of American ethnic stocks, they concluded that American ability is declining rapidly. (Lerner, 1984). Because the black IQ in the U.S. averages 85 and the U.S. military will not accept people with an IQ of less than about 80, U.S. wars kill a disproportionate number of white US soldiers, further lowering IQ. Back

11. Currently, the US finances current consumption by borrowing the money to pay for it, i.e., the U.S. is already bankrupt. China produces for our consumption, expecting us to repay them with even more goods at a later date. Fat chance. "The U.S. annual trade deficit, now running at a rate of more than three-quarters of a trillion annually, or 6.3 percent of GDP, is" (Anthony Fell, formerly vice-chairman of the Royal Bank of Canada. Jan. 18, 2007). Back

12. Figures from (MacDonald, K. "<u>MidEast Policy—Immigration Policy: Is The Other Boot About</u> <u>To Drop?</u>" *VDARE.com*, Jan. 31, 2007). In the 10 yrs between 1990 and 2000, the percentage of Europeans in the US population decreased 18.3%. (*US Census*, 1990 and 2000). In 2000, there were 881,300 U.S. residents from Africa, but only 5 years later there were 1.25 million. (Crary, D., "<u>Diverse influx of African immigrants search for niche</u>," *Oakland Tribune*, June 17, 2007, quoting Wilson, J., of the *Brookings Institution*, based on the U.S. Census). According to the <u>Wright Island Model</u> (Wright, 1931), an established theorem of population genetics, one-way immigration causes the complete genetic extinction of the target population. (Wright, 1931). <u>Back</u>

13. (Lynn, 2002a). The average IQ of Mexicans coming to the U.S. is likely to be lower than 87 because most are peasants. The average IQ of Africans coming to the U.S. is likely to be a higher than 67 because, while those coming as refugees may have an average of 67, the IQ of those coming on other programs is likely to be higher. By importing the more intelligent (and therefore more productive) people from Africa, both the U.S. and Africa become poorer. To paraphrase a quote attributed to Will Rogers, "When the Africans left Africa and went to the U.S.A., the average intelligence of both places went down." Back

14. (Van Court, 1985; Lynn, 2004; Vining, 1984). This is called "dysgenic fertility." There is a correlation of – 0.73 between IQ and fertility; dysgenic fertility has been estimated to have caused a decline in the world's genotypic IQ of 0.86 IQ points for the years 1950–2000. An additional decline of 1.28 IQ points in the world's genotypic IQ is projected for the years 2000–

2050. (Lynn, 2007; Shatz, 2008). To put this another way, more intelligent people, who have fewer children but expend more care on each one, are more "K" orientated. (Chap. 11; <u>Gillespie, 2008</u>). And criminals, who have lower IQ's, (ave. = 92; <u>Herrnstein, 1994</u>, p. 242), have more children than non-criminals. (Lynn, 1995). <u>Back</u>

15. (<u>Herrnstein, 1994</u>, p. 354). "NLSY" is the National Longitudinal Survey of Youth; "National population" is the U.S. average. <u>Back</u>

16. (<u>Herrnstein, 1994</u>, p. 351). The correlation between IQ and fecundity is -0.81. (<u>Intelligence and Latitude in the U.S.</u>," *The Audacious Epigone*, Apr. 13, 2007). Radical feminism, which glorifies a career over motherhood, must bear some of the responsibility for the failure of Caucasians, particularly above-average women, to replace themselves. Ironically, there is some evidence that it is not even healthy for a woman to forego having children. (<u>Grundy, 2006</u>). <u>Back</u>

17. Although Negro slaves were encouraged to produce more slaves, "Even then birth control was secretly exercised by the more intelligent slaves, as we know from many reminiscences." "On the other hand, the mass of ignorant Negroes still breed carelessly and disastrously..." (DuBois, 1932). Back

18. '... a 'mere' 2 point drop of a population's average I.Q. will cut the percentage of geniuses (anyone having an I.Q. over 150) to less than half! And by the time our [U.S.] actual amalgamation [with lower IQ people] is almost complete, our American I.Q. will be about 92, meaning that the percentage of geniuses will decrease to less than 1/30th the WWII percentage. And the percentage of supergeniuses (anyone over 180) will decrease to less than 1/500th!" (Falconi, O., "Where's America's Gene Pool Heading?"). Back

19. Some deaf couples want to have deaf children and will abort non-deaf fetuses until they do. (Cooley, 2006). Back

20. The high intelligence of European Jews (average IQ =107 to 115) is sometime attributed to betrothing the brightest boy to the daughter of the richest man. $\frac{\text{Back}}{\text{Back}}$

21. In preimplantation genetic diagnosis (PGD), embryos fertilized *in vitro* are tested and discarded it they carry a gene that causes a predisposition to a disease, such as cancer. (Harmon, A., 2006). For a good discussion of the issues, see (Whelan, J., "<u>Reproduction</u> revolution: Sex for fun, IVF for children," *New Scientist*, Issue 2574, Oct. 20, 2006, pp. 42-45). Back

22. "... slightly deleterious mutations arise in each generation. They are normally removed by selection, but if selection is experimentally prevented then deleterious mutations accumulate and the fitness of the average member of the population declines over time." (<u>Ridley, 1996</u>, p. 289). <u>Back</u>

23. "Adherence to Marxism-Leninism, and individual behaviour consistent with that philosophy's prescriptions, were among the crucial traits expected of the New Soviet man." (*Wikipedia*, "<u>New</u> <u>Soviet Man</u>"). <u>Back</u>

24. (Plotz, D., *The Genius Factory*, 2005). Back

25. A "perverse" incentive can be defined as an incentive that produces a result that is the opposite of the stated desired result. <u>Back</u>

26. In the United States in the 1960s children became a cash crop for the poor. Mothers on welfare (AFDC) had an average of 2.6 children each; non-AFDC mothers averaged 2.1. (Wright, 1997, p. 64). The IQs of mothers of illegitimate children is ten points lower than mothers of legitimate children. (Wright, 1997, p. 131; Herrnstein, 1994, pp. 191-201). Social Security may also lower the number of children productive people have by increasing their taxes during child-bearing years and making adults less dependent upon their children in their old age. (Juurikkala, 2007). Back

27. Culturally required or encouraged behavior can certainly be maladaptive (<u>Barkow, 1991</u>, p. 293-322), so choosing a child's traits can be expected to sometimes be maladaptive as well. We are physically generalized apes who have specialized in thinking. In our current environment, this has paid off big time, but future environments may be very different, and we may find ourselves selected for surviving on little energy, where a big brain is a liability, and assets are a cast iron stomach and the immune system of a Komodo Dragon. <u>Back</u>

Chapter 33 - Re-Classifying the Left

"I yam what I yam."

Popeye, the Sailor Man

Returning to the subject of re-classification (<u>Chapter 28</u>), let's consider a different sort of classification, the classification by psychiatrists of certain behavior as "mental illness" in their manual, "<u>Diagnostic and Statistical Manual of Mental Disorders</u>." The objectivity of psychiatrists came into question in 1964 when U.S. Senator Barry Goldwater was the Republican candidate for President. Without ever examining him, 1,189 American psychiatrists responded to questions about the candidates in a (now-defunct) magazine and stated that Goldwater was mentally unbalanced. (Goldwater sued and won a substantial settlement; such behavior by psychiatrists has been banned as unethical.)

California psychologist Edward Dunbar has now circulated draft guidelines for a new category in the Manual for people who are "pathologically" prejudiced against gays, Jews, blacks, or others, but presumably not for people who are prejudiced against racists, homophobes, Christian fundamentalists, right-wing Republicans, and Nazis. ¹ Presumably, people who are "pathologically" prejudiced <u>in favor of</u> certain groups would also end up in the Manual. Since everyone has likes and dislikes about groups of other people, Dr. Dunbar can determine which feelings constitute "prejudice" only by determining whether or not those feelings are justified by the facts. If a Jew hates the Nazis, is he "prejudiced" or does he have a perfectly normal and justifiable feeling? Must every psychiatrist be an historian?

Why is certain behavior listed in the Manual as a mental illness?² The reason usually given is that the behavior impairs the ability of a person to function "normally," i.e., to work and take care of himself and his dependents. Biologically, such behavior is maladaptive because it reduces reproductive success. With few exceptions, the behavior that your genes induce in you (i.e., to nurse, care for your children, avoid danger, acquire resources, find a mate, have sex, etc.) is adaptive and behavior that is contrary to what your genes induce you to do, is maladaptive.

Let us first concede that any behavior, even behavior that is induced by our genes, is maladaptive if it so dominates a person's life that he can not otherwise function. Someone who cannot hold a job because he is obsessed with sex, or with hating an ethnic group, or with fighting hatred of an ethnic group, probably has some psychological problems. Is racism, homophobia, etc. maladaptive, even if it is not obsessive, so that it could be described as a "mental illness"?

Homosexuality was actually in the Manual until 1973, when it became fashionable to the left and was removed. Homosexuality is hardly adaptive since it does not induce sexual behavior that passes on one's alleles, and any argument that it is not maladaptive will be devious at best. ³ It is not contagious and it is not a threat to heterosexuals, other than the possibility that it might reduce the number of mates available to the opposite sex. Science is now uncovering more and more evidence that homosexuality is genetic, epigenetic, or due to exposure to the mother's hormones in the womb ⁴ and is not a chosen behavior (except when the opposite sex is unavailable, as in prison). But a great many conditions in the Manual, such as schizophrenia, very likely also have a genetic basis, so that by itself should not keep homosexuality out of the Manual.

What about homophobia, a hatred of homosexuals? Should it also be in the manual? Homosexuality is accepted by some cultures and condemned by others, so there is unlikely to be a genetic inducement towards homophobia. But if homophobia is not so severe that it impairs a person's ability to pass on his own genes (e.g., by physically attacking homosexuals and ending up in jail), it is probably less maladaptive than not liking broccoli.

Racism and ethnocentrism, however, are different. Certainly, caring for your family is adaptive, as they have more of your alleles than do strangers, so, by helping them, you help your own alleles to be passed on; conversely, it is usually maladaptive to not care for your family. Mathematical analysis of genetic distances has now shown - surprise, surprise - that your ethnic group also carries more of your alleles than do other ethnic groups, and the same is true of your race. (Chap. 7). Thus, using your resources to help people of your own race is adaptive and using your resources to instead help people of other races is, when there is no *quid pro quo*, maladaptive. In other words, it is the <u>anti</u>-racists who should be labeled "mentally ill" and worry about being put into the Manual, not the racists. Like the taxonomists and many social scientists, the psychiatrists have been corrupted by egalitarianism.

Man is a highly social animal and readily forms groups that compete with other groups for territory, mates, and resources. Given our social nature and the fact that resources are limited, the formation of a manageable group is the best strategy for surviving against competing groups. A loner, at least until modern times, would not have survived for long. For a group to be effective, it must be cohesive – the individuals in it must stick together and sacrifice for others in the group. Such cohesiveness cannot be easily obtained unless the people in the group are genetically similar so that any sacrifice for others is for those who have more of one's own alleles and is therefore, in a biological sense, less of a sacrifice than it is a gain in fitness. Ethnocentrism and racism are built into our nature; ⁵ the alleles of those who support their own genetic family are more likely to survive than the alleles of those who do not, i.e., anti-racism is maladaptive. ⁶

"In 1998 President Clinton boasted to a cheering Portland State University audience that by 2050 whites would be a minority in America." ⁷ Huh? White college students cheering for the loss of their homeland and their own extinction? And no one thinks there is anything "abnormal" about that? How can any people survive who cheer the prospect of their own demise? ⁸ Surely, this is as pathological as taking poisoned "Kool-Aide" at Jonestown, yet it is considered highly moral, not sick. Jews condemn and ostracize "self-hating Jews," but a majority of whites love and lionize "self-hating whites." Can there be any act of betrayal greater than rejecting the genetic heritage that made such betrayal possible?

Noel Ignatiev, who is white (but Jewish), ⁹ a fellow at Harvard's WEB DuBois Institute, and the founder of the journal "Race Traitor," whose slogan is "Treason to whiteness is loyalty to humanity," wrote, "abolishing the white race is desirable." ¹⁰ Another Jewish writer, Susan Sontag, wrote, "The white race is the cancer of human history." ¹¹ Whites supposedly benefit from the "privilege" of being white, which consists of being able to live in safe, white neighborhoods, go to safe, white schools, have white friends, etc., in other words, enjoying and participating in the civilization that they themselves created. Condemning "white privilege" not only makes it hateful and racist for whites to create a society that others are not capable of creating, it also contradicts the multicultural argument that all cultures are equal.

The latest craze on college campuses is "whiteness studies," which are courses or presentations, usually to whites by whites, on how evil whites are (e.g., "Exploration of Whiteness Week" at Occidental College). ¹² Tim Wise, another Jewish white-hater, earns \$4000 plus expenses for speeches that induce white college students to flagellate themselves with guilt and shame ("my sin is my skin"), ¹³ thereby enabling him to live in a white neighborhood and send his children to white schools. ¹⁴ "It is an established fact that white people favor integration throughout the United States exactly in proportion as they do not need to practice it." (Putnam, 1961, p. 36).

On January 15, 2007 Jared Taylor was scheduled to take the "Weakness" side

of a debate on "Racial Diversity: North America's Strength or Weakness," but when the "Strength" side of the debate, Professor David Divine of Dalhousie University in Halifax, Nova Scotia, Canada, chickened out, Taylor decided to present his speech at a small conference room he rented at the Lord Nelson Hotel. The audience, mostly young, white protestors, shouted, banged pots and pans so he could not be heard, then surrounded Mr. Taylor, linked arms, forced him from the room, and tore up copies of the <u>American Renaissance</u> that he had brought to hand out and tossed them at his head. ¹⁵ (Fig. 33-1).

No arrests were made although the identity of the ringleader is known. ¹⁶ One may wonder why whites would risk jail to silence someone who tries to speak for the interests of whites. With the exception of radical Muslims, the most ideologically



Figure 33-1

committed people in white countries today are the white egalitarians. They are the people who are so incensed by perceived affronts to non-whites they will use violence against their own people.

The first step to mental health is to love yourself. Even if you are the worst SOB ever, you can still be a mentally healthy worst SOB ever if you love yourself. And, even if you are Mother Teresa, if you don't like yourself, you are not mentally healthy – hence the Popeye quote at the beginning of this chapter. The white anti-racists don't like what they are. $\frac{17}{10}$

How could creatures evolve who are capable of not liking themselves? Surely, such creatures would have been driven extinct long ago by others of their kind who <u>do</u> like themselves. Part of the answer is that man, unlike most other animals, does not entirely follow his instincts. Man feels his instincts as urges, but since man has free will he can override those urges by an exercise of his will, and he often does so, sometimes choosing maladaptive behavior instead of biologically programmed adaptive behavior. ¹⁸ That is why we have suicides, ¹⁹ miscegenation, and a host of other maladaptive behaviors.

We inherit urges to behave in ways that increase our reproductive success. Foremost among these, often ahead of even self-preservation, is sex, the urge to reproduce. But, like all urges, it can be satisfied in multifarious ways that do not achieve reproduction. Similarly, our urge to survive, so that we can pass on our alleles to the next generation, can be perverted to accomplish something else entirely – the reproduction of those who possess far fewer of our alleles than do our own children. This is the perversion of the left, who sacrifice the continuation of their own alleles to proliferate alleles they don't possess. Urges demand to be satisfied, but they can be misdirected to obtain satisfaction without fulfilling their *raison d'être*.

Some of the actions of anti-racists are more maladaptive than if they just went out and killed themselves. For example, a white anti-racist who is responsible for bringing 11 Bantu s-S African children into a European country causes a loss to his genetic interests equivalent to the death of 10 white children. ²⁰ Being an anti-racist can be more maladaptive than behaviors that society rigorously condemns, such as murder, child molestation, and failing to support one's children. Yet "anti-racism" is never likely to enter the Manual, though it may be quite a battle to keep "racism" out of it.

Every normal person is programmed to pass on his or her unique set of alleles; anyone not so programmed is an accident of nature who will die without issue. For both sexes, no price, not even the risk of death, is too high to pay to achieve this goal. If a person does not himself reproduce, does not help those who carry more of his alleles to reproduce or, at the very least, does not influence the reproductive choices made by others so as to increase the number of his alleles in the next generation (e.g., by discouraging miscegenation), he has failed his life's biological mission and is but an inconsequential terminal twig on the Tree of Life.

He may be a financial success, a social success, or any other kind of success, but he is a biological success only if his actions increase the number of his alleles in the next generation, not only in absolute terms but as a percentage of all the alleles in the population. And, note carefully, some persons of the opposite sex carry more of his alleles than do other persons. It is those persons who carry more of his alleles who are the most important to his own reproductive success because, for each of his alleles that they also have, his children with them will have twice as many of those alleles. Table 33-1 gives the percent increase in kinship a parent gains with his child when the other parent of his child is from his own population. For example, if a European Caucasoid (left column) has a child with another European Caucasoid, his kinship with that child will be 66% greater than if he has a child with an African (2nd column), and vice versa. ²¹

Lloro'o	Population									
anothe	Africans (AFR)	AFR								
way	Non-European Caucasoids (NEC)	54	NEC							
of	European Caucasoids (EUC)	66	6	EUC						
at it.	NE Asians (NEA)	70	26	38	NEA					
Becau	Arctic NE Asians (ANE)	80	28	30	18	ANE				
African	Amerindians (AME)	90	38	42	30	23	AME			
Pacific Islande are so	SE Asians (SEA)	88	38	50	25	42	54	SEA		
	Bacific Islanders (PAI)	100	38	54	29	47	70	17	PAI	
	New Guineans & Australians (NGA)	99	47	54	29	41	58	50	32	NGA
unrelat	Ave. % gained over other 8 races	81	34	43	33	39	51	46	48	47
the		Table	33-1							

child

of two Africans would carry 100% more (i.e., twice as many) uniquely African alleles than a child of an African and a Pacific Islander. ²² Table 33-1 shows only the loss of alleles from different mates, however, and loss of alleles from interbreeding is not the same thing as less reproductive success. Africans lose the most alleles by mating with other races instead of with their own race, but they may gain more reproductive success if their hybrid offspring have traits that make them more likely to survive, and that gain in alleles may more than offset the loss from not mating with another African.

A person also has a strong genetic interest in <u>who</u> reproduces with persons of the opposite sex who carry more of his alleles, e.g., his children, his blood relatives, and people within his ethnic group and race – because he can place more of his alleles in future generations if they mate with people who carry more of his alleles. It is those individuals who are most genetically distant from him, i.e., blacks for Eurasians, ²³ who will most dilute his alleles in the next generation and most reduce his fitness, i.e., the likelihood of his alleles surviving in future generations will decrease. Thus, a normal, healthy person will be dismayed and angry when a person of his race mates with a person of different race, especially a black,

because they are the most genetically different.

What are we to say, then, of whites today who not only make no objection to this coupling but actually encourage it? It is not believable that a lineage that has survived since mate choice began has produced an individual who has lost the most basic instincts that kept that lineage from going extinct. Of course, like the rest of us, he has been relentlessly subjected to the pervasive propaganda that permeates our society, so we should not be surprised if his brain has been so thoroughly washed that he now fears his own instincts more than the extinction of his lineage.

The egalitarians have succeeded, surely beyond their most extravagant hopes, for now almost all whites not only follow, but vehemently defend, the malignant ideology of egalitarianism, that people of all populations are genetically the same. Oprah, who is black, can say on national TV that is it hateful for whites to want to have more children in order to preserve their kind, and the only whites who are offended are a few racists. A white woman in Sweden says she likes seeing blond, blue-eyed children, and white Swedes condemn her. Today's whites, males and females alike, cheer their own loss of fitness and eagerly anticipate the day when the presence of a white person, live or in history, is nowhere to be found. As Jean-Francois Revel wrote, "Clearly, a civilization that feels guilty for everything it is and does will lack the energy and conviction to defend itself." Life is not a gift - it must be seized – and only those who love it above all else shall have it.

Before leaving this chapter, let us address the important question of <u>why</u> so many whites are anti-white. It has not escaped notice that the most fervent of the white white-haters are not only on the left politically, but many are Marxist. When the working class did not rise up against the exploiting capitalists, as predicted by Marx, the Marxists ideologues of the Frankfort school (Frankfort, Germany, which moved to Columbia University in New York City when Hitler came to power) sought out other classes of exploited victims who could be induced to rebel against the hated establishment. They settled on women, homosexuals, and minorities. The Marxists have no real concern with these oppressed classes, but find them handy weapons for weakening white societies so that they can be more easily overthrown. ²⁴ Why so many whites eagerly embrace white-hating, however, remains to be explained.

If you have been reading this book, you know that egalitarianism is clearly false – populations are not genetically the same and that is obvious even to small children. To hold a view that so clearly conflicts with reality is surely psychopathological, i.e., these people are mentally ill. Nor is it a trivial illness, as it perverts their most important biological function – passing on their alleles. It is only because psychologists and psychiatrists are also mired in the same psychopathology that egalitarians do not have their own special place in the Manuel.

I have written elsewhere on this subject, ²⁵ where I argue that the problem has its genesis in the inevitable conflicts that children have with their parents. If children decide that it is the parents who are wrong, unfair, even evil, they readily identify with those whom they see as similarly oppressed, urging them to overthrow the ruling class, i.e., initially their white parents but, by projection, all whites, including themselves. The parent's justification for ruling over them, that there are biological classes, in this case, children and adults, must be refuted, hence fervently held egalitarianism, that there are no biological classes. Marxism, which promotes class warfare and hatred of those who have and rule (i.e., for children, their parents), is just an extension of this psychopathology. ²⁶ Unfortunately, the egalitarians will be with us forever unless children can be raised to see their parents as wise and loving guardians, not as arbitrarily frustrating obstacles. ²⁷

Chapter 34

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FOOTNOTES

1. (Vedantam, S., "<u>Psychiatry Ponders Whether Extreme Bias Can Be an Illness</u>," *Washington Post*, Dec. 10, 2005). <u>Back</u>

2. A cynic might suspect that the people making the decisions are financially tied to the pharmaceutical industry and that the mental disorders that goes into the Manuel are those that require treatment with prescription drugs, e.g., schizophrenia,. (<u>Cosgrove, 2006</u>; <u>Moynihan</u>, <u>2006</u>). <u>Back</u>

3. "The best estimates of the fitness cost of homosexuality hover around 80 percent: in other words, gay men (in modern times, at least) have only 20 percent as many offspring as heterosexuals have." (Hooper, J., "The Great Synthesizer," *The Atlantic Online*, Feb., 1999). Some claim homosexuality persists because homosexuals help raise close kin, thereby passing on their alleles for homosexuality, of which their close kin may have some. (Vasey, 2007). Also see ("A Wild, and Gay, Kingdom," World Science, October 24, 2006; Vasey, 2007). But see (*Wikipedia*, "Pathogenic theory of Homosexuality"). Back

4. (<u>Savic, 2008</u>; "<u>The Science of Sexual Orientation</u>," *CBS News*, Aug. 26, 2006; "Further evidence that genetics has a role in determining sexual orientation in men," *PhysOrg.com*, Sept. 7, 2007; <u>Manning, 2004</u>). <u>Back</u>

5. (<u>Barkow, 1991</u>, p. 149). Babies as young as three months prefer the faces of someone of their own race to the faces of people of a different race. (<u>Kelly, 2005</u>; <u>Bar-Haim, 2006</u>). <u>Back</u>

6. "The inclination to form bands, cliques, clubs, secret societies, and 'in' groups to the benefit of themselves and the exclusion of others is part of the coalitional psychology that enabled our ancestors to thrive." (Allman, 1994, p. 251). Back

7. (Roberts, P.C., "<u>That Buchanan Book</u>," Jan. 8, 2002). Robert Frost defined a "liberal" as someone "too broadmined to take his own side in a quarrel." <u>Back</u>

8. Even in the 1960s the mostly-white <u>Weatherman</u>" advocated the end of the white race: "I remember going to the last above ground Weatherman convention [in 1969], and sitting in a room and the question that was debated was, 'Was it or was it not the duty of every good revolutionary to kill all newborn white babies.' " (McAdam, D., professor of Sociology at Stanford University, in "Picking Up the Pieces," Part 5 of the PBS series "Making Sense of the Sixties," televised Jan. 23, 1991). "The goal of abolishing the white race is on its face so desirable that some may find it hard to believe that it could incur any opposition other than from committed white supremacists." (Professor Noel Ignatiev). Perhaps "leucanthrophobia," the hatred of white people, should be listed in the Manual? <u>Back</u>

9. Many Jews do not consider themselves to be "white." (Lerner, M., "Jews are Not White," *Village Voice*, May 18, 1993). Jews who wish to condemn racism, but not themselves, say, "I'm not white; I'm Jewish." <u>Back</u>

10. ("Abolish the White Race," Harvard Magazine, Sept-Oct, 2002). Another quote from the august professor, who has not read Section II of this book: "The key to solving the social problems of our age is to abolish the white race." By convincing blacks that white racism, rather than their own deficiencies, is the source of their problems, egalitarians justify black crime against whites. (Chapter 12). Even Lincoln, in his Emancipation Proclamation, has been

accused of implicitly urging slaves to rebel and attack whites, "[It is a] proposal for the butchery of women and children, for scenes of lust and rapine, and of arson and murder." (Horatio Seymour, former governor of New York). <u>Back</u>

11. (Partisan Review, Winter 1967, p. 57). Back

12. "The goal of WS [whiteness studies] is to entrench permanent race consciousness in everyone—eternal victimhood for nonwhites, eternal guilt for whites ... Abolitionism is also a strategy: its aim is not racial harmony but class war. By attacking whiteness, the abolitionists seek to undermine the main pillar of capitalist rule in this country ... The task is to gather together a minority determined to make it impossible for anyone to be white." (Barbara Kay, Canada's *National Post*). "Black studies celebrates blackness, Chicano studies celebrates Chicanos, women's studies celebrates women, and white studies attacks white people as evil." (Conservative social critic David Horowitz). <u>Back</u>

13. Inducing shame and guilt into the mind of one's enemies is the surest way to undermine their will to resist their displacement. Any creature, man or beast, who questions his right to be what he is, will soon be no more. <u>Back</u>

14. Whites who are more educated live in whiter neighborhoods and avoid sending their children to schools that have more than a few token blacks. (<u>Sikkink, 2007</u>). Upon leaving office, Bill Clinton, who describes himself as "the first black president," bought a house in lily-white Chappaqua, NY. <u>Back</u>

15. Taylor's <u>censored speech</u>. Drowning out the speaker and destroying his handouts suggests the attackers have "philophobia," the fear and hatred of knowledge that is likely to conflict with beliefs that serve a desperate psychological need. <u>Back</u>

16. Selective enforcement is common. In 1996, Californians voted for Proposition 209, which banned race and gender preferences in government and education. The day after it passed, public officials filed a lawsuit to have it declared unconstitutional on the grounds that it violated the Equal Protection clause of the Fourteenth Amendment. Huh? Though the courts upheld the law, the Pacific Legal Foundation has had to draw white bureaucrats kicking and screaming through the courts to obtain even reluctant minimal compliance. (MacDonald, H. "Elites to Anti-Affirmative-Action Voters: Drop Dead," *City Journal*, Winter, 2007; La Griffe du Lion, 2000c). A similar refusal to enforce the law occurred in Seattle. (Ramsey, B., "Tiebreaker," *Liberty* magazine, Nov., 2007). Here's another Fourteenth Amendment "Huh?": "Civil rights laws were not passed to protect the rights of white men and do not apply to them." (Mary Frances Berry, former head of the U.S. Commission on Civil Rights). To paraphrase George Orwell (*Animal Farm*), "Some people are more equal than other people." Back

17. Because a person who is in conflict with his biological nature is pulled in opposing directions, he cannot attain confidence in his purpose in life; having a purpose is what makes life meaningful and satisfying. <u>Back</u>

18. Do some animals also have free will? A test that is sometimes given for self-awareness is to put a mark on the forehead of an animal then show him a mirror to see if he touches the mark on his forehead. Chimpanzees, orangutans, elephants, and probably dolphins pass, but only some gorillas do. (Zimmer, 1998, p. 132-134; *Wikipedia*, "Mirror Test"). Back

19. Suicide in the elderly may help their genes survive, however, and death may even be

programmed into the genes of some living things to die. Since territory is finite, in the absence of accidents and predation, the failure of parents to weaken and die after raising their young to maturity may reduce the rate at which generations turn over, thereby preventing the population from rapidly evolving when the environment changes. Genes that cause aging can reliably open up habitat for a new generation. (*New Scientist*, Aug. 11-17, 2007, p. 37). Of course, if space is not a problem (e.g., bristlecone pines or sequoias that cannot guarantee their space to their seedlings when they die) or predation and accidents keep numbers down, those genes would be unnecessary. (Fuerle, 1986, pp. 133-134). (Telomeres that are shortened each time a cell divides may perform this function. *Wikipedia*, "Telomere"). Back

20. (<u>Salter, 2002a</u>, p. 69). The failure of whites to act in their own interests is best exemplified by their importation into their territories, at great cost to them, of tens of thousands of African refugees, each one of which lowers the genetic fitness of whites, as suicidal a policy as any could be. (<u>Salter, 2003</u>). <u>Back</u>

21. (<u>Salter, 2002a</u>, Table 5). The children of a person who mates with someone of a different race will have ($100 \times F_{ST}/0.25$)% fewer of his alleles than if he had mated with someone of his own race, where " F_{ST} " is genetic distance. "For example, a person of English ethnicity who chooses an English spouse over a Danish one gains less than one percent kinship with offspring. But choosing an English spouse over a Bantu one yields a fitness gain of 92 percent (0.2288/0.25). [The F_{ST} in this case is 0.2288 – see Table 7-1, p. 45] In both cases the same applies in reverse order." (Id.). Back

22. Note that the average percentage is the highest (81%) for Africans because they are by far the most genetically distant from the other races. This suggests the movement of alleles in to Africa, as described in <u>Chapter 26</u>, as humans could not have advanced if the flow of alleles was <u>out of</u> Africa. Also note that the aborigines of New Guinea and Australia are in fourth place (47%) because, while they are in some ways more primitive than Africans, they are more closely related to the ancestors of the other races. (<u>Chapter 24</u>). <u>Back</u>

23. There would be a 66% loss from mating, plus possible additional losses from reduced reproductive success in the hybrid offspring due to undesirable traits and incompatible traits. Back

24. (<u>MacDonald, 2002b</u>). A class struggle makes no sense if people are genetically incapable of moving into a different class; hence, egalitarianism – everyone is genetically the same. <u>Back</u>

25. "What Makes Liberals Tick?." The degeneration of a society may be tied to the percentage of liberals (i.e., leftists, not classical liberals, i.e., libertarians) in it, and that may, in turn, be tied to parenting. In other words, the social cycle of civilizations – struggle, triumph, complacency, degeneracy, and collapse – may feed off the parenting cycle of strict discipline, relaxing standards, pampering, and spoiling, producing more establishment-hating leftists, as described in that article. Also see: *The Liberal Mind: The Psychological Causes of Political Madness*, by Lyle H. Rossiter and *Liberalism Is a Mental Disorder*, by Michael Savage. <u>Back</u>

26. Note how, more and more, the government can dictate parental behavior and seize children from their parents, and how much education is now in the hands of government teachers, instead of parents. The egalitarian left sees government as their idealized "good" parents (a "nanny state") and everyone else as children. They fear that their parents will not love them, a reasonable fear given their hostility towards their white parents, but their ideal nanny state will

love everyone. And, if everyone is genetically equal, as the egalitarians believe, being equally loved becomes a right. <u>Back</u>

27. There are less psychoanalytical explanations to white anti-racism, such as gaining status and demonstrating moral superiority, but they are more superficial and do not explain the intensity and depth of the feelings of the anti-racists. <u>Back</u>

Chapter 34 - Egalitarianism

"Whatever may be the sociological value of the legal fiction that 'all men are born free and equal,' there can be no doubt that ... in its biological application, at any rate, this statement is one of the most stupendous falsehoods ever uttered by man through his misbegotten gift of articulate speech."

Dr. Earnest Hooton, Professor of Anthropology at Harvard University 1

"Ideas have consequences," ² and one might add that bad ideas (ideas that conflict with reality) have bad consequences. Certainly the prize for the worst idea of all time has to go to Marxism and its political embodiment, Communism, which resulted in the death of over 100,000,000 people in the twentieth century. ³ Today, Marxism lives on only in the minds of academics, who live guite comfortably under capitalism. ⁴

The second worst idea could well be egalitarianism. ⁵ The dictionary says it means, "a belief in human equality." That idea might not be objectionable if it were limited equality before God ⁶ or before the law, ⁷ as in "all men are created equal," but it is now applied to genetically-controlled traits, that no population differs genetically from any other population, except in trivial differences in appearance. ⁸

But obvious racial differences in appearance are only a small percentage of the number of racial differences, and whether they are "trivial" or not depends upon who is making that decision; what is of no importance to one person may be vital to another. ⁹ As we have seen, egalitarianism must ignore some genetic differences as "trivial," though the line that divides the trivial from the important is hard to draw. Since, clearly, man's early ancestors were not the equal of modern man, egalitarians must divide our ancestors into those who were our equals ("*Homo erectus*?) and those earlier in our lineage who were not. The living are all supposedly equal and the long-ago deceased are all presumably unequal, but the vast humanity in between is anyone's guess. How far back in man's lineage is it necessary to go to reach the unequal, where differences are no longer "trivial"? And, no matter where the line is drawn, some on one side will be more like those on the other side, and those near the boundary will differ in ways so minuscule as to be of no significance.

There are a number of other problems with egalitarianism. If there are no significant genetic differences between populations, then:

"voluntarily segregated all-white and all-black societies would be equal and there would be no ethical or logical argument against such societies. It is only if the races are not equal that arguments (not necessarily valid arguments) can be made for integration or the immigration of one race into the homeland of another race; and "diversity cannot be 'celebrated' and it cannot be a 'strength' as there is no racial diversity of any significance."¹⁰

Some ideologies tell you what reality <u>should be</u> (i.e., how we should live our lives) but others tell you what reality <u>is</u>. An example of the former is modern day Christianity, other than anti-evolution fundamentalists, and an example of the latter is the old Roman Catholic Church, which insisted that the sun revolved around the earth. The ideologists who tell us what reality is typically insist that it <u>must be</u> that way and become quite agitated when reality doesn't behave the way it is supposed to, and angry at those who disturb their equanimity by pointing this out to them. Egalitarianism is such an ideology. It holds that all populations <u>are</u> genetically equal, but when reality refuses to cooperate, its adherents desperately insist that it <u>must be</u> so, that

somehow a reality in which it is not so is not possible. 11

Egalitarianism, and any ideology that conflicts with reality, is doomed from the beginning though, like a zombie, once killed it refuses to remain dead because it fulfills a psychological need. Examples abound. Communism held that people could be educated to sacrifice for the state, and that once they were transformed, their children would inherit this admirable quality. They were not and they did not. Feminism, the fatherless child of egalitarianism, held that the sexes, including confused and undifferentiated sexes, are genetically equal and therefore interchangeable, except for giving birth and nursing, where nature refused to go along. Thus, any suggestions that women cannot compete with men at sports and are less suited for careers in the military, sciences, or in math, are met with fury. ¹² Not only women, but anyone who does not measure up, including the handicapped and uninvited non-English speakers from other countries. must be raised to their inherently equal abilities by giving them the special teachers and facilities needed to let a thousand flowers bloom. Anyone incapable of distancing himself from reality who points out that, despite these efforts, people are still not equal, must be silenced, for they threaten the desperately-held beliefs of the emotionally-controlled equalizers. Every ideology that is at war with reality, as egalitarianism is, must ultimately fail; the only question is how much harm it will do before it does.

Man's ideological conflicts with reality arise from his anthropocentrism, his arrogant view that the universe revolves around him. Egalitarianism is an anthropocentric ideology – it is based on the premise that man is not like other animals, each evolving differently to adapt to a different environment, but was somehow miraculously spared the "try and die" gauntlet of evolution. Unlike animals, who fight for territories and mates, all human populations are supposedly capable of living in harmony in the same territory, cheerfully yielding to those who threaten the survival of their alleles. But the reality is that the same biological laws that constrain other animals also apply to us.

As cheerleaders have long known, people who believe that their own group is superior to other groups, even if it is not, are more successful than people who believe their group is the pits. ¹³ Greater success is an excellent reason for having a group identity and for favoring one's own group.

There is a subtle conflict between egalitarianism and man's nature as a group animal. Egalitarianism is not just an intellectual ideology – that people are genetically equal – but, in order to gain adherents, it must heavily rely upon the emotion of empathy. Normal people (i.e., not sociopaths) identify with others and can and do feel what other people are suffering. That feeling provides a basis for egalitarianism's intellectual case. But we feel empathy only because we are group animals;¹⁴ our feeling of empathy is there to control us and induce us to sacrifice for the benefit of our group ("Group Selection," Chap. 5) so that our group can successfully compete with other groups – that is its biological reason d'être. If we were not group animals, we would have no need to feel empathy. Indeed, empathy would be maladaptive and would soon disappear because those who felt it would reduce their own chances of reproducing and increase the chances of those who lacked it to reproduce, i.e., everyone would be a psychopath. Egalitarianism, however, needs that emotion to play a different and conflicting role, namely to sacrifice for other groups to the detriment of our own group. Thus, empathy is "bad" for egalitarianism when it is adaptive and does what it evolved to do - increase ethnocentricity, but "good" when it is maladaptive and does the opposite of what it evolved to do - reduce ethnocentricity by making us identify with people of other ethnies.

For millions of years, man and his predecessors lived in small groups that competed with other groups. Man evolved when individuals in his group became better adapted for surviving and reproducing not only as individuals, but also as a group. Group-orientated behavior is deeply ingrained in man's genome; ideology can suppress it, but it will not remove it. Even if two groups are genetically equal (and races are not), they are not equal socially
because the members of each group do not see the members of other groups as their equals – the members of one group are not interchangeable with members of another group, so they are not equal in the eyes of the only people who count, the members of the two groups. ¹⁵ Egalitarianism is an ideology that is at war with biology, and nature's creations cannot long survive following a self-destructive ideology. ¹⁶ Biology tells man to fight and defeat his competitors. Egalitarianism tells man, at least if he is white, to welcome his competitors and help them triumph over him.

And how will those non-whites who benefited from the white egalitarian's hara-kiri remember him? As a noble creature who would rather go extinct than forego his ideology and Christ-like morality? No, if he is remembered at all it will be as a fool who was conned into casually tossing away 3½ billion years of evolution to benefit those who were less adapted to successfully contribute to modern civilization, thereby setting back the entire human species.

In 1950, the hooligans at the United Nations officially declared that "all the races are equal in intelligence." Although losing contact with reality is a psychosis, let's be more generous and say that the statement is due to either ignorance or deception. That all human populations, living in vastly different environments all over the world for at least hundreds of thousands of years should, just coincidently, end up with exactly the same intelligence, though they differ in thousands of other traits is contradicted by every intelligence test ever given to them. Are all dog breeds also equally intelligent?

Every teacher of an integrated class, every social worker, every policeman on the beat, soon learns that the races are not interchangeable. No one denies that genetics makes dog breeds differ in intelligence and behavior, but it is a modern day sin to suggest that the same is true of human races. Although there is massive evidence (Section II) that the "Mysterious Black-White Gap" between black and white achievement is due to genetic racial differences, the egalitarians insist it is environmental – whites simply have a superior environment. But to blame whites for not giving blacks the same environment that whites have created for themselves implies that, without whites, blacks are incapable of creating that environment. Since blacks who have never seen a white person (e.g., some Africans) achieve even less than blacks who suffer under white racism, ¹⁷ that implication is no doubt true.

The logic of the egalitarian is that since everyone is <u>genetically</u> equal, the fact that everyone is not equal in wealth, accomplishments, or in other ways means that their <u>environments</u> are not equal; to an egalitarian, physical racial differences (most of Section II) are trivial and of no significance and therefore behavioral racial differences (<u>Chapter 12</u>) must be environmental, not genetic. Thus, equalizing the environments of blacks and whites will make everyone equally intelligent, civilized, and well-behaved. When it does not, a more sinister source of inequality is sought – the whites must be deliberately, or at least unconsciously, oppressing the blacks. ¹⁸ This leads to hostility towards the productive whites, who must be at least insensitive, if not wicked, and sympathy for and glorification of their less productive black victims.

Whenever a minority politician is elected to office, or achieves any position of power, he is quite explicit in stating that he wants to help <u>his</u> people, and everyone finds that normal and acceptable, and even commendable. ¹⁹ And, when he does help <u>his</u> people, he helps propagate <u>his</u> own alleles, because <u>his</u> people have more of <u>his</u> alleles than do other people; bias is adaptive. ²⁰ But such adaptive behavior is not permissible for whites, who are expected to watch their own people lose out without a whimper.

The best strategy for elected politicians is usually to offend no one. Politicians fear divisive issues like vampires fear sunlight. Ethnic strife forces them to take sides, which means losing large blocks of votes no matter which side they take. Using hate laws and censorship to stamp out those who stir up ethnic conflict makes getting re-elected so much easier. Similarly, the mass media has little to gain and much to lose from publicizing material that is insulting to

some of its viewers, readers, and advertisers. Recently, for example, the U.S. press and television refused to show cartoons of the prophet Mohammed that had sparked world-wide protests by Muslims.

Egalitarians should support democracy, especially for multicultural nations because, if everyone is genetically equal, everyone should have one vote. However, one can only imagine what would happen if the last remnants of the white majority voted as a block in their own racial interests, the way various racial minorities do. ²¹ When voters vote as blocks, one vote is not one equal portion of political influence, even in those rare occasions when influence is not for sale; eventually democracies become troops of hyenas fighting over a dead carcass. The only solutions are a dictatorship, e.g., Tito in Yugoslavia or Hussein in Iraq, who can dish out the rewards and punishments needed to hold a multicultural nation together, or libertarianism, where the government is so small that it has no loot to dish out; the latter, however, is unlikely to ever be adopted as no one wants to forego what he is now getting.

Certainly, a democracy is maladaptive for a genetically cohesive majority, as it reduces their genetic fitness. It would be far wiser for that majority to limit voting to (mostly) their own members, as the Jews in Israel have done. To the egalitarians this is, of course, the most blatant form of racism, but for the white majority the choice is racism or extinction. The minorities can always go to or form their own countries, where they are the majority, and run it as they wish.

(Genetic) egalitarianism is based not on rationality, but on the Kum-bay-yah sentimentality of universal brotherhood and love. Any facts contrary to those feel-good, but unrealistic, emotions, e.g., genetic differences, must be denied and suppressed because they are just too upsetting. Egalitarianism is stress-relief for the reality-challenged.

One can imagine an egalitarian going to a race track and saying to the first person he meets, "You know, all those horses would be equally as fast if they had just had the same quality of food and training." Blank stare. "I think some of the horses lose because people think they can't win and the horses believe it," he adds. Another blank stare. His last statement is, "Horse racing is really just plain wrong because it makes the horses that lose feel bad about themselves." Yet, when he makes the same points about people, hundreds of billions of dollars chase his every word.

Egalitarianism is a reckless experiment promoted by rebellious teenage minds, a bet of the entire future of our species, based on only the arrogance of those who will brook no challenge to their ideology. When the experiment is finally complete, and human diversity has been replaced by a single mongrelized breed incapable of maintaining a modern civilization, it will be too late to recover what we once had.

Chapter 35

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FOOTNOTES

1. (<u>Hooton, 1939</u>, p. 342). <u>Back</u>

2. (Weaver, R. M., "Ideas Have Consequences," University of Chicago Press, 1948). Back

3. (Courtois, S., et al., "The Black Book of Communism: Crimes, Terror, Repression," *Harvard University Press*, 1999). <u>Back</u>

4. Japan, S. Korea, and China are three market-capitalist countries whose bright lights are easily visible from space. Nearby is a strange dark shape - socialist North Korea. The 38th

parallel that divides North and South Korea is the only man-made line that can be seen from space. Back

5. Marxism is based on egalitarianism. "[Communism and socialism] ... drew their major nourishment from supposedly unwarranted economic and social inequalities among men. To recognize that many of the inequalities were not unwarranted, that they were instead biologically constituted and consequently inevitable, was to cut to the root of every left-wing doctrine, called by whatever name." (Putnam, 1967, p. 9). Back

6. On the other hand, "Religious people who insist that 'all men are equal in the sight of God,' thereby plainly reveal their conviction that men ought to be treated as equals here and now." (Earnest A. Hooton, Professor of Anthropology at Harvard University, quoted in Simpson, 2003, p. 290). <u>Back</u>

7. U.S. Declaration of Independence, written by Thomas Jefferson, who also wrote, "In memory they [blacks] are equal to the whites; in reason much inferior, as I think one could scarcely be found capable of tracing and comprehending the investigations of Euclid; and that in imagination they are dull, tasteless, and anomalous." <u>Back</u>

8. Note that "egalitarianism," as used in this book, is the dictum that everyone is <u>genetically</u> equal, i.e., "bioegalitarianism"; it does not refer to making people <u>economically</u> equal. An argument can be made that sharing resources, i.e., "economic equality," is, or at least was, somewhat genetically-induced and adaptive because when people lived in small groups their survival depended upon sharing food and other resources, though the sharing would have been mostly limited to close relatives since almost everyone in the group was a blood relative. Today, the much stronger case is that economic equality, especially when it is coerced, is maladaptive as it punishes those who work and save and rewards those who are lazy and impulsive, thus giving everyone an incentive to not produce. Reproductive success requires consumption, which in turn requires production. <u>Back</u>

9. One can say that some values are harmful (e.g., smoking) and others beneficial (e.g., exercise), but it is not possible to objectively show that one should choose particular values because a "should" cannot be deduced from an "is." (David Hume's "Is-Ought" argument, Chap. 36). For that reason, although differences in people can be labeled "trivial," it is not possible to say that trivial differences should have no effect on one's choices. (Fuerle, 1986). Back

10. (MacLaren, A., internet post, "When Logic Fails," Mar. 2, 2006). "Ironically, denial of the reality of race often prefaces a denunciation of race bias, with little explanation given of how people can respond to a trait that no one possesses and no one understands. It should be obvious as well that repudiating race forbids advocacy of racial preferences, although few critics of the race concept have faulted affirmative action on this account." (Levin, 1997, p. 19). Blacks who blame their failures on the resistance of whites to integration implicitly concede that they are not genetically equal to whites because they are saying that whites can succeed without blacks, but blacks cannot succeed without whites. Back

"Diversity training" also requires a contradiction: "To better treat one another as individuals, we must stop seeing people as individuals, and instead acknowledge their identities as members of a particular group." (Gifford, B., "<u>The Unbearable Whiteness of Being</u>," *Washington City Paper*, Nov. 12, 1993). It is also illogical to deny the reality of race yet admit the reality of breeds of dogs, as breeds are no different than races. Because diversity destroys the trust needed to function efficiently as a group, it weakens the military. (Hengest, D., "Diversity in the Army,"

American Renaissance, Vol. 19, No. 1, Jan., 2008). 11. "Reality is what refuses to go away when you do not believe in it." (Pinker, S., "<u>The Lessons of the Ashkenazim</u>," *The New Republic* Online, June 26, 2006). <u>Back</u>

12. Larry Summers, just installed as the new president of Harvard University, naively believing that problems at this august institution could be solved rationally and logically in open debate, set out all the possible reasons why not many women enrolled in the sciences and math, one of those reasons being that they were genetically less capable. Nancy Hopkins, a biologist at MIT, could not decide whether to throw up or black out at this shocking display of truth-speaking. Not long afterwards, the leftist professors gave Summers the boot and, not long after that, several papers were published confirming that the female brain is different from the male mind, something already well known to those of us who passed Puberty 101. <u>Back</u>

13. (See <u>Chapter 8</u>). A great deal of racism is actually "cheerleading," boosting the morale and cohesiveness of one's own racial group, a practice that is adaptive if it is not unrealistic. <u>Back</u>

14. Some species of great apes can also feel empathy towards others (<u>De Waal, 1997</u>, p. 35). While it is likely that one must possess functioning mirror neurons to feel empathy, it is not yet clear what the connection is, if any, between possessing mirror neurons and passing the "mirror test." (<u>Mirror Test</u>, *Wikipedia*). Dogs, for example, seem to have some social control feelings, e.g., submissiveness, but cannot pass the mirror test. <u>Back</u>

15. The idea that if a person will not exchange A for B, then they are not "equal" or "the same" in his mind, regardless of how physically identical they are, comes from Austrian economics; to put it another way, they are concepts by intuition, not concepts by postulation. (Northrop, *The Meeting of East and West*, 1979, pp. 446-448; also see "same good," in the first paragraph of Chapter 23 of Fuerle, 1986). Back

16. A good example of ideologues sacrificing the lives of (other) people is the opposition to donor transplants when the donor picks the recipient. Some hospitals will not even perform the operation unless the recipient is selected by the Equality Police. Here is another example from Robert S. Schwartz, a deputy editor at the New England Journal of Medicine, who does not want the race of a patient to be taken into account, even if it kills him (the patient, that is): "Race is not only imprecise but also of no proven value in treating an individual patient." Perhaps he is not familiar with the journal, *Ethnicity and Health*? Back

17. To many egalitarians, the term "white racism" is redundant as they believe that only whites are capable of racism. A 2006 web page of the Seattle Public Schools defines racism as: "The systematic subordination of members of targeted racial groups who have relatively little social power in the United States (Blacks, Latino/as, Native Americans, and Asians), by the members of the agent racial group who have relatively more social power (Whites)." In a predominately white country, anti-racism and multiculturalism mean attacking whites and their culture. "... people of color cannot be racists... " (2007 program at U. of Delaware, Unruh, B., "University defends teaching students all whites 'racist'," *World Net Daily*, Nov. 1, 2007). Back

18. "The educated negro of today is a failure, not because he meets insuperable difficulties in life, but because he is a negro." H.L. Mencken. <u>Back</u>

19. Black politicians overwhelmingly support wealth transfer programs that burden whites to benefit blacks, even forming their own Congressional Caucus to do so. (<u>Sailer, 2008b</u>; Sperry, P., "<u>Obama's Stealth Reparations</u>," *Front Page Magazine*, Oct. 28, 2008). "Black presidential

candidate Senator Barack Obama got standing ovations from liberal Democrats by promising to double foreign aid, most of which would go to Africa. (Kondracke, M. "<u>Obama's foreign vision is exciting</u> — and also naive," *Leader Call*, Aug. 6, 2007). An extreme case is the way Jews in power favor Israel to the detriment of the U.S., e.g., the neo-Conservatives, who got us into the Iraq War. <u>Back</u>

20. To be free of prejudice requires deluding oneself with "intellectual, moral and emotional dishonesty" and "has several dire consequences for the individual and society as a whole." (Dalrymple, T., *In Praise of Prejudice: The Necessity of Preconceived Ideas*). <u>Back</u>

21. Minorities everywhere tend to be more cohesive than majorities. (Salter, 2003). Back

Chapter 35 - Individualism

"I swear, by my life and my love of it, that I will never live for the sake of another man, nor ask another man to live for mine."

Ayn Rand, Atlas Shrugged 1

Individualism requires treating each person as an individual, not as a member of a group. To some individualists this means that no conclusions can be drawn about any person based on his natural physical appearance (excluding makeup, tattoos, and clothing) and all racial traits must be ignored as they tell you nothing about a person's character. ("I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character." Martin Luther King, Aug. 28, 1963). Treating people according to the content of their character and not according to their race, however, assumes that race provides no useful information about a person's character, which is not true. Even race extortionist Jesse Jackson said, "I hate to admit it, but I have reached a stage in my life that if I am walking down a dark street late at night and I see that the person behind me is white, I subconsciously feel relieved." And, obviously, he could have omitted the word, "subconsciously."

Perhaps every time Rev. Jackson encountered a person on a dark street, white or black, he could somehow instantaneously obtain a complete dossier on that person, then use only the facts in that dossier to determine whether or not to run for his life. But, no, like the rest of us, the Reverend uses race instead. It is unfair to the other person for the Reverend to rely on a stereotype – that blacks are dangerous – but, in this instance, he prefers living to fairness.

Although individualism clearly implies anti-racism, it also implies respect for the choices each individual makes, since a person is not being treated as an individual if he is required to make, or is prohibited from making, particular choices. ² Thus, it is not consistent with individualism to require a person to contract with (sell, rent, buy, hire) someone he does not wish to, even if his reasons are racial. In other words, the Civil Rights Laws, which require non-discrimination in public accommodations, are not consistent with individualism. ³ A consistent individualist must advocate both treating everyone as an individual and respecting the choices an individual makes, even if one does not approve of those choices. Egalitarians, however, endorse individualism when it means treating people according to "the content of their character" but reject it when it is used to defend freedom of choice, making individualism not an end in itself, but only another weapon to attack racism.

If people are to be treated as individuals, and their choices are to be respected, then it cannot be unethical for them to act as individuals and to make their own choices, even if those choices benefit only themselves and not others. In other words, individualism also (subtly) implies that it is <u>ethical</u> for people to act in their own interest, as individuals, not as though they were part of a race, class, the "American people," or other type of collective; that also does not sit well with those on the left, who are collectivists. Ayn Rand takes this implication the farthest, suggesting that it is even a <u>virtue</u> to act in one's own interests (Rand, 1961); she condemns altruism, sacrificing one's own interests for the benefit of others, even if it is voluntary. This she does on the basis that people are not "things," here to serve others, but autonomous beings who have the right to survive and live for themselves. ⁴

To Rand, however, whether an act is or is not commendable "acting in one's own interest" or condemnable "altruism" depends on the values one chooses, not on biology. An act is laudable only if one expects to receive something one values more than what one gave up. Acting for the benefit of one's own family, for example, is acceptable to Rand due to the reciprocal benefits received from one's family, and giving to charity is acceptable if the giving

brings status or recognition, but she would have condemned acting for the benefit of a stranger for no reason other than that you shared more alleles with him. Thus, Rand advocates individualism because it gives an individual the freedom he needs to live <u>his</u> life so as achieve <u>his</u> values, and further argues that it is not only ethical for him to live that way, but unethical if he does not.

She implicitly assumes, however, that he will either choose values that will result in his survival and the survival of his lineage or she does not care if his lineage goes extinct. In either case, her philosophy is not consistent with what nature requires of her creations – that they pass on their own unique collection of alleles – because, consistent with Rand's philosophy, individuals could (and many do), enjoy dining out and the theater, having lovely clothes and apartments or homes, and interesting, successful careers, but not children. Nature's requirements guarantee, as much as possible, the continuation of the lineage; Rand's philosophy does not, unless that just happens to be what someone wants.

Philosophies, including Rand's, are created by people, not by nature. It is people, not nature, who decide that some philosophies are worthy and others are not. There is only a single criterion that nature uses to evaluate any philosophy and that is whether or not it enhances the chances of the adherent's lineage continuing. If you choose a philosophy that leads to the end of your lineage, nature has no objection, and cares not a whit. But if you decide that the survival of yourself and your descendants is a worthy end, then any philosophy that, if followed, imperils that end, can not be an acceptable philosophy.

Survival requires not only the will to survive and pass on your alleles, but knowledge, true knowledge, of reality, at least as much knowledge as can be acquired without imperiling survival. Included in that knowledge is knowledge of ourselves. We cannot survive for long believing that we don't have a racist bone in our bodies, when we do. The reason we have those racist bones is that they aid in our survival, so denying we have them eviscerates a vital instinct. "Know thyself," said Socrates, as the beginning of wisdom. Knowing thyself implies not burying our racist bones deep in our unconscious and denying that they, and other urges our genes gave us, are there.

A philosophy that is adaptive and does not lead to our extinction will not require us to deny any reality, especially the reality of what we are. If a philosophy requires us to deny our nature or the nature of the environment we live in, it is poison. Surely, there must be an error somewhere in any philosophy that is in conflict with reality. Does individualism conflict with reality, just as egalitarianism does (previous chapter)?

To the extent that individualism <u>requires</u> individuals to choose certain values, such as treating everyone according to the content of his character and therefore without regard to his race, it condemns individual choice and becomes a form of collectivism as it is an attempt to limit our choices to the choices that the Equality Police approve of, to say nothing of placing us in great danger from people of other races. To the extent that it favors maladaptive choices and condemns adaptive choices it conflicts with the reality that we either succeed in placing our alleles in the next generation or our lineage dies out. These possible complaints against individualism are easily cured, however, if individualism does not advocate any particular choices, but only the freedom to choose.

Nature has, however, given us at least two inborn urges that may conflict with individualism. The first is the urge of men to control the sexuality of women. ⁵ As far as nature is concerned, the purpose of a man is primarily to impregnate women with his own sperm and secondarily to help those women and his children by them to survive. Every man has a natural interest in trying to limit the sexual relations of women, especially those women who carry more of his alleles, to men who are likely to increase the number of his alleles in future generations, either because those men already have many of his alleles or because they have the money or power to increase the fitness of those future generations. This natural interest, if it involves the coercion of women or others, is certainly anti-individualism.

A second inborn urge that we have is to form groups, identify with them, and advance the interests of our own group over the interests of other groups. We have this urge for the same reason that we have the first urge – it has increased our reproductive success. It is stronger in men than women because it involves competing with other groups, and physical conflict is more suited to men. A dramatic manifestation of this urge is the "madness of crowds,"

⁶ where a group of people acts as though it had a single mind, doing violent and criminal activities that the people in the group would never do if they were acting as individuals. Each person in the group feels that his actions are not only morally legitimate, but also uplifting and empowering, freeing him from artificial social constraints on his innate urges.

Man is clearly a group animal (Chap. 4), as evidenced by his highly developed language and the large amount of his brain devoted to speech and social complexities. He is that way because individuals who had alleles for group-orientated behavior were more reproductively successful than individuals who lacked those alleles. The "selfishness" that Rand demands may reduce the gains in reproductive success that man derives from living in groups, turning Randians into "free riders," who receive the benefits of group membership without contributing to the success of the group. ⁷ Although one can argue the doubtful proposition that today group solidarity no longer enhances reproductive success, it will nevertheless remain part of man's psyche until those who lack the alleles for it out-reproduce those who have them which, despite the narcissism of individualists, is unlikely. Man may be an intellectual individualist, but emotionally he is, at least in part, a collectivist.

Although the violation of the natural rights of individuals would not be consistent with individualism, it may be possible to satisfy our natural urges to control the sexuality of others and to act as a group without violating those rights. For example, a man and a woman could be permitted to make an enforceable contract that would, among other things, require support by the man only if the woman had sex and children only with him. Also, the contract could provide that he is obligated to support only his biological children and, after they reach puberty, only if they do not have sexual relations with anyone without his permission. ⁸

The parents may also argue that they have the right to control their children's sexuality because they own the genetic information that is in their eggs and sperm, much as a writer obtains a copyright on his books. When a person voluntarily relinquishes control over his property, he abandons it and ownership of it can be acquired by another person. To the extent that a man relinquishes control over his sperm, he abandons them and, to the (much lesser) extent that a woman abandons control over her eggs, she abandons them as well.

We know there is an intent to abandon property when a person no longer tries to control the use of his property. The mother certainly tries to retain control over her developing egg and the resulting child for many years after it is born. The father may also try to retain control over the genetic material he contributed to that developing egg. For example, if either parent demands a say in whom their child dates and marries, we know that they did not abandon his control over the use of his genetic material, now embodied in the child. Thus, it may be possible to resolve conflicts between individualism and controlling the sexuality of certain other people without violating their natural rights.

In addition to individual genetic interests that may conflict with individualism, a population also has genetic interests, and they, too, may conflict with individualism. ⁹ The usual argument made in opposition to miscegenation, for example, is that the parties have the right to decide for themselves with whom they will mate. But rights, like philosophies, are creations of man, not nature. The implementation of a system of rights in a population is adaptive when the rights increase the fitness of the population as a whole and is maladaptive when they do not. (Chapter 27 of Fuerle, 2003). Since miscegenation is maladaptive (Chapter 29), implementing a system of rights that permits it is also maladaptive.

Individualism assumes that there are only individual interests and that there are no

legitimate group interests. But biologically that has never been true of man. Man has always survived in groups – it is part of his nature. The immense tax burden we all bear today is good evidence that there are group interests. This is not to say that man is wholly a group animal, ¹⁰ as the socialists would have it, but he is certainly a mixture of individual and group genetic interests.

Those group interests are, of course, the survival of the group, i.e., the people in the group, their territory, culture, and genome. The question is, "Can our group interests be preserved within individualism?" and the answer is probably "yes." There have always been individuals who, for one reason or another, have been a liability to their group. The penalty was removal from the group, which may or may not have been consistent with individualism. Certainly, removal by killing or incarceration for a minor offense would be inconsistent, but expulsion from the group's territory may not be. Even without physical removal, a person can be removed socially by ostracism – others in the group can simply refuse to have anything to do with him; the greatest fear of a group animal is that he will be expelled from the group. 11 Refusing to socialize or trade with a person is completely consistent with individualism.

Ostracism is a severe penalty – Socrates drank hemlock rather than leave Athens – but it is a penalty that is within the rights of the other individuals in the group and does not violate the natural rights of the person being ostracized. After all, an individual who acts against the interests of his group betrays not only others within his group, but all his ancestors who sacrificed and died to enable him to exist. Ostracism by individuals is a common occurrence as we all distance ourselves from those we don't like or trust. Ostracism by a group of people requires only that they act in concert for the interests they share. Today, however, we have "civil rights laws" that violate our natural right to associate with whomever we wish to, preventing many effective forms of ostracism, such as refusing to deal with persons based on their race, religion, etc. 12

For a group to ostracize or expel one or more of its members weakens the group by decreasing its numbers, but strengthens the group by removing those who are likely to weaken the group more than they strengthen it, and by warning others of the consequences of such behavior, which can be a net gain to the group's fitness. Those who refuse to contribute to the welfare of the group (a "<u>free rider</u>") or, worse, knowingly work against the interests of the group (a traitor), are hardly assets for the remainder of the group. ¹³ Thus, individualism does not necessarily conflict with the interests of the group.

But a further consideration must be kept in mind. Individualism is an ideology and, like rights and philosophies, ideologies are concocted by man – they are not to be found anywhere in nature. Group interests are not an ideology, but a behavior deeply ingrained in our genes because they are crucial to our survival and, when push comes to shove, biology will trump ideology, like it or not. Any group that sacrifices its genetic interests for an ideology, be it a religion, a political system, or a social dogma, cannot successfully compete against a group that puts its genetic interests first. Let the reader ponder this: If the vast majority of women decide they do not wish to be "breeders" and refuse to become pregnant, so that the only alternatives are to allow humanity to go extinct or force pregnancy upon women, which would he choose?

Chapter 36

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FOOTNOTES

1. Abraham Lincoln expressed a similar sentiment: "As I would not be a slave, so I would not be a master." (*Collected Works of Abraham Lincoln*, Vol. 2, p. 532). <u>Back</u>

2. Here, I am referring to choices that do not violate the natural rights of other persons. Exactly what those rights are is beyond the subject of this book, but is discussed in (Fuerle, 2003). Back

3. These laws were, and are, sold to the public with the argument that prohibiting discrimination ensures that the best person is hired, promoted, admitted to college, etc. However, it can be mathematically proved that if two groups have different means on the test given to determine eligibility, then the test scores of persons from those two groups must be adjusted towards the mean of their own group in order to select the best qualified person. In other words, prohibiting racial discrimination, <u>guarantees</u> that <u>best</u> qualified person will <u>not</u> be hired, promoted, admitted to college, etc. (Miller, <u>1994b</u>; <u>Jensen</u>, <u>1980</u>, p. 94). <u>Back</u>

4. "Act in such a way that you treat humanity, whether in your own person or in the person of any other, always at the same time as an end and never simply as a means." (Kant, I. *Grounding for the Metaphysics of Morals*). Ironically, Rand despised Kant. <u>Back</u>

5. Men, of course, do not want their mates to have sex with other men as that directly reduces their fitness. They may also want to limit the sexual activity of their sisters and daughters as their virginity increases their value as mates and therefore increases the likelihood that they will obtain a better quality man so their father will have more surviving grandchildren. For that same reason, it is in a woman's interest to limit her sexual activity, or at least keep it secret. (Barkow, 1991, p. 337). Back

6. (Chaplin, J.P., *Rumor, Fear and the Madness of Crowds*, 1959). "Madness is rare in individuals - but in groups, parties, nations, and ages it is the rule." (Nietzsche). <u>Back</u>

7. "But for animals that live in groups, selfishness must be strictly curbed or there will be no advantage to social living." (Wade, N. "Is 'Do Unto Others' Written Into Our Genes?" New York Times, Sept. 17, 2007). Individuals of all species will tend to evolve into group animals whenever that strategy results in more reproductive success than acting independently. A group strategy, however, necessarily means that individuals must sacrifice some of their individual fitness for the fitness of the group, and this, in turn, means that some individuals will be sacrificing more than others and/or receiving fewer of the benefits. That loss of fitness is overcome, however, when the more fortunate members of the group carry most of the same alleles as the less fortunate; the success of a group strategy therefore requires the members of the group to be more genetically-related to each other than to those outside the group. Back

8. If his sons have children, he passes his alleles on to his grandchildren and, since his sons can have a large number of children, he usually benefits genetically from their promiscuity. (But, if the sons impregnate females who are genetically distant, the sons are creating hybrids who may be enemies of his group, thus damaging his genetic interests.) His daughters, however, can have only a limited number of children, so their quality and genetic distance from him are more important. Back

9. Individualism, for example, seems to be associated with a higher percentage of sociopaths. (<u>Stout, 2005</u>, p.136). <u>Back</u>

10. Indeed, socialists may see the entire group as a single biological entity to be governed by a single mind, i.e., theirs. <u>Back</u>

11. Edward Everett Hale's short story, The Man Without a Country, poignantly describes the

painful alienation that results from ostracism from one's group. Dog trainer Victoria Stilwell ("It's <u>Me or the Dog</u>," on the *Animal Planet Channel*) trains dogs, another social animal, by turning away and ignoring them when they misbehave, i.e., she ostracizes them. Whites already practice severe ostracism, but against those who do not genuflect to the Equality Police. Ostracism is a form of rejection. To a normal person, rejection brings on a feeling of depression and a display of submission, which will often get them back into the group. But psychopaths lack the capacity for empathy, and therefore cannot see themselves as others see them. Thus, they cannot feel the disapproval of others, which the rest of us feel as depression. Since the goal of a psychopath is to win, rejection is seen as a frustrating defeat. As in normal people, frustrations create intense anger and hatred in the psychopath against the frustrating person but, unlike normal people, they feel no depression to dampen those aggressive feelings. That is why women are most likely to be murdered after they reject a male (<u>Buss, 2005</u>) and why psychopaths within the Allied leadership, e.g., Morganthau, had millions of Germans murdered after WWII was over. (<u>Keeling, 1947; Irving, 1996</u>) <u>Back</u>

12. E.g., a person who owns an apartment building, movie theater, or store, even if he is black, cannot refuse to rent to or admit blacks, even for the reason that they are likely to vandalize, steal, or drive other customers away. <u>Back</u>

13. That is the source of "the Jewish Problem." The Jews survive as a distinct ethny by being strongly cohesive, but that creates distinct Jewish interests that inevitably conflict with the interests of the host population in which they are imbedded. <u>Back</u>

Chapter 36 - Morality

"Morality is man's servant, not his master."

Public policy eventually turns on who holds the moral high ground. After all, no one wants to be seen as supporting "evil" and anyone who believes he is morally in the wrong is more easily defeated. Clearly, it was capturing the moral high ground that brought about the abolition of slavery and the passage of the 1964 Civil Rights Laws. And there is no doubt that today the anti-racist egalitarians have captured the moral high ground.

"To see what is in front of one's nose requires a constant struggle," (George Orwell) may be true of most of us, but egalitarians struggle <u>not</u> to see the 800 pound gorilla in front of them, and even dress him up in a suit, tie, and glasses so others won't notice him. (See <u>front cover</u>.) The evidence that the races are not genetically equal, especially in intelligence and behavior, is clear to all but the reality-challenged egalitarians, who find it emotionally unacceptable. Any apparent differences must be due to the irrationality of whites, who, consciously or unconsciously, think they see differences where there are none, thereby somehow preventing non-whites from achieving, even when the finish line is moved closer and closer. Whites, probably the least ethnocentric of all the races, judging from the devastation of their internecine wars and the immense costs they have imposed on themselves for the benefit the blacks, are nevertheless pronounced guilty of the newly-concocted sin of racism, i.e., of favoring those of their own kind, behaving as nature insists they must if they are to continue to exist. Would that it were so.

Thus, the weapon of choice for the egalitarians is the morality of sacrifice, a morality that coincides nicely with both Marxism ¹ and Christianity, though Egalitarians often display contempt for Christianity. Both embrace the morality of sacrifice – that on the scale of morality, from the depths of the devil to the heights of heaven, one rises or falls according to whether his acts benefit others ... or himself. ² The moral high ground is gained by personal sacrifice, be it of money, resources, mates, territory, children, or life itself. And, obviously, sacrifice is possible in only one direction - from those who have to those who do not have, no matter how honestly or ethically they acquired what they have. The morality of sacrifice is a weapon used by the have-nots to infuse the haves with guilt and induce them to abandon all that they have worked for; one does not have to be a cynic to realize that it is a morality that will be quickly abandoned when the have-nots become the haves.

Evolution offers no support for the morality of sacrifice, because sacrifice is adaptive only if it is likely to increase one's alleles in future generations, which is not a sacrifice at all, but a necessity if one's lineage is to avoid extinction. Although that is called "altruism" by biologists, it is in no way a sacrifice because it is a biological gain to the individual, not a loss. It is hardly a coincidence that Caucasians, who have a strong urge to cooperate with and help others, ³ embraced Christianity, a religion that requires them to do exactly that. Thus, they receive moral kudos for doing what their genes urge them to do anyway, but for different reasons. Before modern times, those urges served them well in hunting, fighting off enemies, and creating civilizations. ⁴ Altruism was strongly adaptive when nearly everyone one dealt with had most of the same alleles but, once the anti-racists mixed the races up, altruism became maladaptive as it lead Caucasians to sacrifice their own genetic interests for the benefit of those who did not share as many of their alleles and did not reciprocate. ⁵

Today, Caucasian altruism is not directed just towards nearby Caucasians, but towards anyone anywhere, i.e., "promiscuous altruism." ⁶ The urge to help people of a different race, ⁷ sometimes called the "<u>White Man's Burden</u>" because only whites seem to have it, lowers fitness, sometimes drastically. ⁸ To much of the world, people who give away their territory and

wealth are not "good" people, to be admired and emulated, but "suckers," to be despised. ⁹ Worse, to be the recipient of aid is insulting and degrading as it is seen as proof that the recipient is inferior to the giver. The result is that the giver does not receive the love and gratitude that he believes he is entitled to, but hatred. ¹⁰ Now the giver is helping his enemies, all the while dumbfounded by their growing hatred for him. Does he stop giving? No, he condemns himself for not giving enough, wallows in his guilt, and further aids in his own demise. Associations of whites with non-whites has made the altruism and cooperation that was formerly adaptive, maladaptive. To avoid becoming a dead end on a $3\frac{1}{2}$ billion year old lineage, the promiscuous altruist must learn to allocate his altruism roughly in accord with relatedness, ¹¹ and refuse to accept any guilt for doing so.

One might suppose that this would be not be difficult to do, but for demonized whites, who accept their status as immoral pariahs, it is not. If you let others convince you of your own immorality, they have already defeated you, without firing a shot. You will no longer defend what was once yours, and will wallow in the neurosis of self-hatred. ¹² Far better to take pride in being the epitome of evil than to be tricked into defeat by a few words. Even if it were true that whites are evil to the core (and it is not true), pride in their evilness would serve them far better than shame. A snake that believes it is immoral to bite and swallow an adorable little baby bunny is no longer a snake; indeed, it is no longer, period. A morality that forbids us to be what we are, holds that extinction is our only moral course of action. Whites could easily secure the preservation of their race, as they are the most technologically competent of the races. But, tricked into believing that their survival as a race is immoral, they refuse to do so.

All people, especially men, seek status, as status brings more reproductive success. ¹³ When a man cannot claim status based on wealth or power, he is left with the poor man's status – moral superiority. The egalitarian's claim of moral superiority is the ultimate claim for status as it trumps status based on both wealth and power. Even if he has no other indicia of status, he can claim he has greater moral worth. (To be consistent, an egalitarian must, of course, deny that there is a genetic component to morality, for otherwise his claim of moral superiority would invalidate his claim that everyone is genetically equal.) ¹⁴

A claim of moral superiority, however, is not consistent with the multiculturalists' dictum that "all cultures are equal" because "culture" includes morality and, if one's own moral stands are superior, then the moral standards of others have to be inferior. Indeed, even many multiculturalists regard some alien cultural practices as immoral. ¹⁵ But why let foolish inconsistencies hobble a glorious ideology? ¹⁶ Surely, having an emotionally comforting, but inconsistent ideology is preferable to consistency and the cold shower of reality? (Barkow, 1991, p. 201).

David Hume long ago pointed out (<u>A Treatise of Human Nature</u>, 1739) that one cannot obtain a "ought" from an "is," an observation that is sometimes referred to as "<u>Hume's Guillotine</u>." That is, to <u>objectively</u> prove a statement is true one must begin with facts about man and the world he lives in, then show that those facts lead to the conclusion that the statement must be true. Hume was asserting that no moral statement can be proved to be true by reasoning from facts. Morality is outside of the "is" world of facts and is in an entirely different realm of moral "oughts" and "shoulds," ¹⁷ and there is no way to journey from one realm to the other. ¹⁸ Morality is not discovered using our senses, as facts are, but is created or divined by man. ¹⁹ Thus, morality cannot be "correct" or "true," in the sense that facts about reality are.

Nevertheless, a moral statement is commonly accepted as true when it is emphatically asserted to be true by a large number of people. Counting votes does not prove something is true, of course, but we all have a psychological tendency to believe that "60 million Frenchmen can't be wrong," even if they neither have nor can have any objective proof that they are correct. The beliefs that racism is immoral and anti-racism is moral long ago passed the "tipping

point" and now nearly everyone either accepts them as true or is at least afraid to say that they are not true.

Dual Morality

If we take it as an abiding principle that any morality, the acceptance of which will lead to our extinction, is so much in conflict with reality that it cannot be correct, then anti-racism cannot be a correct morality. Man, like his relative, the chimpanzee, is an animal that lived and lives in groups. Behavior, such as murder, rape, theft, and adultery, that endangered the survival of the group could not be tolerated and became "immoral." ²⁰ But that morality was <u>intra</u> group – within the group. As to <u>inter</u> group behavior – between groups – there was an entirely different morality. We see this "dual morality" today, especially preceding and during a war, when the enemy is demonized and dehumanized, so that the intra group rules of morality need not be applied to them. ²¹

The existence of a group, any kind of a group, necessitates dual behavior, i.e., people in the group must behave one way towards members of the group and a different way towards outsiders, for otherwise they cannot function as a group; this suggests that at least some behavior that is immoral within a group will be moral between groups. Egalitarianism argues against a dual morality because, if everyone is genetically about the same, everyone should be treated the same. That does not follow, however, because the second phrase has a "should" in it and the first phrase does not, so that argument is decapitated by Hume's Guillotine.²²

Egalitarianism's mono-morality is also incompatible with man's nature as a group animal. To require man to adhere to one-morality-fits-all is an attempt to make man into something he is not, which requires the destruction of what he is. Far better to accept a dual morality, one morality for inside the group and a different morality for outside the group, and try to obtain agreements with other groups on the terms of the out-group morality.²³

In addition to being in conflict with man's nature as a group animal, a morality based on egalitarianism is irrelevant to biological survival. The object of all life is to successfully reproduce. Whether the parties are equal or unequal, in any sense, or whether their behavior is fair or moral, matters only to the extent that it increases or decreases success in reproducing. And, for groups, unequal, unfair, and amoral dual morality does exactly that. ²⁴

Even in peacetime, no one, not even egalitarians, applies the same morality to everyone. Certainly, everyone, to some extent, follows a "do as I say, not as I do" dual morality, and everyone has a different morality for their children, even their adult children, than they do for strangers. We don't toss dice to determine to which drowning person we will throw the last life preserver, which is what should be done if our morality were the same for everyone. No, instead, we make a moral judgment about who is more worthy to live, typically women and children. No one actually lives by a one-morality-fits-all rule. And, most of the time, these multiple moralities will, at least approximately, coincide with the answer to the question, "Which choice maximizes my reproductive success?" To act according to that "natural morality" is adaptive and usually instinctive, and to not do so is maladaptive and usually extinctive.

Populations all across the planet apply different moralities to different people, depending upon their genetic relatedness (Simpson, 2003, pp. 798-801). They typically use flattering words for their own people and pejorative words for people outside their group to justify their dual morality, e.g., "goy" for a non-Jew ("animal"), ²⁵ as in "Jewish blood is not the same as the blood of a goy." (Rabbi Yitzhak Ginzburg of Joseph's Tomb in Nablus/Shechem, justifying the murder of an Arab girl by Jews). ²⁶ Although Christian egalitarians quote the Bible for support, there are many references one can find to a "different strokes for different folks" morality in the Bible, such as "…our leaders should have entered Lebanon and Beirut without hesitation, and killed every single one of them. Not a memory should have remained." (Genesis 15: 18–20; Joshua 1: 3–4).

A successful population that has expanded to the carrying capacity of its territory has to move into the territory of contiguous populations. Since resources are limited, when one population expands and eliminates a competing population, it increases its own fitness. If it fails to do so and instead maintains a stable population, it jeopardize its own long term survival when, inevitably, circumstances and the environment change and turn against it. This necessitates a dual morality – an intra-population morality and an inter-population morality.

But inter-population warfare for territory is no longer necessary. The brutality of conquest and colonialization can be replaced by the civility of contract. Conquest, after all, is not free; in addition to military costs, it may leave a legacy of guilt that demoralizes the conquering population, providing its enemies with a weapon, e.g., Mahatma Gandhi in India fighting the British. Contract, on the other hand, improves the lot of both parties. The expanding population obtains additional territory and, in return, the other population receives resources. The U.S. practiced this policy several times in its history, with Thomas Jefferson and the Louisiana Purchase, the purchase of California and the southwest from Mexico, and the purchase of Alaska from Russia.

The only morality that can be followed without moving towards extinction is a morality that directs our behavior towards passing on our alleles, e.g., "Be fruitful and multiply." (Genesis 1:28). Quite naturally, that is the morality that people follow when they not are subjected to propaganda and coercion to make them choose a different morality. In the long run, an egalitarianism morality is doomed, for it demoralizes and immobilizes those who adhere to it, reducing their genetic fitness, and driving them to extinction. (Though, of course, that would not apply to a deceptive egalitarian who urges others to follow egalitarianism while he himself does not.)

The empathy that we feel for other creatures is a creation of nature, the mirror neurons in our brain. ²⁷ Empathy motivates us to help those who are around us, based on their genetic similarity to us, i.e., how many of our alleles they have. That is why we care deeply about our babies, some for our pet dog or cat, little for the mouse in the house, and not at all for the spider on the glider. Empathy arose long before television and instant worldwide communications, when the only people anyone knew lived in the same geographical vicinity and were closely related. Now a person can feel more empathy for someone on the other side of the planet, who is suffering on television, but who shares few alleles with him, than he can for his own children sitting right beside him. ²⁸

Empathy gives morality an emotional impetus, but nature does not create a morality and nature's only punishment for ignoring it is the guilt felt for violating a morality that has been accepted. And, although the amount of empathy we feel for others varies approximately with genetic distance, the lines that divide different moral standards are drawn by men, not nature, and men draw them to suit their own purposes. Empathy is nature's way of controlling man; morality is man's way. Both are adaptive when they increase our reproductive success and both are maladaptive when they decrease it.

Man created morality to benefit the group – it reduced strife, induced cooperation, and kept the group stable. Morality encouraged individuals within a group to put aside their own genetic interests for the benefit of others in their group. ²⁹ But now other groups have hijacked that morality to use as a weapon against the group that created it. Those who define what is or is not moral can be expected to do so in a way that benefits themselves, and those who do not resist that morality will be at the mercy of the morality-definers. In the War Against Whites, the egalitarians claim the right to define "morality" and collect the spoils from the demonized and demoralized Whites; whites can save themselves only by refusing to accept any morality that requires their extinction.

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FOOTNOTES

1. "From each according to his ability, to each according to his need." (Karl Marx). That aid by whites to non-whites is morally commendable shows that it is a manisfistation of the morality of sacrifice; it is also an admission that such aid is maladaptive because, if it was not maladaptive, it would not be a sacrifice and therefore would not be morally commendable. <u>Back</u>

2. E.g., the epitome of Christian morality, Christ dying for our sins. Defining morality as incurring a personal loss to benefit others justifies the left's view of the immorality of profits and capitalism and the Christian view of charity; both see the accumulation of wealth as immoral ("It is easier for a camel to pass through the eye of a needle, than for a rich man to enter the kingdom of God." *Matthew* 19:24). <u>Back</u>

3. It has been observed that when Europeans go to war, they claim to be helping the people they attack, e.g., by spreading freedom and democracy or by saving their souls, while other races do not use such justifications. (Epstein, M. "<u>War and the Imperfect Nature of Man</u>," *VDARE.com*, Jan. 29, 2008). Even very small children and chimpanzees voluntarily help others. (<u>Warneken, 2007</u>). <u>Back</u>

4. Altruism also gave more reproductive success to individuals who invested less in brawn and more in brain, causing people to become more gracile, cooperative, and intelligent, traits useful in building civilizations. Back

5. The expectation of reciprocity, "reciprocal altruism," should not be considered to be altruism at all, as it is more of an implied contract; if your bumper sticker says "Practice random acts of kindness," you expect to be a recipient of some of the kindness you are encouraging. Ditto for practicing a religion to obtain promised rewards in Heaven. (A religion is an attempt to gain the favor of a supernatural being; organized religion is the selling of those favors.) Ironically, altruism may have evolved to make groups more successful in war. (Bowles, 2006). Back

6. *Wikipedia* is an example of promiscuous altruism since the hundreds of hours editors spend without pay probably lowers their fitness; another good example is the Peace Core. Promiscuous altruism is a perversion of adaptive altruism. <u>Back</u>

7. A charitable organization run by whites that helped only whites would be denounced as "racist" and therefore immoral. <u>Back</u>

8. "Let no good deed go unpunished." A significant number of whites have been killed helping non-whites. On Mar. 26, 2006, University of Washington medical professor <u>Richard Root</u> was killed, and presumably eaten, by a crocodile in Botswana. Amy Biehl, a 26 year old white Stanford graduate student and Fulbright Scholar, who went to South Africa in 1993 to help Africans overthrow her fellow whites, was stoned and stabbed to death by Africans. http://library.flawlesslogic.com/biehl.htm "I remember very clearly watching the ABC News reports on the trial of the men who had stoned and stabbed Biehl to death as she begged for her life. The courtroom was packed with the relatives and friends of the accused, who had to be admonished by the judge over and over to maintain order during the proceedings. The ABC newsman focused on one dramatic event during that day's testimony. As a witness for the prosecution described in detail Biehl's begging while a knife was being driven into her chest down to the hilt, the black women in the crowd began to laugh and perform a mocking ululating while a few performed mock begging motions. The black men yowled in glee and the entire courtroom broke out into hysterics as the black crowd mocked this white girl's final moments." (Black savagery, white acceptance: the Biehl story). In 2003, an Israeli soldier killed 23-year-old Rachel Corrie with a bulldozer as she tried to prevent the destruction of a Palestinian home. (*Wikipedia*, "Rachel Corrie"). Back

9. "Generosity and indulgence exhibited by the white man they [the Negroes in Cuba] consider as weakness." (Count Gorz, in <u>Hunt, 1865</u>, p. 19). Whites are much less emotionally attached to their race than non-whites, and so they reasonably, but incorrectly, assume that non-whites feel the same way. This individualist view leads whites to define morality in terms of abstract rules of justice, while non-whites define it in terms of loyalty to one's own group. (<u>MacDonald, 2002a</u>). Jews apply the term "<u>useful idiots</u>" to people who benefit Jews to the detriment of their own interests, e.g., support foreign aid for Israel and fight wars against Israel's enemies, such as Iraq. Unless the genes responsible for altruism are evenly distributed among all the races, and they are not, the morality of sacrifice is doomed to produce a society of productive but exploited altruists and unproductive but exploiting parasites. When the latter eventually destroys the former, the society will no longer be capable of supporting itself and will also disintegrate. <u>Back</u>

10. "Around the year 2040, whites will become a minority in the United States and, believe me, it will be 'payback time'." Pro-Immigration Activist, Jorge Sanchez. "The white race is a disease, and the only cure is a bullet." Hindu nationalist, Ramesh Sharma. (Roodt, D., "France's National Suicide," World Net Daily, Dec. 6, 2007). Back

11. People already do this to some extent with their own money, but mostly after they are dead and beyond the reach of moralizing egalitarians. Did you will your estate to complete strangers or mostly to your relatives? But with money that is almost entirely other people's, i.e., money given out by the government, the living will trade some of their reproductive success for guilt relief. <u>Back</u>

12. See (Horney, K., *Neurosis and Human Growth: The Struggle Toward Self-Realization*, 1950). <u>Back</u>

13. "Power is the ultimate aphrodisiac." (Henry Kissinger). Back

14. But sociopaths have no conscious, and lack moral feelings (e.g., guilt, shame, remorse) and sociopathy is about 50% heritable (<u>Stout, 2005</u>, p. 123), so morality must be at least partly genetic. <u>Back</u>

15. E.g., cruelty to animals (horse tripping, dog and cock fighting), female genital mutilation, honor killings, forced marriages, etc. <u>Back</u>

16. "A foolish consistency is the hobgoblin of little minds," (Ralph Waldo Emerson) draws attention away from the embarrassing consistency that underlies inconsistent positions. (See FN 26). <u>Back</u>

17. A <u>moral</u> "ought" or "should" implies that behavior violates a moral rule, as opposed to "I should (or ought to) go shopping," which does not. The division of statements into "is's" and "oughts" is a subset of the division of all concepts into concepts that describe reality (e.g., a "point" as a dot on a piece of paper) and concepts that that describe creations in man's imagination (e.g., a "point" as a location in mathematical space that does not extend in any

direction). Back

18. The impossibility of an <u>objective</u> morality does not mean that there can be no morality. Each person can still have his own <u>subjective</u> morality – he can feel guilt, shame, or remorse for acts that generate no such emotions in others, e.g., killing a bug, eating lamb. <u>Back</u>

19. Since egalitarians normally believe that (alleged) genetic equality makes racial discrimination immoral, David Hume's Guillotine collapses the moral high ground claimed by the egalitarians. <u>Back</u>

20. Some of the Ten Commandments, for example, prohibit behavior that disrupts the functioning of the group. Clearly, morality was created to serve group interests – an individual in isolation has no need for morality. Only group animals, such as meerkats, monkeys, and men, have rules about what behavior is permissible between members of the group. Thus, morality arose <u>because</u> it was adaptive and, like any trait, it will continue only so long as it remains adaptive and does not become maladaptive. <u>Back</u>

21. In general, the greater the genetic distance between two groups, the greater will be the difference between in-group and out-group moralities. We step on ants, but mistreating a dog is a crime. Every egalitarian who is not an anarchist accepts a dual morality when it comes to the government because people acting in their "official" capacity as agents of the government are permitted to take actions that would be crimes if done by anyone else, e.g., seize money for taxes. The best strategy for a minority group is to conceal its own unegalitarian dual morality while demanding that the majority practice an egalitarian mono-morality, i.e., treat the members of the out-group the same as members of the in-group. Back

22. Also see (Fuerle, 2003, Chapter 23), where free will forms the basis for arguing that a person consents to being treated the same way he treats others. And, if he treats others according to a dual morality, he consents to that dual morality being applied to himself as well. Back

23. Indeed, this is the aim of the rules of war, such as the Geneva Conventions. It also arises spontaneously when people practice "tit-for-tat," the most effective game strategy. (*Wikipedia*, "<u>Tit for Tat</u>"; also see <u>THIS</u>). One might think that the Golden Rule is an expression of a monomorality, but if one treats people inside his group as he wishes to be treated by them, and treats people outside his group as he wishes to be treated by them, and treats the Golden Rule would be compatible with a dual-morality. Dual moralities are not inherently more conflict-prone than mono-moralities; dual moralities lead to conflicts when groups fail to agree upon and follow complementary dual-moralities. <u>Back</u>

24. Whites lost The Union of South Africa and Rhodesia because they were induced to apply their mono-morality to Africans. The most successful government, all else being the same ("ceteris paribus"), will an ethnic state that is consistent with an ethny's biology and represents its genetic interests. <u>Back</u>

25. The literal translation of "goy" is "nation," but the Talmud suggests it means "animal." Dictionaries define "goy" as an offensive term for a non-Jew and the Talmud says, "The non-Jew is consequently an animal in human form, and condemned to serve the Jew day and night." (Midrasch Talpioth, p. 225-L; <u>Horowitz, 1985</u>). The more a population develops its own language, religion, and culture, the more genetically isolated and different it will become; and, since everyone sees himself as "human," the more his DNA differs from the DNA of others, the

less "human" they will seem to him. Back

26. Also, "Any trial based on the assumption that Jews and goyim are equal is a total travesty of justice." (Rabbi Yitzhak Ginsburg, "An Israeli Mayor Is Under Scrutiny," *The New York Times*, June 6, 1989, p. 5). The Jews should be commended for openly expressing their dual morality, as most of us do our best to conceal it. However, they have not only a dual morality, but also a "meta" dual morality because they claim a dual morality for themselves while condemning others for also having a dual morality. "It is not as wrong raping a Swedish girl as raping an Arab girl." (Muslim immigrant in Sweden, quoted in Swank, Jr., J.G., "Official Sweden Says Muslim Rapes, Etc. = OK." *CAGE*, May, 23, 2006). Those who follow a dual morality are often labeled "hypocrites," suggesting they hold inconsistent positions, but that is true only of egalitarians; the consistency is that the two moralities both increase their fitness. The Golden Rule is a good example of mono-morality. <u>Back</u>

27. (<u>Masters, 1995</u>). The brain's mirror neuron network responds differently to people who look like us, suggesting a dual morality may have a genetic basis. (<u>Molnar-Szakacs, 2007</u>). <u>Back</u>

28. Civil rights worker <u>Viola Liuzzo</u> left her husband and five children in Michigan to protest in Alabama, where she was murdered on March 25, 1965. <u>Back</u>

29. "One's 'neighbor praises selflessness because <u>he derives advantage from it</u>." (Nietzsche). <u>Back</u>

Chapter 37 - Which Way Western Man?

"Civilizations die from suicide, not murder."

Arnold Toynbee

When the environment changes, behavior that was so adaptive that it made a population supreme may be so maladaptive that it leads them towards extinction. Such is the case with whites, whose intra-group cooperation and altruism took them to the top, but now that they are no longer isolated from other races, their altruism is their Achilles' heel, leaving them a mere resource to be used by others. Yet changing their innate, now maladaptive, behavior may be more difficult for them than watching their race disappear forever. To paraphrase Woody Allen's dark humor:

> "We stand today at a crossroads: One path leads to a slow diminishment of our numbers, a weakening of our ability to defend ourselves, and the likely extinction of our people. The other leads to vicious conflicts with immense losses on all sides and the possible extinction of our people. Let us hope we have the wisdom to make the right choice."

The decline of the West has been lamented, ¹ but warnings go unheeded and we continue to decline; indeed, our decline is accelerating. All the signs of a catastrophic collapse are there, and getting worse all the time – financing current consumption by massive foreign debt, lowering the national average IQ by subsidizing the reproduction of the less intelligent and permitting them to enter the country (La Griffe du Lion, 2005), and wasting thousands of lives and hundreds of billions of dollars on counterproductive military adventures. Struggle and suffering can make a people great, but once they have achieved greatness they flee the caldron that made them so, lose their edge, indulge in hedonism and baseness, and are no longer the equal of those who begot them.

Today, white men in the military fight all over the world, but they do not fight for the one thing that is most important to the survival of their kind – who impregnates their women. ² They not only condone the impregnation of white women by other races, ³ they not only facilitate it, they actually celebrate it! Unless they throw off the shackles of egalitarianism and fulfill their biological destiny, there will soon be no more white babies and no more whites.

Almost nothing is as maladaptive for whites as admitting non-white immigrants and refugees into white homelands (<u>Salter, 2002a</u>), yet every year white elites in churches and governments bring in tens of thousands of non-whites. Our territory is lost and our gene pool is desecrated, a slow genocide of the white race, all so the white elites can gloat in their supposed moral superiority.

The closer the West moves towards the precipice, ⁴ the more difficult it becomes to reverse directions and save it. (Stang, A., "<u>A Warning for America from South Africa</u>," Nov. 6, 2008). The West is nominally democratic, and the best survival strategy in a democracy is to form an interest group and vote yourself somebody else's money. There are dozens of coalitions of like-benefiting people – seniors for old-age benefits, blacks for affirmative action and welfare, Jews for foreign aid and military support for Israel, trial lawyers for laws that benefit plaintiffs, farmers for agricultural subsidies, manufacturers for tariffs on imports, and so on, with the government taking a "handling fee," which can amount to as much as 90% of the money transferred. Each coalition is a small minority, but few politicians can afford to lose their votes or campaign contributions, so the coalitions and their power increases. Everyone ends up putting the interest of his own group first, until the system collapses. ⁵ Since no coalitions are permitted

to represent the interests of the whites who made the West – that would be racism – the only solution is to reduce the power of government so that it can no longer take from one person and give to another, but that is unlikely to happen. $\frac{6}{2}$

Because whites are genetically programmed to be altruistic, it is difficult for them to resist financing their own extinction. ⁷ Every year billions of dollars are transferred from whites to blacks, ⁸ subsidizing blacks and their children while whites forego, postpone, or limit childbearing because of the expense. These transfers consist not only of government welfare payments, housing subsidies, food stamps, Medicaid, aid to schools and black organizations, but international aid to Africa. In addition, individual whites make huge transfers of funds to blacks in the form of donations to black organizations and scholarships, ⁹ and white businesses lose money complying with affirmative action laws ¹⁰ and paying out damages for discrimination. ¹¹ A hidden cost, which extends indefinitely into the future, is the lost opportunities that whites would have had to survive and propagate, had they helped themselves and had not aided the survival and propagation of other races, all due to egalitarianism, the greatest triumph of ideology over adaptation in man's entire lineage. ¹²

A conquering tribe claims the territory, resources, and women $\frac{13}{10}$ of the conquered. The massive amount of wealth transferred from whites to blacks, the ubiquitous white women with mulatto children, $\frac{14}{10}$ and the tens of millions of Mexicans claiming most of the western states as their own, are the proof that whites are the vanquished.

"...African-Americans ... are clearly dominant over whites. There is a tremendous and continuing transfer of property, land, and women from the subordinate race to the dominant race." (Whitney, 1999).

There is no doubt that whites, in their own homelands, could not be vanquished by other races, if they only believed in their own right to exist and had the will to resist. It is their own conscience, their own decency, that has brought them down. What better way is there to destroy an enemy with a conscience than to convince him that he is the cause of the misery of others and therefore should not survive? ¹⁵ Whites have been convinced that they are evil – responsible for the poverty and suffering of others, the destruction of the environment, and the carnage of wars. Even the crimes that other races commit against whites are blamed on whites – those crimes are excused as justifiable reactions to the racism of whites. An unexpressed, but critical, thought in the mind of a white about a non-white is a thought crime – proof that whites oppress other races. Both mentally and physically, whites have been demonized, demoralized, and disarmed by the relentless self-serving anger of non-whites and their fifth column allies, white egalitarians. Since non-whites gain from the defeat of the whites, there is no one who can or will save whites but themselves.

Are there populations living today that, unlike most whites, try to preserve themselves? Yes, there are. In fact, every other population on the planet believes in its own goodness and tries to preserve itself, but the population that has done so most effectively is, perhaps surprisingly, the European Jews. They strongly discourage marriage to non-Jews, nor do they proselytize to bring non-Jews into their genetic fold. They have strong in-group amity and outgroup enmity, a dual morality that is supported and justified by their religious rules, the Talmud, ¹⁶ and they support policies for white countries (multiculturalism, open immigration, miscegenation, ¹⁷ civil rights) that weaken and divide their out-group, the non-Jews. ¹⁸ ¹⁹ They encourage their daughters to marry the most intelligent Jews and have many children, thereby raising their average IQ to the highest of any population. ²⁰ They have many cultural practices that increase group coherence, including their own religion, language, holidays, rituals, and even humor. They have their own clubs and organizations, even one for keeping Jewish criminals out of jail (the "<u>Alternative Sentencing Proposals</u>" of the ALEPH Institute). Were whites to emulate the European Jews, they would be unstoppable.

Neuroses, according to Karen Horney, (<u>1945</u>) are caused by unconscious conflicts. By cowering before the Equality Police, whites have internalized a conflict between their innate, now-subconscious ethnocentrism and their conscious thinking processes, which warn them that any expression of their ethnocentrism is dangerous. Thus, they act according to their ethnocentrism by avoiding other races, then use their conscious thinking to rationalize their choices, i.e., they are hypocrites. ²¹ This is, of course, unhealthy, as a person who has internal conflicts cannot function as well as a person who is of one mind. ²²

There is some good news and some bad news. The good news is that the conflict will end when reality so blatantly conflicts with conscious thinking that the conflict can no longer be rationalized. At that time whites will have an epiphany and, in an exuberant feeling of joy and freedom, they will throw off their false view of reality and openly embrace their ethnocentrism. The epiphany will begin not with a few demoralized race realists on the fringes, who already know the score, but with a well-respected and loved leader who will stand up and say the obvious. There will be dead silence as whites wait for the Equality Police to push him down the memory hole. ²³ When that does not happen, other whites will quickly agree with him because they have been waiting all their lives for a savior. The bad news is that whites may have to suffer considerably more before this happens.

In the meantime, a little push here, a bit of a nudge there, can only bring that day closer. David Davis, the Shadow Home Secretary in Great Britain, now admits that multiculturalism is not working. ²⁴ Perhaps a prominent person in the US could do the same? (e.g., <u>Putnam</u>, 2007). A few college debates on the benefits of diversity, or the lack thereof, would be refreshing. How about a study showing that white mothers of mulatto children feel alienated from their children? ²⁵ Or a bold statement by the CEO of a large company that a decline in IQ is occurring and that it is not in the national interest? A moratorium on immigration, including refugees, would probably be too much to hope for, but you never know. Or how about "Proud and confident explicit assertions of ethnic identity and interests among white people, and the creation of communities where such explicit assertions are considered normal and natural rather than a reason for ostracism." (MacDonald, 2006).

In the final analysis, the most valuable possession whites have is their genome. They can lose territory and wealth but, if their genome is intact, they can survive and recover all that they have lost. ²⁶ In today's times, however, it is racist and immoral for whites to love and cherish their own racial uniqueness. So on to the precipice we go. It won't be a pleasant descent, but the wise and well-prepared will perhaps survive and, after much suffering, will rise again.

I leave the reader with one last question to ponder: Suppose, hypothetically, of course, that the information presented in this book is mostly correct, despite being extremely politically incorrect, what action, if any, would he take?

<u>Appendix</u>

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FOOTNOTES

1. (Buchanan, P., *The Death of the West*, 2002; Brimelow, P., *Alien Nation*, 1995; <u>Simpson</u>, 2003). <u>Back</u>

2. The use of the word "their" is deliberate. Feminism teaches that women (and, presumably, men) are autonomous beings who do not belong to anyone. Like all ideologies, that is a position created by humans; it is not a fact that was discovered to be true in nature. Biology matches up those males and females who are likely to have the greatest reproductive success. That is what gives white males a claim to white females and vice versa. Feminism, like anti-racism, is unnatural and maladaptive. <u>Back</u>

3. "In 2002-2003, 89% of white 18-25 year-olds agreed that it is okay for blacks and whites to date each other." ("2006 Generation Next Study," *Pew Research Center survey*, 2007). <u>Back</u>

4. (Buchanan, P., *Day Of Reckoning: How Hubris, Ideology and Greed Are Tearing America Apart*). <u>Back</u>

5. This is why multiculturalism is not compatible with democracy. (<u>Sailer, 2005b</u>). The war in Bosnia and the current war in Iraq are good examples. Partitioning would greatly alleviate the problems created by multiculturalism, but that would be an admission that people are not identical and therefore are not interchangeable. <u>Back</u>

6. There are two political parties that oppose the vast power of government, the <u>Libertarian</u> <u>Party</u> and the <u>Constitution Party</u>, but so far neither has had much success. However, "It is a well-established finding that the more ethnically mixed a population becomes, the greater is its resistance to redistributive policies." (<u>McDonald, 2006</u>). <u>Back</u>

7. Without the altruism of whites, providing them with the benefits of white civilization, Africans would have gone extinct long ago. <u>Back</u>

8. "Thirty-three percent of all black children (and their mothers) are now supported almost entirely by the resource of genetically unrelated whites in the form of public assistance, rather than by their biological parents." (Levin, 1997, p. 188; also see pp. 115, 258-260). "There is a steady flow of stolen resources from whites to blacks." (id, p. 274). "In other words, each black child received .6 x 26 = \$15.60 in schooling from taxes paid by whites for every \$1 he received in schooling from taxes paid by blacks." (id, p. 279). For whites, the abolition of slavery turned blacks from assets into liabilities. The "Racial Ratio" is the ratio of the number of people (mostly blacks and Hispanics) who benefit from affirmative action to the number of people (whites and sometimes Asians) who lose out because of it. The Racial Ratio was about 8 whites per black in 1969, i.e., the burden of each black, and it continues to fall. (Sailer, S., "The Coming Diversity Crack-Up: The Future of Racial Quotas," *The American Conservative*, Aug. 11, 2003, and Sailer, 2007e). Affirmative Action is a tax on whites. Back

9. Poor, mostly black students receive 20% of the tuition collected at major colleges. (Goldin, 1995). Bill and Melinda Gates, both of whom are white, have set aside \$1,000,000,000.00 (\$1 billion) through their foundation for scholarships for "minorities," and many other well-off white people have created similar scholarship funds with lesser amounts. Three-fourths of Federal education money goes to the handicapped and "disadvantaged," i.e., mostly blacks, and 0.02% goes to gifted and talented programs, i.e., mostly whites. (Rubenstein, 2007). Thus, the educatable are not educated because they are white, while a fruitless attempt is made to educate the uneducatable because they are black. Back

10. (<u>Brimelow, 1993</u>) estimates the cost of Affirmative Action to the U.S. economy at "well over \$225 billion" per year, but a follow up study (<u>Rubenstein, 2008</u>) "puts the annual waste at over

\$1.1 trillion dollars" per year. (Also see <u>Stein, 2006</u>; Brimelow, P., "<u>Invisible Victims: White</u> <u>Males and the Crisis of Affirmative Action Revisited</u>," *VDARE.com*, Oct. 15, 2007). The 2008 credit crisis has also been blamed on Affirmation Action as banks for pressured to make loans to minorities who were not credit-worthy. (Liebowitz, S., "<u>House of Cards: Liberals Fueled Wall</u> <u>St. Woes</u>," *New York Post*, Sept. 24, 2008). Out-sourcing is another consequence of Affirmative Action as companies send jobs overseas to avoid having to hire incompetent blacks. Strangely, in countries where whites are not the majority, such as <u>South Africa</u> and <u>Malaysia</u>, the Affirmative Action laws favor the non-whites who enact them - to the detriment of other nonwhites; it is only in countries run by whites that Affirmative Action laws penalize those who pass the laws. <u>Back</u>

11. In 1996, blacks extorted \$176 million from Texaco because an executive allegedly used the word "nigger" in a conversation with other executives; an analysis of the tape showed that he did not. ("<u>Texaco Independent Investigator's Report</u>," *Court TV Online*, Legal Documents, Nov. 11, 1996). <u>Back</u>

12. "According to Espenshade's regression analysis of data from a dozen selective colleges, on a 1600-point SAT scale, being black and Hispanic adds up to an advantage of 230 and 185 extra SAT points respectively." (Dalmia, S., "Legacies of injustice: alumni preferences threaten educational equity--and no one seems to care," *Reason* magazine, Feb. 1, 2008, p. 36). This is another cost that whites impose on themselves. <u>Back</u>

13. "In the United States in 2005, 37,460 white females were sexually assaulted or raped by a black man, while between zero and ten black females were sexually assaulted or raped by a white man. What this means is that every day in the United States, over one hundred white women are raped or sexually assaulted by a black man." (Auster, L., "The truth of interracial rape in the United States," *View from the Right*, April 27, 2007, based on Department of Justice, *Criminal Victimization in the United States*, 2005). "Rape was an insurrectionary act. It delighted me that I was defying and trampling upon the white man's law, upon his system of values, and that I was defiling his women." (Eldridge Cleaver, *Soul on Ice*, McGraw-Hill, 1968, p. 14). <u>Back</u>

14. Black men have "a strong preference for meeting either white or Asian women." (<u>Fisman</u>, <u>2008</u>). <u>Back</u>

15. Mahatma Gandhi's passive resistance defeated the British in India only because the British had a conscience. <u>Back</u>

16. It is illegal in Israel, the only western nation with laws against miscegenation, i.e., the Jews in Israel enact the same laws that the Jews in the United States did their best to abolish. (<u>Gitlin</u>, <u>2004</u>). For 2000 years, only 1 in 200 matings within Jewish communities were with non-Jews. (<u>Hammer, 2000</u>). <u>Back</u>

17. "When a Jew murders a gentile (Cuthean), there will be no death penalty. What a Jew steals from a gentile he may keep." (*Talmud*, Sanhedrin 57a). <u>Back</u>

18. E.g., *Breeding Between the Lines* by Jewish writer Alon Ziv, reviewed at (<u>Richards, 2006</u>). <u>Back</u>

19. Living in an ethnically diverse environment causes people to mistrust everyone, withdraw from friends, and stay home. "In colloquial language, people living in ethnically diverse settings appear to 'hunker down'—that is, to pull in like a turtle." (Putnam, 2007). "It is well recognized in

the social sciences that ties, notably between kith, kin and co-ethnics, increase trust and trustworthiness, and thus mitigate breach of agreement." (<u>Salter, 2002b</u>). <u>Back</u>

20. Yet even very intelligent people can embrace policies that damage their interests. The Jews support multiculturalism and open immigration as they fear living with a racially unified non-Jewish majority, but now anti-Jewish Muslims are flooding into Europe and other countries. The Chinese had a one-child policy to control an exploding population, but soon will have a million men without wives (though this could be eugenic as it is mostly the uneducated men who cannot find wives). (*BBC News*, Jan. 12, 2007). And the egalitarian policies enacted by whites (e.g., Civil Rights, affirmative action, the No Child Left Behind Act (i.e., the No Black-White Achievement Gap Act) all damaged white interests and left whites permanently supporting a white-hating black population. <u>Back</u>

21. (<u>Sailer, 2005a</u>). When whites are shown photos of blacks for too short a time to register consciously, brains scans (fmRI) show negative reactions. When the photos are shown long enough to register consciously, the negative reactions decrease because whites consciously censor themselves. (<u>Richeson, 2003</u>). White liberals are more hypocritical about race than white conservatives. (<u>MacDonald, 2006</u>). <u>Back</u>

22. "A house divided against itself cannot stand." (Abraham Lincoln). Back

23. James Watson, who won the Nobel Prize (with others) in 1962 for finding the structure of DNA, told a British newspaper (Oct., 2007) that blacks are less intelligent than whites, and all hell broke loose. The Science Museum in London cancelled an over-sold lecture he was to give, he was suspended from his job as director at Cold Spring Harbor Laboratory on Long Island, and the Federation of American Scientists said he was promoting "personal prejudices that are racist, vicious and unsupported by science." Did he cite the masses of data that support his statement? No, he squirmed like a scolded child, then joined a long line of sniveling grovelers who begged the Equality Police for absolution. (Sailer, 2007c; Bradley, 2008). Back

24. (Jones, G. "<u>Multicultural Britain Is Not Working, says Tory Chief</u>," *Telegraph*, April 8, 2005; <u>Riley, 2006</u>). <u>Back</u>

25. (Turner, L., "<u>I love my mixed race baby – but why does she feel so alien?</u>" *Daily Mail*, July 11, 2007). Barack Obama's mother married two non-white men, but she turned him over to her parents to raise. <u>Back</u>

26. After Germany had been defeated in WWI and WWII, the Allies brought in Negro troops in what seems to have been a deliberate effort to destroy the German genome. (Keeliing, 1947). Back

Appendix - DNA

DNA ("deoxyribonucleic acid") is the carrier of genetic information in all living things except for retroviruses (which use RNA instead). DNA is a polymer that is made by stringing together various combinations of four different monomers called "nucleotides." Each nucleotide is made by reacting ¹ three compounds: ²

(1) Phosphoric acid,



(2) deoxyribose,



and

(3) a pyrimidine or purine base.

The **<u>pyrimidines</u>** are the single-ring bases thymine (T) and cytosine (C):



The **purines** are the double-ring bases adenine (A) and guanine (G):





Guanine

Figure App-1 (*Wikipedia*, "Gene") shows two DNA strands (the "sense" strand that is read and the complementary "anti-sense" strand), each strand in the figure having four nucleotides. Each nucleotide is made up of three groups – a phosphate, a deoxyribose, and a base; all four pairs of the possible base pairs, A-T, C-G, T-A, and G-C, are shown. Analogizing to a ladder, the rails ("backbones") of the ladder are formed by alternating phosphate and deoxyribose groups and the rungs of the ladder are formed by a pair of bases. Adenine ("A") always bonds to thymine ("T"), and cytosine ("C") always bonds to guanine ("G"), so all the base pairs are either A-T or C-G. ³ Since A and G each have a single ring and C and T each have two rings, there are always 3 rings separating the rails and not 2 rings or 4 rings. The paired bases weakly bond the two rails together, so they can be easily separated when the strands are read. ⁴ The two rails are reversed, one going from the 5' end to the 3' end and the ribose ring, starting with the oxygen atom, "O.") Note that there are two weak bonds (dotted lines) between adenine (A) and thymine (T), but there are three weak bonds between cytosine (C) and guanine (G); this gives the structure a slight twist, forming a double helix.



DNA

RNA ("ribonucleic acid") is the same as DNA, but ribose replaces deoxyribose and uracil replaces thymine:



Since each nucleotide can be formed with one of four bases (A, C, G, or T), every group of <u>three</u> adjacent nucleotides in the DNA sense strand will have one of 64 possible combinations (4x4x4) of the four T-G-C-A bases. The three base pairs in those three nucleotides (a "codon") correspond to one of the 20 amino acids that are linked together to form proteins. For example, the base sequence TGC codes for the amino acid cysteine, so that when that codon (T-G-C) is read the amino acid cysteine will be added to the polypeptide that is being formed. Since there are 64 different codons and only 20 different amino acids, different codons may code for the same amino acid, i.e., those codons are "synonymous." A "gene" is a portion of the DNA sense chain that codes for a product, usually a polypeptide; various polypeptides are then assembled to form different proteins.

Glossary

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FOOTNOTES

1. In the first reaction, a hydrogen atom (H) on one of the four bases, A, C, G, or T, combines with a hydroxyl group (OH) on deoxyribose, bonding the base to the deoxyribose and forming water (H-OH). In the second reaction, hydrogen atoms (H) from phosphoric acid combine with the remaining two hydroxyl radicals (OH) on the deoxyribose, splitting out more water (H-OH) and forming long strings of alternating phosphoric acid and deoxyribose groups (with bases attached). <u>Back</u>

2. In the chemical formulas, the letters represent atoms of various elements. "H" is hydrogen, "O" is oxygen, "C" is carbon, "N" is nitrogen, and "P" is phosphorus; a carbon atom is at every vertex in the rings that is not occupied by an "N" or an "O." <u>Back</u>

3. For that reason, a sense strand can be the same as its anti-sense strand read backwards, e.g., ACCTAGGT and TGGATCCA, a palindrome. Many of the sequences on the Y chromosome are palindromes, which is useful in making repairs. <u>Back</u>

4. Typically, the sense strand is read, but now scientists are finding that the anti-sense strand can also be read. (Stark, 2008). <u>Back</u>

Glossary 1

Adaptive – behavior or traits that increase fitness, the likelihood of passing on alleles.

Adult – an individual who is (or was) capable of reproducing.

Allele – a variety of a gene; the particular A-C-G-T sequence of a gene.

Allen's Rule – mammals and birds from colder climates usually have shorter and bulkier limbs than the equivalent animals from warmer climates.

Altruism – reducing individual fitness to increase inclusive fitness.

Amino acid – an organic compound that has at least one amine group (-NH2) and at least one carboxylic acid group (-COOH). They are the monomers that link

together to form proteins.

Artifact – something made or used by long deceased humans.

Assortative mating – the tendency to mate non-randomly, typically with someone who is similar.

Atavism – the expression of an allele that had been long ago turned off; a "throwback."

Autosomes – chromosomes other than the X and Y chromosomes.

Balanced polymorphism – a situation where the optimal percentage of each of two or more alleles of a gene in a population is greater than 0 and less than 100.

(*Wikipedia*, "<u>Balancing Selection</u>"). See "environmental heterogeneity," "frequency-dependant selection," and "heterozygote advantage."

Bergmann's Rule – within a species, the body mass increases with latitude and colder climate. Biogenetic Law – "Ontogeny recapitulates phylogeny," i.e., the fetal stages of an organism reveal its evolution. Formulated by Ernst Haeckel, it is now believed to

be more accurately stated as "Ontogeny recapitulates the fetal stages of phylogeny." Bipedal – walking on two feet.

BP – before present, taken as the year 1950.

Bottleneck – a large reduction in population size, followed by a large increase in their numbers. Brachiator – an animal that moves through trees by swinging from its arms.

Brow ridge – a bony ridge over the eyes that strengthens the skull and protects the eyes.

Capoid – Bushmen and the remnants of the Hottentots, who presently reside near the Cape of Africa.

Carrying capacity – the maximum biomass or number of individuals of a population that can survive in a territory.

Chromosome – a strand of DNA entwined with a histone; it is passed on to the next generation during fertilization.

Cline – a gradual change of the incidence of a trait between contiguous populations.

Coalescence – a reduction of genetic variety as one moves back in time.

Codon – three linked nucleotides that code for an amino acid.

Congoid – Africans who reside around the Congo River and Niger basins.

Copy number variant (CNV) – a difference in the number of copies of a string of DNA.

Cross-over – in a pair of chromosomes, the transfer of chunks of DNA from one chromosome to the other during the preparation of an egg or sperm.

Culture – behavior that is not inherited.

DNA – deoxynucleic acid; a large polymer made by stringing together four nucleotides. It is a carrier of hereditary information.

Junk DNA – nuclear DNA that does not code for a gene.

Mitochondrial DNA – DNA that is inside a mitochondrion.

Nuclear DNA – DNA that is inside a nucleus.

Y Chromosomal DNA – nuclear DNA that is in the Y chromosome, which males have

and females do not have.

Drift – the tendency for a population that splits into two populations to become genetically different.

Egalitarian – someone who believes that all people are essentially genetically the same and therefore genetically equal; a bioegalitarian.

Environmental heterogeneity – a situation where the environment changes periodically and having a trait that is partially

advantageous in each environment is more advantageous than having a trait that is more advantageous in one environment and less advantageous in another,

i.e., where generalized is better than specialized.

Epicanthic fold – a fatty fold of skin over the upper portion of the eyes.

Epigenetics –the study of heritable changes in gene expression that are not due to changes in DNA.

Equilibrium – the genome a population would have in a completely stable environment after an infinite amount of time.

Erectine – having traits characteristic of *Homo erectus*.

Ethny – a group whose solidarity is based on common descent; a group in between blood relatives and race.

Exaptation – using a trait to do something other than what it evolved to do.

Evolutionary psychology – the study of the selection of heritable behavior.

Fitness, inclusive – the likelihood of increasing the number of copies of an individual's alleles in the next generation.

individual – the likelihood of increasing the number of copies of an individual's alleles in the next generation by an individual himself reproducing.

Fixed – an allele is "fixed" in a population if everyone has it.

Frequency-dependant selection – a situation where having an allele is advantageous only if less than a certain percentage of people in the population have it, e.g.,

sociopathy.

Founder effect – the lesser genetic diversity of a population that was founded by a sub-set of another population.

F_{ST} - the numerical genetic distance or variaance between individuals or populations.

Gause's Law of Competitive Exclusion – two subspecies of the same species do not for long occupy the same territory.

Gene – a string of DNA that codes for one or more biologically useful molecules, usually polypeptides.

Gene pool – a population's combined genetic heritage.

Generalized – lacking traits for functioning better in particular environments.

Genetic distance – a measurement of the extent that the genetic material of an individual or population differs from that of another individual or population.

Genetic drift – random changes in the genome of an isolated population.

Genetic similarity theory – the theory that people prefer mates, friends, etc. who are genetically similar to themselves.

Genome – the full complement of heritable genetic information in an individual or a population. Genotype – heritable genetic information.

Germline cell – an egg or sperm, or a cell that makes eggs or sperm.

Gloger's rule – birds and mammals that live in a humid environment are more heavily pigmented.

Gracile – having less bone and muscle; not robust.

Gyrus – (pl, gyri) the raised portions of the cerebral cortex in between sulci.

Haplogroup – a group of haplotypes.

Haplotype – a collection of alleles in a region of a single strand of a chromosome that are inherited as a unit and are the same in most members of a population.

Heterozygote – an individual who receives different alleles of a gene from his mother and father.

Heterozygote advantage – a situation where having one copy of an allele is advantageous, but having two copies is not, e.g., sickle-cell anemia.

Histones – proteins that entwine the DNA strands in chromosomes.

Hitchhiking – an increase in the frequency on an allele because it is linked to an allele that is being positively selected.

Holocene - the last 11,600 yrs.

Hominid – a bipedal primate.

Hominin – a member (living or extinct) of the genus Homo.

Hominoid – resembling or related to man.

Homo – the genus of man.

Homozygote – an individual who receives the same allele of a gene from both his mother and his father.

Human – a member of the genus Homo.

Archaic – a member of the species Homo sapiens who is not yet anatomically modern.

Early – a member of the genus Homo but not the species sapiens.

Modern – a member of the sub-species Homo sapiens sapiens.

Hybrid – the offspring of two (genetically different) populations.

Introgression – the movement of an allele from one population into another population by interbreeding.

Inversion – a rearrangement of a chromosome where a segment is reversed end-to-end. An inversion occurs when a chromosome breaks and recombines in a

different arrangement.

Kinship – kinship (f) is half the value of the coefficient of relatedness (r), f = r/2.

Last Common Ancestor (LCA) – the LCA of two individuals (or two populations) is the most recent individual (or population) that includes an ancestor of both of

them, aka Most Recent Common Ancestor (MRCA).

Lewontin's fallacy – the assumption that because individuals within a population differ in their alleles more than the average differences between races over all their

genes, the concept of "race" is meaningless.

Lineage sorting – the loss of an allele that occurs in a population when all the individuals who have that allele fail to have any progeny. The Y chromosomes of males

are lost when they have no sons and the mtDNA of females is lost when they have no daughters.

Locus (pl, Loci) – a particular base pair (nucleotide) in an identifiable string of DNA.

Macrohaplogroup – a group of haplogroups.

Maladaptive – behavior that reduces fitness. Melanin – a pigment that colors skin, hair, and eyes, and protects against ultraviolet rays from the sun. There are two

primary pigments: Eumelanin – a dark brown or black pigment, and

Phenomelanin – a red-gold pigment.

Meme – an idea that induces those who believe it to engage in behavior to induce others to believe it.

Mirror Neurons – neurons in the brain that enable a person to understand what another person is feeling and empathize with him.

Monomer – a compound that can react with itself or a different monomer to form a polymer.

Mt. Toba – a volcano located in Indonesia that exploded 73,000 ya, darkening the atmosphere and killing large numbers of humans in Europe and Asia, as well as

other species.

Multiculturalism – the doctrine that a desirable society consists of a mixture of many different (and often conflicting) cultures, each legally equal and equally worthy.

Neoteny – the retention of childlike features (other than sexual features) into adulthood.

Neutral – having no effect; an allele is neutral if it changes no traits.

Nucleotide – a compound of phosphoric acid, a sugar (ribose for RNA and deoxyribose for DNA), and one of five bases (adenine, cytosine, thymine, and uracil

for RNA and adenine, cytosine, thymine, and guanine for DNA).

Occipital bun – a bulge at the back of the skull, principally in Neanderthals.

Ontogeny – the developmental history of an organism from embryo to adult.

Peptide – a short string of amino acids linked together.

Phenotype – the traits expressed when genes are read.

Phylogeny – the evolutionary history of an organism.

Plasmid – circular DNA in mitochondria.

Pleistocene – the period from about 1.8 mya to about 11,600 ya.

Polymorphism – a gene having more than one allele.

Polypeptide – a string of linked peptides.

Population – a group of interbreeding individuals who have shared alleles that distinguish them from other groups; a politically correct term for race or ethny.

Population genetics – the study of the distribution and frequency of alleles in different populations and how they have changed over time.

Primate – a mammal that has five fingers, an opposable thumb, and fingernails.

Promiscuous altruism – altruism that is not limited to those who are closely genetically related to the giver; sacrificing for others without regard to increasing one's

own fitness.

Protein – a large polypeptide; a polymer formed from amino acids monomers.

Pseudogene – a gene that has been turned off.

Race – a group of individuals all expressing a set of independent genetically-controlled traits, where that set is not possessed by individuals in other groups of that

species; a partly inbred extended family; a breed.

Race-denier – someone who denies the existence of biological human races.

Race-realist – someone who believes that there are racial differences that are real and significant.

Random – not predictable by any rule.

Recombination - (1) the recombining of chromosomes from the egg and the sperm after fertilization, thereby restoring the chromosome number that was halved

during meiosis; (2) the "undoing" of a mutation by one or more subsequent mutations that restores the original condition; (3) the process in which two

pairs of chromosome combine and exchange pieces to form hybrid chromo- somes during the formation of an egg or a sperm cell ("cross-over").

Relatedness – the coefficient of relatedness, r, is the portion of genes that two individuals receive from their LCA; generally, $r = (\frac{1}{2})^n$, where "n" is the number of

generations between two related people.

Reproductive success – placing one's alleles in the genome of the next generation.

Retrovirus – an RNA virus that converts its RNA to DNA when it infects a cell.

Endogenous – a retrovirus whose DNA has become part of its host's germline.

RNA – ribonucleic acid, a large polymer identical to DNA, except that ribose replaces deoxyribose and uracil replaces guanine.

Robust – having large bones and muscles; not gracile.

Saggital keel (or crest) – a bony ridge extending along the center of the top of the skull from the forehead back for attaching chewing muscles and strengthening the

skull.

Selection – increasing or decreasing the frequency of a trait in a population according to whether individuals who possess that trait have increased or decreased

reproductive success.

Selection pressure – the additional reproductive success that could be achieved by increasing the frequency of an allele or combination of alleles in a population.

Selective sweep – the replacement of a group of alleles in a population when an advantageous mutation occurs and the individual with that mutation is so

reproductively successful that not only does the new allele become common, but so do his other alleles, even though they are not more advantageous.

Selector – any factor that increases or decreases an individual's reproductive success depending on whether or not he possesses a particular trait.

Sexual dimorphism – the extent that males differ from females, other than in genital or reproductive traits.

Simian shelf – a bony reinforcing ridge behind the lower incisors.

SNP – single nucleotide polymorphism, a single base (A, C, G, or T) difference in a string of DNA.

Sociobiology – the study of the biological basis for social behavior.

Specialized – having traits for superior functioning in particular environments.

Species – an interbreeding group of individuals who differ significantly from other interbreeding groups within the same genus.

Sub-species – a race or a classification in between species and race.

Sulcus – (pl, sulci) a groove in the cerebral cortex of the brain.

Synonymous – having a different A-C-G-T sequence, but coding for the same amino acid.

Tajima's D – a statistic used to infer whether positive selection of an allele has occurred.

Trait – a heritable property of a living thing; a phenotype.

Recommended Reading

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FOOTNOTE

1. For a technical glossary see THIS Back

Recommended Reading

Here are some of my favorite books on subjects in this book:

Which Way Western Man? by William Gayley Simpson.

This book, a literary classic by a founder of the ACLU and a Franciscan monk, is elegantly written and full of the author's wisdom, knowledge, and honesty. Although the book was written 50 ya, the people then faced the same problems that we do today.

The March of the Titans by Arthur Kemp.

Is history dull? Well, this book is about the history of the white race and, if you are white, it will help tell you who you are and how you came to be.

Why Race Matters by Michael Levin.

Written by a philosopher, this book makes tight and well-reasoned arguments for the reality and importance of race.

On Genetic Interests: Family, Ethny and Humanity in an Age of Mass Migration by Frank Salter.

This book explains why racism is rational and in everyone's genetic interest.

Race, Evolution, and Behavior: A Life History Perspective by J. Philippe Rushton.

Rushton amasses data from many fields to make the case that the races have different reproductive strategies. The blacks are the most "r" orientated (more kids, less care) and the Asians the most "K" orientated (fewer kids, more care), with whites in between, but close to Asians.

Race Differences in Intelligence by Richard Lynn.

The average IQ in nations all over the world is given and explained. Whites are in third place, behind Jews and East Asians.

References

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REFERENCES

Books and Journals

Aarssen, L.W.

(Nov. 26, 2007). <u>Some bold evolutionary predictions for the future of mating in humans</u>. *Oikos*, **116**(10):1768-1778.

Abernathy, V.

(Oct. 2006). Census Bureau Distortions Hide Immigration Crisis. *Population-Environment Balance.*

Abner, A.,

Villarosa, L., & Beal, A. (1998). The Black Parenting Book. Broadway.

Abramson, L.

(Nov. 15, 2006). The 'achievement gap' gets wider, despite changes. All Things Considered. *NPR*.

Achilli, A.,

Rengo, C., Battaglia, V. et al. (2005). Saami and Berbers – An unexpected mitochondrial DNA link. *Am. J. Hum. Genet.*, **76**:883–886.

Adamowicz, S.J.,

Purvis, A., & Wills, M.A. (Mar. 17, 2008). Increasing morphological complexity in multiple parallel lineages of the Crustacea. *PNAS*, **10**:1073.

Adcock, G.J.,

Dennis, E.S., Easteal, S., Huttley, G.A., Jermiin, L.S., Peacock, W.J., & Thorne, A. (Jan. 16, 2001). Mitochondrial DNA sequences in ancient Australians: Implications for modern human origins. *PNAS*, **98**(2):537-542.

Adler, D.S.,

Bar-Oz, G., Belfer-Cohen, A., & Bar-Yosef, O. (Feb., 2006). Ahead of the game: Middle and upper Paleolithic hunting behaviors in the southern Caucasus. *Current Anthropology*, **47**(1).

Aiello, L.C.

& Dean, C. (1990). *An Introduction to Human Evolutionary Anatomy*. Academic Press: London.

Aiello, L.C.

& Wheeler, P. (1995). The expensive tissue hypothesis: the brain and the digestive system in human and primate evolution. *Current Anthropology*, **36**: 199-221.

Albu, J.,

Shur, M., Curi, M. Murphy, L. Heymsfield, S.B., & Pi-Sunyer, F.X. (1997). Resting metabolic rate in obese, premenopausal black women. *American Journal of Clinical Nutrition*, **66**:531-538.

Alesina, A.,

Easterly, W., & Matuszeski, J. (June, 2006). Artificial states. *National Bureau of Economic Research*, Working Paper No. 12328.

Allaby, R.G.,

Fuller, D.Q., & Brown, T.A. (Sept. 16, 2008). The genetic expectations of a protracted model for the origins of domesticated crops. *PNAS*, **105**(37):13982-13986.

Allen, G.

(1987). Frequency of triplets and triplet zygosity types among U.S. births, 1964. *Acta Geneticae Medicae et Gemellologiae*, **37**:299-306.

Alles, D.L.

(2006). A review of current research on human evolution. http://fire.biol.wwu.edu/trent/alles/Human_Evolution.pdf

Alliegro, M.C.,

Alliegro, M.A., & Plazzo, R.E. (June 5, 2006). Centrosome-associated RNA in surf clam oocytes. *PNAS*, **103**(24).

Allik, J.

& McCrae, R.R. (2004). Towards a geography of personality traits: patterns of profiles across 36 cultures. *Journal of Cross-Cultural Psychology*, **35**:13-28.

Allman, W.F.

(1994) The Stone Age Present. Touchstone: NY.

Allocco, D.J.

et al. (2007). Geography and genography: prediction of continental origin using randomly selected single nucleotide polymorphisms. *BMC Genomics*, **8**:68.

Altheide, T.K.

& Hammer, M.F. (1997). Evidence for a possible Asian origin of YAP_Y chromosomes. *Am J Hum Genet*, **61**:462–466.

Ama, P.F.M.

et al. (1986). Skeletal muscle characteristics in sedentary Black and Caucasian males. *Journal of Applied Physiology*, **61**:1758-1761.

Ama, P.F.M., & Ambassa, S. (1997). Buoyancy of African black and European white males. *American Journal of Human Biology*, **9**(1):87-92.

Ambrose, S.H.

(June, 1998). Late Pleistocene human population bottlenecks, volcanic winter, and differentiation of modern humans. *Journal of Human Evolution*, **34**(6):623-651.

Ananthaswamy, A.

& Douglas, K. (May 25, 2002). X-rated brains. New Scientist, Issue 2344.

Andreev, L.

(Aug. 29, 2004). Analysis of population pyramids. *2. UNEX Index and dynamics of population pyramids*. http://www.matrixreasoning.com/pdf/poppyrtwo.pdf.

Angier, N.

(Feb. 28, 1995). *Orangutan hybrid, bred to save species, now seen as pollutant.* New York Times.

Anikovich, M.V.,

et al. (Jan. 12, 2007). Early Upper Paleolithic in Eastern Europe and implications for the dispersal of modern humans. *Science*, **315**(5809):223-226.

Anzai, T.

et al. (June 24, 2003). Comparative sequencing of human and chimpanzee MHC Class | Regions unveils insertions/deletions as the major path to genomic divergence. *PNAS*, **100** (13):7708-7713.

Ardrey, Ŕ.

(1966). The Territorial Imperative: A Personal Inquiry into the Animal Origins of Property and Nations. Atheneum.

Arnold, M.L.

& Meyer, A. (2006). *Natural hybridization in primates: One evolutionary mechanism*. Zoology (Jena).

Arsuaga, J.L.

(2001). *The Neanderthal's Necklace: In Search of the First Thinkers*. Four Walls Eight Windows: NY.

Ash, J.

& Gallup Jr., G.G. (June, 2007). Paleoclimatic Variation and Brain Expansion during Human Evolution. *Human Nature*, **18**(2):109-124.

Asimov, I.

(1989). Chronology of Science & Discovery. Collins.
Bailey, R.

(Nov. 18, 2005). Discriminating medicine: Using race and ethnicity to improve medicare. *Reason Online*.

Bailey, S.E.

(2002). A closer look at Neanderthal postcanine dental morphology: The mandibular dentation. *The Anatomical Record (New Anat.)*, **269**:148–156.

Bakalar, P.

(2004). The IQ of Gypsies in Central Europe. *Mankind Quarterly*, **44**(3&4):291-300. **Baker**, J.R.

(1974). Race. *Georgia: Foundation for Human Understanding with permission of Oxford University Press*, reprinted 1981.

Baker, R.

(2006). Sperm Wars: Infidelity, Sexual Conflict, and Other Bedroom Battles. *Basic Books*. **Bakewell**, M.A.,

Shi, P., & Zhang, J. (May 1, 2007). More genes underwent positive selection in chimpanzee evolution than in human evolution. *PNAS*, **104**(18):7489-7494.

Balbirnie, C.

(Feb. 10, 2005). The icy truth behind Neanderthals. BBC News.

Balter, M.

(Nov. 25, 2005). Expression of endorphin gene favored in human evolution. *Science*, **310** (5752):1257.

Balter, M.

(Feb. 2, 2007). Small brains, big fight: 'Hobbits' called new species. *Science*, **315** (5812):583.

Bar-Haim, Y.,

Ziv, T., Lamy, D., & Hodes, R.M. (Feb., 2006). Nature and nurture in own-race face processing. *Psychological Science*, **17**(2):159-163.

Barash, D.P.

& Lipton, J.E. (1997). *Making Sense of Sex*. Island Press: Washington, D.C.

Barkow, J.H.

(1991). Darwin, Sex, and Status. University of Toronto Press.

Barkow, J.,

Cosmides, L., & Tooby, J. (1992). *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. Oxford University Press.

Barnouw, V.

(1982). *An Introduction to Anthropology: Physical Anthropology and Archaeology*, **Vol. 1**, The Dorsey Press: Homewood, Illinois.

Barrai, I,

Rodriguez-Larralde, A., Manni, F., Ruggierio, V., Tartari, D., & Scapoli, D. (2003). Isolation by language and distance in Belgium. *Annuls of Human Genetics*, **68**:1-16.

Barreiro, L.B.,

Laval, G., Quach, H., Patin, E., & Quintana-Murci, L. (Feb. 3, 2008). Natural selection has driven population differentiation in modern humans. *Nature Genetics*, online, doi:10.1038/ng.78.

Basler, R.P. ed.

(1953). *The Collected Works Of Abraham Lincoln*. Rutgers University Press. **Baumann**, S.

(Aug. 14, 2004). Gender, Complexion, and the Link Between Aesthetic and Moral Boundaries: Content Analysis of Magazine Advertisements. Paper presented at the annual meeting of the *American Sociological Association*, Hilton San Francisco & Renaissance Parc 55 Hotel, San Francisco, CA.

Bazin, E.,

Glémin, S. & Galtier, N. (Apr. 28, 2006). Population Size Does Not Influence Mitochondrial Genetic Diversity in Animals. *Science*, **312**(5773):570-572.

Beals, K.L.

(1965). *An introduction to anthropology*, 3rd Ed. Allyn and Bacon: Boston, Mass. **Beals**,

Smith, C. L. & Dodd, S. M. (1984). Brain size, cranial morphology, climate, and time machines. *Current Anthropology*, **25**:301-330.

Bean, R.B.

(1906). Some racial peculiarities of the Negro brain. *American Journal of Anatomy*, **5**:353-432.

Beard, K.C.

(Mar. 3, 2008). The oldest North American primate and mammalian biogeography during the Paleocene– Eocene Thermal Maximum. *PNAS*, Online.

Begun, E.R.

(1997). Eurasian Origin of the Hominidae. *American Journal of Physical Anthropology*, Supp. 24, pp.73-74.

Benfer, R.

(Apr., 2006). Presentation at Society for American Archeology, San Juan, Puerto Rico. **Benjamin**, J.,

Li, L., Patterson, C., Greenberg, B.D., Murphy, D.L., Hamer, D.H. (1996). Population and familial association between the D4 dopamine receptor gene and measures of novelty seeking. *Nat. Genet.*, **12**:81-84.

Benveniste, R.E.

& Todaro, G.J. (May 13, 1976). Evolution of type C viral genes: evidence for an Asian origin of man. *Nature*, **261**:101-108.

Bereczkei, T.,

Gyuris, P., & Weisfeld, G.E. (Jun. 7, 2004). Sexual imprinting in human mate choice. *Proc. Biol. Sci.*, **271**:1129-34.

Bereczkei, T.,

Hegedus, G., & Hajnal, G. (Sept. 2, 2008). Facialmetric similarities mediate mate choice: sexual imprinting on opposite-sex parents. *Proceedings of the Royal Society B: Biological Sciences*, Online.

Berger, L.R.,

Churchill, S.E., De Klerk, B., & Quinn, R.L. (2008). Small-Bodied Humans from Palau, Micronesia. *PLOS ONE*, **3**(3):e1780.

Bergman, J.

(Dec., 1998). Are wisdom teeth (third molars) vestiges of human evolution? *TJ Archive*, **12** (3):297-304.

Bermúdez de Castro, J.M.,

Arsuaga, J.L., Carbonell, E., Rosas, A., Martinez, I., & Mosquera, M. (1997). A Hominid from the Lower Pleistocene of Atapuerca, Spain: Possible ancestor to Neanderthals and modern humans. *Science*, **276**:1392-1395.

Beyers, S.N.

(2007). Introduction to Forensic Anthropology, Third Ed., Allyn & Bacon.

Birdsell, J.B.

(1993). *Microevolutionary Patterns in Aboriginal Australia: A Gradient Analysis of Clines* (Research Monographs on Human Population Biology). Oxford University Press.

Birkhead, T.

(2003). A Brand-New Bird. Basic Books.

Birney, E.

et al. (June 14, 2007). Identification and analysis of functional elements in 1% of the human genome by the ENCODE pilot project. *Nature*, **447**:799-816.

Bishop, N.A.

& Guarente, L. (May 31, 2007). Two neurons mediate diet-restriction-induced longevity in C. elegans. *Nature*, **447**:545-549.

Blain, J.

& Barkow, J.H. (1988). Father-involvement, reproductive strategies, and the sensitive period. *Sociobiology and Human Development*, MacDonald, ed., pp.373-396. Garland: NY.

Blumenstiel, J.P.

(Dec. 7, 2007). Sperm competition can drive a male-biased mutation rate. *Journal of Theoretical Biology*, **249**(3),624-632.

Boaz, N.T.

(1997). Eco Homo. Basic Books: NY.

Boaz, N.T.

& Ciochon, R.L. (2004). *Dragon Bone Hill: An Ice-Age Saga of Homo erectus*. Oxford University Press.

Bolk, L.

(1926). *Das Problem der Menschwerdung* [The problem of human development]. Jena: Gustav Fischer.

Bolton, J.S.

(1914). The Brain in Health and Disease. London.

Bonger, W.A.

(1948). Race and Crime. Columbia University Press.

Bornstein, M.H.,

Hahn, C-S., Belf, C., Haynes, O.M., Slater, A., Golding, J., Wolke, D., & ALSPAC Study Team. (Feb., 2006). Stability in cognition across early childhood: A developmental cascade. *Psychological Science*, 17:151.

Borst, R.A.

(Apr., 1986). Bring your skeleton to life. *The Science Teacher*.

Botting, K.

& Botting, D. (1995). Sex Appeal. London: Boxtree Ltd.

Bouchard, T.J., Jr,

Lykken, D.T., McGue, M., Segal, N.L., & Tellegen, A. (1990). Sources of human psychological differences: the Minnesota Study of Twins Reared Apart. *Science*, **250**:223–228.

Bourgouin, S.

(1993). Serial killers; enquête sur les tueurs en série. Livre de poche.

Bower, B.

(Feb. 25, 2006). Big Woman with a Distant Past: Stone Age gal embodies humanity's cold shifts. *Science News* Online, **169**(8):116.

Bowles, S.

(Dec., 8, 2006). Group Competition, Reproductive Leveling, and the Evolution of Human Altruism. *Science*, **314**(5805):1569-1572.

Boyd, W.C.

& Asimov, I. (1955) Races and People. Abelard-Schumann: NY.

Brace, C. L.

(2000). Evolution in an Anthropological View. AltaMira Press.

Bradley, B.

& Stanford D. (2004). The North Atlantic ice-age corridor: A possible Paleolithic route to the New World. *World Archeology*, **36**:459-478.

Bradley, P.

(Feb. 12, 2008). Why Do Only Whites Lose Jobs Over Racial Remarks? VDARE.com. Brain, C.K.

& Sillent, A. (Dec. 1, 1988). Evidence from the Swartkrans cave for the earliest use of fire. *Nature*, **336**:464-466.

Bramble, D.M.

& Llieberman, D.E. (Nov. 18, 2004). Endurance running and the evolution of Homo. *Nature*, **432**:345-352.

Brandt, T.

(1978). Growth dynamics of low birth weight infants with emphasis on the perinatal period. *Human Growth*, Vol. 2, Falkner, F. & Tanner, J.M. (eds.), pp. 557-617. Plenum Press: NY.

Brésard, B.

& Bresson, F. (1983). Handedness in Pongo pygmaeus and Pan troglodytes. *Journal of Human Evolution*, **12**:659-666.

Briffault, R.

(1931). *The mothers: the matriarchal theory of social origins*. Macmillan: New York, NY. **Brimelow**, P.

& Spencer, L. (Feb. 15, 1993). When quotas replace merit, everybody suffers. Forbes, pp. 80-102.

Broca, P.P.

(1858). Mémoire sur l'hybridité en général, sur la distinction des espèces animals et sur les métis obtenus par le croisement du lièvre et du lapin. *J. De la Physiol.*, **1**:433-471 & 684-729.

Brody, N.

(1992). Intelligence. (2nd ed.) Academic: NY.

Brody, S.

(1997). Sex at risk: Lifetime number of partners, frequency of intercourse, and the low AIDS risk of vaginal intercourse. Transaction Publishers.

Broom, R.

(1918) The evidence afforded by the Boskop skull of a new species of primitive man (Homo capensis). *Anthropological Papers of the American Museum of Natural History*, **XXIII**, Part II.

Brosnan, M.J.

(Nov., 2006). Digit ratio and faculty membership: Implications for the relationship between prenatal testosterone and academia. *British Journal of Psychology*, **97**(4):455-466.

Brown, G.L.,

et al. (1982). *Crime Times*, **1**(1/2).

$\pmb{\text{Brown},\,\text{M.D.,}}$

Hosseini, S.H., Torroni, A., Bandelt, H-J, Allen, J.C., Schurr, T.G., Scozzari, R., Cruciani, F., & Wallace, D.C. (Nov., 25, 1998). mtDNA Haplogroup X: An Ancient Link between Europe/Western Asia and North America? *Am. J. Hum. Genet.*, **63**:1852-1861.

Brown P.,

Sutikna, T., Morwood, M., Soejono, R.P., Jatmiko, Saptomo, E.W. et al. (2004). A new small-bodied hominin from the late Pleistocene of Flores, Indonesia. *Nature*, **431**:1055-61. **Bruder**, C.E.G.,

et al. (2008). Phenotypically Concordant and Discordant Monozygotic Twins Display Different DNA Copy- Number-Variation Profiles. *The American Journal of Human Genetics*, Online.

Buck, T.J.

(Nov., 2004). A proposed method for the identification of race in sub-adult skeletons: a geometric morphometric analysis of mandibular morphology. *Journal of Forensic*

Sciences, 29 (6).

Budiansky, S.

(1992). *The Covenant of the Wild: Why Animals Chose Domestication*. Morrow: New York.

Bulmer, M.G.

(1970). The Biology of Twinning in Man. Oxford: Clarendon Press.

Burmeister, H.

(1853). *The black man. The comparative anatomy and psychology of the African Negro.* Evening Post.

Burdick, K.E.,

Lencz, T., Funke, B., Finn, C.T., Szeszko, P.R., Kane, J.M., Kucherlapati, R., & Malhotra1, A.K. (2006). <u>Genetic variation in DTNBP1 influences general cognitive ability</u>. *Human Molecular Genetics*, **15**(10):1563-1568.

Burger, J.,

Kirchner, M., Bramanti, B., Haak, W. & Thomas M.G. (Mar. 6, 2007). Absence of the lactase-persistence-associated allele in early Neolithic Europeans. *PNAS*, **104**(10):3736-3741.

Burton, M.L.,

Moore, C.C., Whiting, J.W.M., Romney, A.K., Aberle, D.F., Barcelo, J.A., Dow, M.M., Guyer, J.I., Kronenfeld, D.B., Levy, J.E., & Linnekin, J. (Feb., 1996). *Current Anthropology*, **37**(1):87-123.

Buss, D.M.

(2005). *The Murderer Next Door: Why the Mind is Designed to Kill*. Penguin Press. **Buss**, D.M.

(2008). Attractive Women Want it All: Good Genes, Economic Investment, Parenting Proclivities, and Emotional Commitment. *Evolutionary Psychology*, **6**(1):134-146.

Butler, P.

(1995). Racially based jury nullification: Black power in the criminal justice system. *Yale Law Journal*, **105**:677-725.

Byer, S.N.

et al. (1997). Identification of Ero-Americans, Afro-Americans, and Amerindians from palatal dimensions. *The Journal of Forensic Science*, **42**(1):3-9.

Calvin, W.H.

(1991). Essays on the brain: The throwing Madonna.

http://williamcalvin.com/bk2/bk2ch1.htm

Cann, R.

(2002). Tangled genetic routes. *Nature*, **416**(7):32-33.

Caramelli, D.,

Lalueza-Fox, C., Vernesi, C., Lari, M., Casoli, A., Mallegni, F., Chiarelli, B., Dupanloup, I., Bertranpetit, J., Barbujani, G., & Bertorelle, G. (May 27, 2003). Evidence for a genetic discontinuity between Neandertals and 24,000-year-old anatomically modern Europeans, *PNAS*, **100**(11):6593-6597.

Cardwell, D.

& Elliott, S. (Sept. 8, 2006). City ad firms agree to hire more black managers. *New York Times*.

Cartwright, S.A.

(Nov. 10, 1857). *Natural history of the prognathous species of man*. New York Day- Book. **Caspari**, R.

& Lee, S-H. (Jan. 27, 2004). Older age becomes common late in human evolution *PNAS*, **101** (30):10895-19000.

Caspi, E.,

et al. (Nov. 5, 2007). Moderation of breastfeeding effects on the IQ by genetic variation in fatty acid metabolism. *PNAS*, **10**:1073.

Castle,

W.E. (1930). *Genetics and Eugenics*. Harvard University Press, 4th Ed.

Caufield, P.W.,

Saxena, D., Fitch, D., & Li, Y. (2007). Population Structure of Plasmid-Containing Strains of Streptococcus mutans, a Member of the Human Indigenous Biota. *Journal of Bacteriology*, **189**:1238-1243.

Cavalli-Sforza, L.L.

(Nov., 1991). Genes, peoples and languages. Scientific American.

Cavalli-Sforza, L.L.,

Menozzi, P. & Piazza, A. (1994) *The History and Geography of Human Genes*, Princeton University Press.

Chaimanee, Y.,

Suteethorn, V., Jintasakul, P., Vidthayanon, C., Marandat, B., & Jaeger, J-J. (Jan. 29, 2004). A new orangutan relative from the late Miocene of Thailand. *Nature*, **427**:439-441. **ndlev**, A.C.,

Chandley, A.C.,

Short, R.V., & Allen, W.R. (Oct., 1975). Cytogenetic studies of three equine hybrids. *J. Reprod. Fertil. Suppl.*, **23**:356-70.

Changizi, M.,

Zhang, Q. & Shimojo, S. (2006). Bare skin, blood, emotion, and the evolution of primate color vision. *Biology Letters* **2**.

Chapais, B.

(2008). *Primeval Kinship: How Pair Bonding Gave Birth to Human Society*. Harvard University Press.

Charlton, B.G.

(2006). The rise of the boy-genius: psychological neoteny, science and modern life. *Medical Hypotheses*, **67**:679-681.

Chen, F.C.

& Li, W.H. (2001). Genomic divergences between humans and other hominoids and the effective population size of the common ancestor of humans and chimpanzees. *Am. J. Hum. Genet.*, **68**(2):444-456.

Cheng, C.

(2006). Annual Main Meeting of the Society for Experimental Biology in Canterbury, England.

Cheng, S.

& Powell, B. (Jan., 2007). Under and Beyond Constraints: Resource Allocation to Young Children from Biracial Families. *American Journal of Sociology*, **112**(4):1044–1094.

Chenn, A.

&Walsh, C.A. (July 19, 2002). <u>Regulation of Cerebral Cortical Size by Control of Cell</u> <u>Cycle Exit in Neural Precursors</u>, *Science*, **297**(5580):365-369.

Ch'eng-K'un, C. (Dec., 1946). Characteristic Traits of the Chinese People. *Social Forces*, **25**(2) 146-155.

Childe, V.G. (Spring, 1965). Zimbabwean. *Mankind Quarterly*, V(4).

Choi, S.C.

& Trotter, M.A. (1970). Statistical study of the multivariate structure and race sex differences of American White and Negro fetal skeletons. *American Journal of Physical Anthropology*, **33**:307 312.

Choi, Y.

Harachi, T.W., Gillmore, M.R., & Catalano, R.F. (Jan., 2006). Are multiracial adolescents at greater risk? Comparisons of rates, patterns, and correlates of substance use and

violence between monoracial and multiracial adolescents. *American Journal of Orthopsychiatry*, **76**(1):86-97.

Chorney, M.J.,

Chorney, K., Seese, N., Owen, M.J., Daniels, J., McGuffin, P., Thompson, L.A., Detterman, D.K., Benbow, C., Lubinski, D., Eley, T., & Plomin, R. (1998). A quantitative trait locus associated with cognitive ability in children. *Psychological Science*, **9**:(3):1-8 & 159-166.

Chu, S.,

Hardaker, R., & Lysett, J.E. (May, 2007). Too good to be 'true'? The handicap of high socio- economic status in attractive males. *Personality and Individual Differences*, **42** (7):1291-1300.

Clark, D.S.

et al. (June 12, 2003). Stratigraphic, chronological and behavioural contexts of Pleistocene Homo sapiens from Middle Awash, Ethiopia. *Nature*, **423**:747-752.

Clark, G.

(1969). *World prehistory: A new outline*. (2nd ed.). Cambridge: Cambridge University Press.

Clark, G.

(2007). *A Farewell to Alms: A Brief Economic History of the World*. Princeton University Press.

Cochran, G.,

Hardy, J., & Harpending, H. (Sept., 2006). Natural history of Ashkenazi intelligence. *Journal of Biosocial Science*, **38**(5):659-693.

Collard, M.

& Aiello, L.C. (Mar. 23, 2000). Human evolution: From forelimbs to two legs. *Nature*, **404**: 339.

Connolly, C.J. (1950). External Morphology of the Primate Brain, Springfield, III.

Conroy, G.C.,

Vannier, M.W., & Tobias, P.V. (1990). Endocranial features of Australopithecus africanus revealed by 2- and 3-D tomography. *Science*, 247:838-841.

Conti, B.

et al. (Nov. 3, 2006). Transgenic mice with a reduced core body temperature have an increased life span. *Science*, **314**(5800):825-828.

Cooley, D.R.

(2007). <u>Deaf by Design: A Business Argument Against Engineering Disabled Offspring</u>. *Journal of Business Ethics*, **71**:209-227.

Coon, C.S.

(1962). The Origin of Races. Alfred A Knopf: NY.

Cooper, A.,

Poinar, H.N., Pääbo, S.J., Radovcic, J., Debenath, A., Caparros, M., Barroso-Ruiz, C., Bertranpetit, J., Nielsen-Marsh, C., Hedges, R.E.M., & Sykes, B., (Aug. 22, 1997). Neandertal genetics. *Science*, **277**:1021–1023.

Cooper, N.,

Rodriguez, J., & Purvis, A., (Sept. 7, 2008). <u>A common tendency for phylogenetic</u> overdispersion in mammalian assemblages. *J. Pro. Roy. Soc. B*, **275**(1646).

Coppens, Y.

(2004). *Human Origins: The Story of Our Species*. Hachette Illustrated: UK. **Coppinger**, R.

& Schneider, R. (1995). Evolution of working dogs. In J. Serpell (ed.), *The Domestic Dog: Its Evolution, Behaviour and Interactions with People*. Cambridge: Cambridge University Press, pp. 21-47.

Coqueugniot, H,

Hublin, J.J., Veillon, F., Houët, F., & Jacob, T. (Sept. 16, 2004). Early brain growth in Homo erectus and implications for cognitive ability. *Nature*, Letter, **431**:299-302.

Corballis, M.C.

(1991). *The Lopsided Ape: Evolution of the Generative Mind*. Oxford University Press: USA.

Cornwell, R.E.,

&a Perrett, D.I. (2008). Sexy sons and sexy daughters: the influence of parents' facial characteristics on offspring. *Animal Behaviour*.

Cosgrove, L.,

Krimsky, S. Vijayaraghavan, M., & Schneider, L. (Spring, 2006). Financial ties between DSM-IV panel members and the pharmaceutical industry. *Psychotherapy and Psychosomatics*.

Coulthart, M.B.,

Posada, D., Crandall, K.A., & Dekaban, G.A. (2006). *Infection, Genetics and Evolution*, **6**:91-96.

Crawford, M.A.,

Bloom, M., Broadhurst, L., Schmidt, W.F., Cunnane, S. C., Ghebremeskel, K., Linseisen, F., Lloyd -Smith, J & Parkington, J. (2000). Evidence for the Unique Function of Docosahexaenoic Acid (DHA) During the Evolution of the Modern Hominid Brain. *Lipids*, **34**: S39-S47.

Crespi, B.,

Summers, K., & Dorus, S. (Sept. 4, 2007). Adaptive evolution of genes underlying schizophrenis. *Proceedings of the Royal Society B*, Online.

Crew, F.A.E.

(1927). Heredity. London.

Cropley, J.E.,

Suter, C.M., Beckman, K.B., & Martin, D.I.K. (Nov. 14, 2006). Germ-line epigenetic modification of the murine Avy allele by nutritional supplementation. *PNAS*, **103** (46):17308- 17312.

Cross, T.

& Slater, R.B. (Autumn, 1997). Special Report: Why the End of Affirmative Action Would Exclude All but a Very Few Blacks from America's Leading Universities and Graduate Schools. *J. Blacks Higher Educ*. No. 17, pp.8-17.

Cruciani, F.

et al. (2002). A back migration from Asia to sub-Saharan Africa is supported by highresolution analysis of human Y-chromosome haplotypes. *Am. J. Hum. Genet.*, **70**:1197-1214.

Cruciani, F.

et al. (June 25, 2008). <u>Genetic diversity patterns at the human clock gene period 2 are</u> suggestive of population-specific positive selection. *European Journal of Human Genetics*, Online.

Cull, R.

(1850). Remarks on three Naloo Negro skulls. *Journal of the Ethnological Society of London*, **2**:238 -245.

Culotta, E.

(Oct. 26, 2007). Ancient DNA reveals Neanderthals with red hair, fair complexions. *Science*, **318**(5850):546-547.

Cunningham, W. A.,

Nezlek, J.B. & Banaji, M.R. (2004). Implicit and explicit ethnocentrism: Revisiting the ideologies of prejudice. *Personality and Social Psychology Bulletin*, **30**:1332–1346.

Curnoe, D.,

& Thorne, A. (2003). Number of ancestral human species: a molecular perspective. *HOMO*, **53** (3):201-224.

Curnoe, D.

& Tobias, P.V. (2006). Description, new reconstruction, comparative anatomy, and classification of the Sterkfontein Stw 53 cranium, with discussions about the taxonomy of other southern African early Homo remains. *Journal of Human Evolution*, **50**:36-77.

Dabbs, Jr., J.M.

& Hargrove, M.F. (1997) Age, testosterone, and behavior among female prison inmates. *Psychosomatic Medicine*, **59**(5):477-480.

Dabbs, Jr., J.M.

& Milun, R. (1999). Pupil Dilation when Viewing Strangers: Can Testosterone Moderate Prejudice? *Social Behavior and Personality*, **27**:297-301.

Dabbs, Jr., J.M. & Dabbs, M.G. (2001). *Heroes, rogues, & lovers: Testosterone and behavior.* MrGraw- Hill.

Dalley, J.W.

et al. (Mar. 2, 2007). Nucleus Accumbens D2/3 Receptors Predict Trait Impulsivity and Cocaine Reinforcement. *Science*, **315**(5816):1267-1270.

Daly, M.

& Wilson, M. (1988). *Homicide*. Aldine de Gruyter: NY.

Damasio, A.R.

(1994). *Descartes' error: Emotion, reason, and the human Brain*. Grosset/Putnam: NY. **Darwin**, C.

(1859). On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life.

Darwin, C.

(1871) *The Descent of Man and Selection in Relation to Sex*. D. Appleton & Co.: NY. **Davenport**, C.B.

& Steggerda, M. (1970). *Race Crossing in Jamaica*. Greenwood Press Reprint, (N.e.of 1929 Ed edition).

David, H.

& Lynn, R. (2007). Intelligence Differences between European and Orienta Jews in Israel. *Journal of Biosocial Science*, **39**:465-473.

David, R.

& Collins, Jr., J. (July, 2007). Disparities in infant mortality: What's genetics got to do with it? *Am. J. of Public Health*, **97**:1191-1197.

Davidenko, N.

(2007). Silhouetted face profiles: A new methodology for face perception research. *Journal of Vision*, **7**(4-6):1-17.

Davidson, L.E.

& Rodd, H.D. (2001). Interrelationship between dental age and chronological age in Somali children. *Community Dent. Health*, **18**:27-30.

Davies, P.

(Dec. 1, 2004). Tiny bones pose humanity's big questions. *Science & Theology News* Online.

Davis, B.D.

(1983). *Neo-Lysenkoism, IQ and the press*. The Public Interest, **74**:41-59.

Davis, D.B.

(2006). *Inhuman bondage: The rise and fall of slavery in the new world*. Oxford University Press.

Dawkins, R.

(1976). The Selfish Gene. Oxford University Press: Oxford.

Dawson, B.,

Iwamoto, C.K., Ross, L.P., Nungester, R.J., Swanson, D.B., Volle, R.L. (1994). Performance on the National Board of Medical Examiners. Part I Examination by men and women of different race and ethnicity. *JAMA*, **272**(9):674-679.

Deaner, R.O.,

van Schaik, C.P., & Johnson, V. (2006). Do some taxa have better domain-general cognition than others? A metaanalysis of nonhuman primate studies. *Evolutionary Psychology*, **4**:149-196.

Deaner, R.O.,

Isler, K., Burkart, J., & van Schaik, C. (2007). Overall Brain Size, and Not Encephalization Quotient, Best Predicts Cognitive Ability across Non-Human Primates. *Brain, Behavior, and Evolution*, **70**:115-124.

Deary, I.J.,

Whalley, L.J., Lemmon, H., Crawford, J.R., & Starr, J.M. (Feb., 2000). The stability of individual differences in mental ability from childhood to old age: follow-up of the 1932 Scottish Mental Survey, *Intelligence*, **28**(1):49-55.

De Beer, G.R.,

(1951). Embryos and Ancestors. Clarendon Press: Oxford.

Dediu, D.

& Ladd, D.R. (May 30, 2007). Linguistic tone is related to the population frequency of the adaptive haplogroups of two brain size genes, ASPM and Microcephalin. *PNAS*, **10**:1073.

Deedrick, D.W.

& Koch, S.L. (Jan., 2004). Microscopy of Hair Part 1: A Practical Guide and Manual for Human Hairs. *Forensic Science Communications*, **6**(1).

Deka,

et al. (Feb., 1995). Population genetics of dinucleotide (dC-dA)n.(dG-dT)n polymorphisms in world populations. *Am. J. Hum. Genet.*, **56**(2):461-74.

Demuth, J.P.,

De Bie, T., Stajich, J.E., Cristianini, N., Hahn, M.W. (2006). The evolution of mammalian gene families. *PLOS ONE*, **1**(1):e85.

Deng, C.,

Liu, C., Liu, C., Ao, H., Pan, Y., & Zhu, R. (2007). Magnetochronology of the Feiliang Paleolithic site in the Nihewan Basin and implications for early human adaptability to high northern latitudes in East Asia. *Geophysical Research Letters*, paper **10**.1029.

Dennell, R.

& Roebroeks, W. (Dec. 22, 2005). An Asian perspective on early human dispersal from Africa. *Nature*, **438**:1099-1104.

Derbyshire, J.

(Oct. 21, 2006). *Race and conservatism*. New English Review.

Derenko, M.V.,

Grzybowski, T., Malyarchuk, B.A., Czarny, J., Miścicka-Śliwka, D., & Zakharov, I.A. (July, 2001). The presence of mitochondrial Haplogroup X in Altaians from South Siberia. *Am. J. Hum. Genet.*, **69**(1):237–241.

Destro-Bisol, G.,

Maviglia, R., Caglia, A., Boschi, I., Spedini, G., Pascali, V., Clark, A., Tishkoff, S. (1999). Estimating European admixture in African Americans by using microsatellites and a microsatellite haplotype (CD4/Alu). *Human Genetics*, **104**:149-157.

De Waal, F.

& Lanting, F. (1997). *Bonobo: The Forgotten Ape*. University of California Press. **Diamond**, J.M.

(1986). Variation in human testis size. *Nature*, **320**:488-489.

Dick, D.M, et al.

(Mar., 2007). Association of CHRM2 with IQ:Converging evidence for a gene influencing intelligence. *Behav. Genet.*, **37**(2):265-272.

Ding, Y-C, et al.

(Jan. 8, 2002). Evidence of positive selection acting at the human dopamine receptor D4 gene locus. *PNAS*, **99**(1):309-314.

Donohoe, J.

(Dec., 2003). Non-human primate handedness: The great apes. Historia & Ciencia, *Anthropologia, Primatologia*.

Driscoll, C.A.

et al. (July 27, 2007). The Near Eastern origin of cat domestication. *Science*, **317**:519-523.

Duarte, C.,

Maurício, J., Pettitt, P.B., Souto, P., Trinkaus, E., van der Plicht, H., & Zilhão, J. (June 22, 1999). The early Upper Paleolithic human skeleton from the Abrigo do Lagar Velho (Portugal) and modern human emergence in Iberia. *PNAS*, **96**(13):7604-7609.

DuBois, W.Ĕ.Ś.

(1915). The Negro: Africa.

DuBois, W.E.B.

(June, 1932). Black folk and birth control. *Birth Control Review*, **16**(6).

Duckworth, W.L.H.

(1895). Variations in crania of Gorilla savagei. *Journal of Anatomy and Physiology*, 29. Charles Griffen and Co.

Duffy, D.L.,

Montgomery, G.W., Chen, W., Zhao, Z.Z., Le, L., James, M.R., Hayward, N.K., Martin, N.G., & Sturm, R.A. (2007). A Three–Single-Nucleotide Polymorphism Haplotype in Intron 1 of OCA2 Explains Most Human Eye-Color Variation. *American Journal of Human Genetics*, **80**:241-252.

Dugdale, R.L.

(1877). The Jukes: A Study in Crime, Pauperism, *Disease and Heredity*.

Duranceaux, N.C.E.,

Schuckit, M.A., Mimy, Y., Eng, M.Y., Robinson, S.K., Carr, L.G., & Wall, T.L. (Sept., 2006). Associations of variations in alcohol dehydrogenase genes with the level of response to alcohol in non-Asians. *Alcoholism: Clinical and Experimental Research*, **30** (9):1451-1631.

Dwyer, T.,

Blizzard, L., Ashbolt, R., Plulmb, J., Berwick, M., & Stankovich, J.M. (Apr., 2002). Cutaneous melanin density of Caucasians measured by spectrophotometry and risk of malignant melanoma, basal cell carcinoma, and squamous cell carcinoma of the skin. *Am. J. Epidemiol.*, **155**: 614-621.

East, E.M.

& Jones, D.F. (1919). Inbreeding and Outbreeding, Lipppincott.

Eberhardt, J.L.

(Feb.-Mar., 2005). Imaging Race. American Psychologist, 60(2):181-190.

Eberhardt, J.L.,

Davies, P.G., Purdie-Vaughns, V.J., & Johnson, S.L. (May, 2006). Looking deathworthy: Perceived stereotypicality of black defendants predicts capital-sentencing outcomes. *Psychological Science*, **17**(5):383-386.

Edgar, H.

(Mar., 2005) Prediction of race using characteristics of dental morphology. Journal of

Forensic Sciences, **50**(2).

Edmands, S.

(2007). Between a rock and a hard place: evaluating the relative risks of inbreeding and outbreeding for conservation and management. *Molecular Ecology* **16**(3):463–475.

Edwards, A.W.F.

(2003) Human Genetic Diversity: Lewontin's Fallacy, an academic paper.

Eiberg, H.,

Troelsen, J., Nielsen, M., Mikkelsen, A., Mengel-From, J., Kjaer, K.W., & Hansen, L. (Jan. 3, 2008). <u>Blue eye color in humans may be caused by a perfectly associated founder</u> mutation in a regulatory element located within the HERC2 gene inhibiting OCA2 <u>expression</u>. *Human Genetics*, Online.

Eichler, E.E.

(2006). Widening the spectrum of human genetic variation. *Nature Genetics*, **38**:9-11. **Ekblom**, R.

(2000). Inbreeding avoidance through mate choice. Evolutionary Biology Centre Department of Population Biology, Uppsala University, Sweden.

Emery, N.J.

& Clayton, N.S. (Dec. 10, 2004). The mentality of crows: Convergent evolution of intelligence in corvids and apes. *Science*, **306**(5703):1903-1907.

Entine, J.

(2001). *Taboo: Why Black Athletes Dominate Sports and Why We're Afraid to Talk About It*. Public Affairs.

Eppinger, M.,

et.al. (July, 2006). Who ate whom? Adaptive Helicobacter genomic changes that accompanied a host jump from early humans to large felines. *PLoS Genet.*, **2**(7):e120.

Eswaran, V.,

Harpending, H., Rogers, A.R. (July, 2005). Genomics refutes an exclusively African origin of humans. *Journal of Human Evolution*, **49**(1):1-18.

Etcoff, N.

(1999). Survival of the prettiest: The science of beauty. Doubleday: NY.

Etler, D.A.

(Oct., 1996). <u>The fossil evidence for human evolution in Asia</u>, *Annual Review of Anthropology* **25**:275-301.

Ettinger, B.,

Sidney S., Cummings, S.R., Libanati, C., Bikle, D.D., Tekawa, I.S., Tolan, K., & Steiger, P. (1997). Racial differences in bone density between young adult black and white subjects persist after adjustment for anthropometric, lifestyle, and biochemical differences. *Journal of Clinical Endocrinology & Metabolism*, **82**:429-434.

Evans, P.D.,

Anderson, J.R., Vallender, E.J., Gilbert, S.L., Malcom, C.M., Dorus, S., & Lahn, B.T. (Jan. 13, 2004). Adaptive evolution of ASPM, a major determinant of cerebral cortical size in humans. *Human Molecular Genetics* Online, **13**(5):489-494.

Evans, P.D.,

Gilbert, S.L., Mekel-Bobrov, N., Vallender, E.J., Anderson, F.R., Vaez-Azizi, L.M., Tishkoff, S.A., Hudson, R.R., & Lahn, B.T. (Sept. 9, 2005). <u>Microcephalin, a Gene</u> <u>Regulating Brain Size, Continues to Evolve Adaptively in Humans</u>. *Science*, **309** (5741):1717-1720.

Evans, P.D.,

Mekel-Bobrov, N., Vallender, E.J., Hudson, R.R., & Lahn, B.T. (Nov. 7, 2006). <u>Evidence</u> that the adaptive allele of the brain size gene microcephalin introgressed into Homo sapiens from an archaic Homo lineage. *PNAS*, **103**:18178-18183.

Ewald, P.W.,

(1996). The Evolution of Infectious Disease. Oxford University Press.

Farkas, L.G.

(1981). Anthopometry of the head and face in medicine. Elsevier Science, NY.

Farron, S.

(2005). *The Affirmative Action Hoax: Diversity, the Importance of Character And Other Lies.* Seven Locks Press. Reviewed by (Jobling, I., "<u>The Affirmative Action Hoax</u>, *Inverted World*, Aug. 8, 2008).

Faulkner, J.,

Schaller, M., Park, J. H., & Duncan, L. A. (2004). Evolved disease-avoidance mechanisms and contemporary xenophobic attitudes. *Group Processes & Intergroup Relations*, **7** (4):333–353.

Ferguson, W.W.

(Jan., 1989). Reappraisal of the taxonomic status of the cranium Stw 53 from the Plio/Pleistocene of Sterkfontein, in South Africa. *Primates*, **30**(1):103-109.

Filler, A.G.

(2007a). The Upright Ape: A New Origin of the Species. New Page Books.

Filler, A.G.

(Oct. 10, 2007b). Homeotic Evolution in the Mammalia: Diversification of Therian Axial Seriation and the Morphogenetic Basis of Human Origins. *PLOS ONE*, **2**(10):e1019.

Fincher, C.L.,

Thornhill, R., Murray, D.R., & Schaller, M. (Feb. 26, 2008). Pathogen prevalence predicts human cross-cultural variability in individualism/collectivism. *Proceeding of the Royal Society*, Online.

Fink, B.

(1997). Neanderthal Flute: Musicological Analysis. http://www.greenwych.ca/fl-compl.htm **Fink**, B.,

Neave, N., & Seydel, H. (Jan./Feb., 2007). Male facial appearance signals physical strength to women. *American Journal of Human Biology*, **19**(1):82-87.

Finlay, B.L.,

Darlington, R.B., Nicastro, N. (2001). Developmental structure in brain evolution. *Behavior* and Brain Science, **24**(2):263-278.

Finlayson, C.,

et al. (Sept. 13, 2006). Late survival of Neanderthals at the southernmost extreme of Europe. *Nature*, **443**:850-853.

Fisher, H.

(1992). *The Anatomy of Love: The Natural History of Monogamy, Adultery, and Divorce.* W.W. Norton.

Fisher, R.A.

(1958). The Genetical Theory of Natural Selection (2nd ed.). Dover: NY.

Fisman, R.

& Iyengar, S.S. (2008). <u>Racial Preferences in Dating</u>, *Review of Economic Studies*, **75**:117-132.

Fitzpatrick, J.W.

et al. (Jun. 3, 2005). lvory-billed woodpecker (Campephilus principalis) persists in continental North America. *Science*, **308**(5727):1460-1462.

Florida, R.

(Oct., 2006). Where the brains are. Atlantic Monthly, pp. 34-36.

Flynn, J. R.

(1984). The mean IQ of Americans: Massive gains 1932-1978. *Psychological Bulletin*, **95**: 29.

Flynn, J.R.

(1987). Massive IQ gains in 14 nations: what IQ tests really measure. *Psychological Bulletin*. **101**:171-191.

Foley, R.

(1995). Humans before Humanity. Massachusetts: Blackwell Pub.

Fonda, R.A.

(2000). Human Origins. www.rafonda.com.

Fonda, R.A.

(Winter, 2001). Age and origin of the human species. *Mankind Quarterly*, **42**(2):189-199. **Fonseca**, I.

(1996). Bury Me Standing: The Gypsies and Their Journey. Vintage: NY.

Fraga, M.F.,

et al. (2005). Epigenetic differences arise during the lifetime of monozygotic twins. *PNAS*, **102**:10413-10414.

Frayer, D.W.

(1992).Evolution at the European edge: Neanderthal and Upper Paleolithic relationships, *Prehistoire Europeenne*, **2**:9-69.

Freedman, D.G.

& Freedman N.C. (Dec. 20, 1969). Behavioral differences between Chinese-American and European-American Newborns. *Nature*, **224**:1227.

Freedman, B.I.,

et al. (April, 2007). A leucine repeat in the carnosinase gene CNDP1 is associated with diabetic end-stage renal disease in European Americans. *Nephrology Dialysis Transplantation*, **22**: 1131-1135.

Freedman, M.L.,

(2006). Admixture mapping identifies 8q24 as a prostate cancer risk locus in African-American men. *PNAS*, **103**:14068-14073.

Freeth, T.

et al. (Nov. 30, 2006). Decoding the ancient Greek astronomical calculator known as the Antikythera Mechanism. *Nature*, **444**:587-591.

Friedlaender, J.S.,

Friedlaender, F.R., Hodgson, J.A., Stoltz, M., Koki, G., Horvat, G., Zhadanov, S., Schurr, T.G., & Merriwether, D.A. (Feb. 28, 2007). Melanesian mtDNA complexity. *PLOS ONE*, **2** (2):e248.

Frost, P.

(2005). *Fair Women, Dark Men: The Forgotten Roots of Racial Prejudice*. Cybereditions. **Frost**, P.

(Mar., 2006). European hair and eye color - A case of frequency-dependent sexual selection? *Evolution and Human Behavior*, **27**(2):85-103.

Fryer, R.G.

& Levitt, S.D. (Mar., 2006). Testing for racial differences in the mental ability of young children. *National Bureau of Economic Research*, Working Paper No. 12066.

Fuerle, R.D.

(1986). *The Pure Logic of Choice*. Vantage Press: NY.

Fuerle, R.D.

(2003). Natural Rights: A New Theory. Xlibris.

Galdikas, B.M.F.

(1995). *Reflections of Eden: My Tears with the Orangutans of Borneo*. Little, Brown: NY. **Gale**, C.R.,

O'Callaghan, F.J., Bredow, M., Martyn, C.N., & the Avon Longitudinal Study of Parents and Children Study Team. (Oct., 2006). The influence of head growth in fetal life, infancy,

and childhood on intelligence at the ages of 4 and 8 years. *Pediatrics*, **118**(4):1486-1492. **Galloway**, A.

(2005). The characteristics of the skull of the Boskop physical type, *American Journal of Physical Anthropology*, **23**:1.

Gardner, A.,

West, S.A., & Barton, N.H. (Feb., 2007). The relation between multilocus population genetics and social evolution theory. *American Naturalist*, **169**:207-226.

Garrett, H.E.

(July, 1960). A review: Klineberg's chapter on Race and Psychology. *Mankind Quarterly*, 1 (1).

Garrigan, D.,

Mobasher, Z., Severson, T., Wilder, J.A., & Hammer, M.F. (Oct. 13, 2005). Evidence for Archaic Asian Ancestry on the Human X Chromosome. *Mol. Biol. Evol.*, **22**:189-192.

Garrigan, D.,

Kingan, S.B., Pilkington, M.M., Wilder, J.A., Cox, M.P., Soodyall, H., Strassmann, B., Destro-Bisol, G., de Knijff, P., Novelletto, A., Friedlaender, J., & Hammer, M.F. Inferring Human Population Sizes, Divergence Times and Rates of Gene Flow From Mitochondrial, X and Y Chromosome Resequencing Data. (Dec., 2007). *Genetics*, **177**(4):2195-2207.

Garte, S.

et al. (2001). Metabolic gene polymorphism frequencies in control populations. (Dec., 2001). *Cancer Epidemiology Biomarkers & Prevention*, **10**:1239-1248.

Garver-Apgar, C.E.,

Gangestad, S.W., Thornhiif, R. Miller, R.D., & Olp, J.J. (Oct., 2006). Major histocompatibility complex alleles, sexual responsivity, and unfaithfulness in romantic couples. *Psychological Science*, **17**:830.

Gates, C.E.,

(Sept, 1922). The Polynesians: Caucasians of the Pacific. *The Scientific Monthly*, **15** (3):257-262.

Gawande, A.

(Dec. 27, 2004) The bell curve for doctors. Gene Expression.

http://www.gnxp.com/MT2/archives/003384.html

Gayre, R.

(Jan.-Mar.,1967). Negrophile Falsification of Racial History. *Mankind Quarterly*, VII(3). **Geber**, M.

(1958). The psychomotor development of African children in the first year and the influence of maternal behavior. *Journal of Social Psychology*, **47**:185-195.

Gebo, D.L.,

MacLatchy, L., Kityo, R., Deino, A., Kingston, J., & Pilbeam, D. (Apr. 18, 1997). A Hominoid Genus from the Early Miocene of Uganda. *Science*, **276**(5311):401-404.

Gebo, D.L.

(2004). A shrew-sized origin for primates. *Yearbook of Physical Anthropology*, **47**:40-62. **Gee**, H.

(Feb., 13, 1992). Statistical Cloud over African Eden, Nature, 355:583

Getahun, D.,

Ananth, C.V., Selvam, N., & Demissie, K. (2005). Adverse perinatal outcomes among interracial couples in the United States. *Obstetrics & Gynecology*, **106**:81-88.

Gibbons, A.

(Mar. 11, 2005). Skeleton of upright human ancestor discovered in Ethiopia. *Science*, **307** (5715):1545.

Gibbs, G.D.

(1865). [Comments on]: On the Essential Differences Observable between the Larynx of

the Negro and That of the White Man. *Journal of the Anthropological Society of London*, 3:cxxv- cxxviii.

Gillespie, D.O.S.,

Russell, A.F., and Lummaa, V.(Jan. 22, 2008). When fecundity does not equal fitness: evidence of an offspring quantity versus quality trade-off in pre-industrial humans. *Proceeding of the Royal Society B.* Online.

Gimelbrant, A.,

Hutchinson, J.N., Thompson, B.R., & Chess, A. (Nov.16, 2007). Widespread Monoallelic Expression on Human Autosomes. *Science*, **318**:1136-1140.

Gitlin, J.

(Mar. 25, 2004). They talk of change, but liberal parties thwart reform of Israel's marriage laws. *Jewish Telegraph Agency*.

Glad, J.P.

(2006). *Future of Human Evolution: Eugenics in the Twenty-First Century*. Hermitage Publishers: PA.

Gobineau, A.

(1853-1855). *Essai sur L'inégalité des Races Humaines*. Paris: Didot. Gore (1996). **Godinho**, V.M.

(1983). *Os descobrimentos e a economia mundial*, volume 4, 2nd ed. Lisbon: Presenc_sa Editors.

Goebel, T.,

Waters, M.R., & Rouke, D.H. (Mar. 14, 2008). The Late Pleistocene Dispersal of Modern Humans in the Americas. *Science*, **319**(5869):1497-1502.

Goff, P.A.,

Eberhardt, J.L., Williams, M.J., & Jackson, M.C. (Feb., 2008). Not yet human: Implicit knowledge, historical dehumanization, and contemporary consequences. *Journal of Personality and Social Psychology*, **94**(2):292-306.

Goldin, D.

(Mar. 22, 1995). Increasing, those paying full tuition are supporting their poorer peers. *New York Times*, B7.

Goldsmith, T.H.

(July, 2006). What birds see. Scientific American.

Gonzaga, G.C.,

Haselton, M.G., Smurda, J., Davies, M., & Poore, J.C. (Mar., 2008). Love, desire, and the suppression of thoughts of romantic alternatives. *Evolution & Human Behavior*, **29**(2):119-126.

González, A.M.,

et al. (2003). Mitochondrial DNA Affinities at the Atlantic Fringe of Europe. *Am. J. Phys. Anthro.*; **120**:391-404.

Goodall, J.

(1977). Infant killing and cannibalism in free-living chimpanzees. Folia Primatologica; *International Journal of Primatology*, **28**(4):259-289.

Goodyear III, A.C.

(Nov. 17, 2004). New evidence puts man in North America 50,000 years ago. News Release, Topper Site, Allendale County, SC.

Goos, L.

& Silverman, I. (July, 2006). The inheritance of cognitive skills: Does genomic imprinting play a role? *Journal of Neurogenetics*, **20**(1-2):19-40.

Gordon, A.D.,

Nevell, L. & Wood, B. (Mar. 20, 2008). The Homo floresiensis cranium (LB1): Size, scaling, and early Homo affinities. *PNAS*, Online **105**:4650-4655.

Goren-Inbar, N.,

Alperson, N., Kislev, M.E., Simchoni, O., Melamed, Y., Ben-Nun, A., & Werker, E. (Apr. 30, 2004). Evidence of hominin control of fire at Gesher Benot Ya`aqov, Israel. *Science*, **304**(5671):725-727.

Gosso, M.F.,

van Belzen, M., de Geus, E.J., Polderman, J.C., Heitink, P., Boomsma, D.I., & Posthuma, D. (Nov., 2006). Association between the CHRM2 gene and intelligence in a sample of 304 Dutch families. *Genes Brain Behavior*, **5**(8):577-584

Gottfredson, L.S.

(1997a). Editorial: Mainstream science on intelligence. *Intelligence*, **24**:13-24.

Gottfredson, L.S.

(1997b). Why g matters: The complexity of everyday life. *Intelligence*, **24**(1):79-132. **Gottfredson**, L.S.

(1999). The general intelligence factor. *Scientific American* Presents "Exploring Intelligence," p 24.

Gottfredson, L.S.

(Apr. 4, 2004a). Social consequences of group differences in cognitive ability. In C. E. Flores-Mendoza & R. Colom (Eds.), *Introducau a psicologia das diferencas individuais*. (pp. 433- 456). Porto Allegre, Brazil: ArtMed Publishers.

Gottfredson, L.

& Deary, I.J. (2004b). Intelligence predicts health and longevity, but why? *Current Directions in Psychological Science*, **13**(1):1-4.

Gowlett, J.A.J.,

Harris, J.W.K., & Wood, B.A. (Nov. 12, 1981). Early archaeological sites, hominid remains and traces of fire from Chesowanja, Kenya. *Nature*, **294**:125-129.

Gowlett, J.A.J.,

Harris, J.W.K., & Wood, B.A. (Apr. 29, 1982). Early archaeological sites, hominid remains and traces of fire from Chesowanja, Kenya (reply). *Nature*, **296**:870.

Goymer, P.

(Feb., 2007). Synonymous mutations break their silence. *Nature Reviews Genetics*, **8**:92. **Graglia**, L.A.

(Summer, 1998). The "affirmative action" fraud. *Journal of Urban and Contemporary Law*. **54**:31.

Grant, M.

(1970). *Passing of the Great Race, Or, the Racial Basis of European History*. Ayer Co Pub; Reprint edition.

Gray-Little, B.

& Hafdahl, A.R. (Jan., 2000). Factors influencing racial comparisons of self-esteem: A quantitative review. *Psychological Bulletin*, **126**(1):26-54.

Greene, J.P.

& Forster, G. (Sept., 2003). Public High School graduation and college readiness rates in the United States. Education Working Paper, *Manhattan Institute for Policy Research*. **Grehan**, J.R.

(2006). Mona Lisa smile: The morphological enigma of human and great ape evolution. *Anat. Rec. (Part B: New Anat.*) 289B, pp. 139-157.

Greife, H.

(1999) Jewish-Run Concentration Camps in the Soviet Union. *The Truth At Last.* **Griffin**, A.S.,

West, S.A., & Buckling, A. (Aug. 26, 2004). Cooperation and competition in pathogenic bacteria. *Nature*, **430**:1024-1027.

Grooms, R.M.

(Oct., 1995). Dixie's censored subject – Black slave owners. *The Barnes Review*, No. 13. **Grundy**, E.

(Sept. 12, 2006). Childless women risk poorer health in later life. *Economic and Social Research Council* Press Release.

Guilherme, A.

& Pacheco, F. (Apr., 2002). CCR5 receptor gene and HIV infection. *CDC National Office of Public Health Genomics*.

Guillén, A.,

Barrett, G.M., Takenaka, O. (Aug, 2005). <u>Genetic diversity among African great apes</u> <u>based on mitochondrial DNA sequences</u>. *Biodiversity and Conservation*, **14**(9):2221-2233. **brie** B D

Guthrie, R.D.

(May 11, 2006). New carbon dates link climatic change with human colonization and Pleistocene extinctions. *Nature*, **441**:207-209.

Gutiérrez, G.,

Sánchez, D., & Marín, A. (2002). A Reanalysis of the Ancient Mitochondrial DNA Sequences Recovered from Neandertal Bones. *Molecular Biology and Evolution*, **19**:1359-1366.

Hagelberg, E.

(2003). Recombination or mutation rate heterogeneity? Implications for mitochondrial Eve. *Trends in Genetics*, **19**:84-90.

Haier, R. J.,

Siegel, B. V., Nuechterlein, K. H., Hazlett, E., Wu, J. C., Paek, J., Browing, H. L., & Buchsbaum, M. S. (1988). Cortical glucose metabolic rate: correlates of abstract reasoning and attention studied with positron emission tomography. *Intelligence*, **12**:199-217.

Haier, R. J.,

Siegel, B., Tang, C., Abel, L., & Buchsbaum, M. S. (1992). Intelligence and changes in regional cerebral glucose metabolic rate following learning. *Intelligence*, **16**:415-426.

Haier, R. J.

(1993). Cerebral glucose metabolism and intelligence. In Vernon, P. A. (Ed.). *The biological basis of intelligence*, Norwood: Ablex, pp. 317-332.

Hall, A.

(Nov. 8, 1999). The Latest Neanderthal. Scientific American.

Hall, È.R.

(Oct. 1960). Zoological subspecies of man. *Mankind Quarterly*, **1**(2).

Hall, H.I.

et al. (Aug. 6, 2008). Estimation of HIV Incidence in the United States. JAMA, **300**:520-529.

Hamilton, W.D.

(1964). The genetical evolution of social behavior I and II, *Journal of Theoretical Biology*, **7**:1-52.

Hamilton, W.D.

(1975). Innate social aptitudes of man: An approach from evolutionary genetics. In Narrow roads of gene land Vol. 1: *Evolution of social behaviour*, pp. 315-352. W. H. Freeman: Oxford.

Hammer, M.F.,

Karafet, T., Rasanayagam, A., Wood, E.T., Altheide, T.K., Jenkins, T., Griffiths, R.C., Templeton, & A.R., Zegura, S.L. (1998). Out of Africa and back again: nested cladistic analysis of human Y chromosome variation. *Mol. Biol. Evol.*, **15**:427–441.

Hammer, M.F.,

et al. (2000). Jewish and Middle Eastern non-Jewish populations share a common pool of

Y-chromosome biallelic haplotypes. PNAS, 97:6769-6774.

Hammer, M.F.,

Karafet, T.M., Redd, A.J., Jarjanazi, H., Santachiara-Benerecetti, S., Soodyall, H., Zegura, S.L. (2001). Hierarchical patterns of global human Y-chromosome diversity. *Mol. Biol. Evol.*, **18**:1189–1203.

Hanihara, T.

(2000). Frontal and facial flatness of major human populations. *American Journal of Physical Anthropology*, **111**:105-134.

Hanihara, T.

& Ishida, H. (2005). Metric dental variation of major human populations. *American Journal of Physical Anthropology*, **128**(2):287-298.

Hanna, Z.,

Cheung, E., & Jolicoeur, P. (June, 4-9, 1989). Molecular characterization of the human CD4 gene. *Int. Conf. AIDS*, (abstract no. T.C.O.32), **5**:520.

Hanson, P.,

Magnusson, S.P., & Simonsen, E.B. (1998). Differences in Sacral Angulation and Lumbosacral Curvature in Black and White Young Men and Women. *Acta Anatomica*, **162**:226-231.

Hanson, P.,

Magnusson, S.P., Sorensen, H., & Simonsen, E.B. (1999). Anatomical differences in the psoas muscle in young black and white men. *Journal of Anatomy*, **194**:303-307.

Harden, K.P.,

Turkheimer, E., Emery, R.E., D'Onofrio, B.M., Slutske, W.S., Heath, A.C., & Martin, N.G. (2007). Marital conflict and conduct problems in children of twins. *Child Develop.*, **78**(1):1–18.

Harding, R.M.

(Mar. 16, 1999). More on the X files. PNAS, 96(6):2582-2584.

Harding, R.M.,

Healy, E., Ray, A.J., Ellis, N.S., Flanagan, N., Todd, C., Dixon, C., Sajantila, A., Jackson, I.J., Birch-Machin, M.A., & Rees, J.L. (2000). Evidence for Variable Selective Pressures at MC1R. *Am. J. Hum. Genet.*, **66**:1351-1361.

Hardy, J.,

Pittman, A., Myers, A., Gwinn-Hardy, K., Fung, H.C., de Silva, R., Hutton, M., & Duckworth, J., (2005). Evidence suggesting that Homo neanderthalensis contributed the H2 MAPT haplotype to Homo sapiens. *Biochem. Soc. Trans.*, **33**:582-585.

Harmon, A.

(Sept. 3, 2006). Couples cull embryos to halt heritage of cancer. *New York Times*. **Harmon**, E.H.

(Feb., 2007). The shape of the hominoid proximal femur: a geometric morphometric analysis. *Journal of Anatomy*, **210**(2):170–185.

Harpending, H.C.,

Batzer M.A., Gurven M., Jorde L.B., Rogers, A.R., & Sherry S.T. (1998a). Genetic traces of ancient demography. *PNAS*, USA, **95**:1961-1967.

Harpending, H.C.,

Batzer, M.A., Gurven, M., Jorde, L.B., Rogers, A.R., & Sherry, S.T. (April, 1998b). Archaic African and Asian lineages in the genetic ancestry of modern humans. *American Journal of Human Genetics*, **60**(4):772-89.

Harpending, H.C.

(Dec. 23, 2002) Did early humans mate with the locals? Human genome data cast doubt on 'Replacement Theory" of human evolution. *News Release*, University of Utah. **Harpending**, H.C. & Cochran, G. (Mar., 2006). Genetic diversity and genetic burden in humans. *Infect Genet. Evol.*, **6**(2):154-162.

Harris, E.E.

& Hey, J. (Mar. 16, 1999). <u>X chromosome evidence for ancient human histories</u>. *PNAS*, **96**(6):3320-3324.

Harris, È.F.

(July, 1990). Tooth Mineralization Standards for Blacks and Whites from the Middle Southern United States. *Journal of Forensic Sciences*, **35**(4).

Harris, J. A.,

Rushton, J.P., Hampson, E., & Jackson, D. N. (1996). Salivary testosterone and selfreport aggressive and pro-social personality characteristics in men and women. *Aggressive Behavior*, **22**: 321-331.

Harrison, G.A.

& Owen, J.J.T. (1964). Studies on the inheritance of human skin colour. *Ann. Hum. Genet.*, 28:27–37.

Harrison, ⊤.

(Nov., 1986). New fossil anthropoids from the middle Miocene of East Africa and their bearing on the origin of the oreopithecidae. *American Journal of Physical Anthropology*, **71**(3): 265-284.

Hart, M.H.

(2007). Understanding Human History. Washington Summit Publishers: Georgia.

Harvati, K.

Frost, S.R., & McNulty, K.P. (Jan. 26, 2004). Neanderthal taxonomy reconsidered: Implications of 3D primate models of intra- and interspecific differences. *PNAS*, **101**:1147-1152.

Hawkes, J.

& Cochran, G. (2006). Dynamics of adaptive introgression from archaic to modern humans. *PaleoAnthropology*, pp. 101-115.

Hawkes, J.,

Wang, E.T., Cochran, G.M., Harpending, H.C., & Moyzis, R.K. (2007) Recent acceleration of human adaptive evolution. *PNAS*, **104**: 20753-20758.

Hawkes, K.,

O'Connell, J.F., Jones, N.G.B., Alvarez, H., & Charnov, L. (1998, current to 2006). Grandmothering, menopause, and the evolution of human life histories. *PNAS*, **95**:1136-1139.

Hay, J.M.,

Subramanian, S. Millar, C.D., Mohandesan, E. & Lambert D.M. (2008). Rapid molecular evolution in a living fossil. *Trends in Genetics*, **24**(3):103-109.

Hayes, J.D.,

Imbrie, J. & Shackleton, N.J. (1976). Variations in the earths orbit: pacemaker of the ice ages. *Science*, **194**:1121-1131.

Haywood, J.

(2000). The Illustrated History of Early Man. PRC Pulbishing Ltd.: London.

Heatherton, E.M.

(1972). Effects of father absence on personality development in adolescent daughters. *Developmental Psychology*, **7**:313-326.

Hecht, J.

(June 17, 2005). Donkey Domestication Began in Africa. *New Scientist*.

Heizmann, E.P.J.

& Begun, D.R. (2001). The oldest Eurasian hominoid. *Journal of Human Evolution*, **41**:5. **Helgadottir**, A.

et al. (2006). A variant of the gene encoding leukotriene A4 hydrolase confers ethnicityspecific risk of myocardial infarction, *Nature Genetics*, **38**:68–74.

Helgason, A.,

Pálsson, S., Guðbjartsson, D.F., Kristjánsson, þ., & Stefánsson, K. (Feb. 8, 2006). An Association Between the Kinship and Fertility of Human Couples. *Science*, **319**:813-816. **mmingsson**, T.,

Hemmingsson, T.,

Melin, B., Allebeck, P., & Lundberg, I. (2006). The association between cognitive ability measured at ages 18-20 and mortality during 30 years of follow-up--a prospective observational study among Swedish males born 1949-51. *Int. J. Epidemiol.*, **35**(3):665-670.

Henneberg, M.

& Steyn, M. (May 27, 2005, Online). <u>Trends in cranial capacity and cranial index in</u> <u>Subsaharan Africa during the Holocene</u>. *American Journal of Human Biology*, **5**(4):473-479.

Henshaw, S.K.

& O'Reilley, K. (1983). Characteristics of Abortion Patients in the United States, 1979 and 1980, *Family Planning Perspectives*, **15**(1):5-16.

Herrick, C.H.

(1956). *The Evolution of Human Nature*. University of Texas Press.

Herring, C.D.

et al. (Dec. 1, 2006). Comparative genome sequencing of Escherichia coli allows observation of bacterial evolution on a laboratory timescale. *Nature Genetics*, **38**:1406-1412.

Herrnstein, R.J.

& Murray, C. (1994). *The Bell Curve: Intelligence and Class Structure in American Life*. Simon & Schuster: NY.

Himes, J.H.

(1988). Racial variation in physique and body composition. *Canadian Journal of Sport Science*, **13**:117-126.

Hinds, D.A.,

Kloek, A.P., Jen, M., Chen, X., & Frazer, K.A. (2006). Common deletions and SNPs are in linkage disequilibrium in the human genome. *Nature Genetics*, **38**:82-85.

Hirschfeld, L.A.

(1996). *Race in the making: Cognition, culture, and the child's construction of human kinds.* MIT Press: Cambridge.

Hittinger, C.T.

& Sean B. Carroll, S.B. (Oct. 11, 2007). Gene duplication and the adaptive evolution of a classic genetic switch. *Nature*, **449**:677-681.

Hobolth, A.,

Christensen, O.F., Mailund, T., & Schierup, M.H. (Feb. 23, 2007). Genomic relationships and speciation times of human, chimpanzee, and gorilla inferred from a coalescent hidden Markov model. *PNAS Genetics*, **3**(2):e7.

Hoffecker, J.F.

(2002). *Desolate Landscapes: Ice-Age Settlement in Eastern Europe*. Rutgers University Press.

Hoffecker, J.F.

(2007). <u>Upper pleistocene loess stratigraphy and paleolithic site chronology on the</u> <u>Russian plain</u>. *Geoarchaeology*, **2**(4):259-284.

Hogan, J.

et al. (Oct. 2-5, 2001). China's Energy Efficiency Design Standard for Residential Buildings in the "Hot Summer/Cold Winter" Zone. *Proceeding of the 4th International*

Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings. p. 573, Changsha, Hunan, China.

Holland, T.D.,

O'Brien, M.J., & Fessler, D.M. (2003). On morning sickness and the Neolithic revolution. *Current Anthropology*, **44**:707–711.

Holliday, T.W.

(1999). Brachial and crural indices of European Late Upper Paleolithic and Mesolithic humans, *Journal of Human Evolution*, **36**:549-566.

Holloway, A.

(May, 1996). Race and health. American Renaissance, 7(5).

Holloway, R.L.

(1981). Culture, symbols, and human brain evolution. *Dialectical Anthropology*, **5**:287-303.

Holmes, S.J.

(1927). The Low Sex Ratio in Negro Births and Its Probable Explanation. *Biological Bulletin*, pp. 325-329.

Hooton, E.

(1939). Crime and the Man. Harvard University Press.

Hopkins, W.D.,

Bard, K.A., Jones, A., & Bales, S. (1993). Chimpanzee hand preference for throwing and infant cradling: Implications for the origin of human handedness. *Current Anthropology*. **34** (5): 786–790.

Hopkins, W.D.,

Stoinski, T.S., Lukas, K.E., Ross, S.R., & Wesley, M.J. (Sept., 2003). Comparative Assessment of Handedness for a Coordinated Bimanual Task in Chimpanzees (Pan troglodytes), Gorillas (Gorilla gorilla), and Orangutans (Pongo pygmaeus). Journal of *Comparative Psychology*, **117**(3):302-308.

Horney, K.

(1945). *Our Inner Conflicts: A Constructive Theory of Neurosis*. W.W. Norton & Co.: NY. **Horowitz**, D. L.

(1985). *Ethnic Groups in Conflict*. University of California Press: Berkeley.

Hotz, R.L.

(Mar. 3, 2000). Ancient tools compel a new look at the pace of human development in Asia, *The Los Angeles Times*; Record edition.

Howard, C.

(1979). *Zebra: The True Account of the 179 Days of Terror in San Francisco*. Richard Marek Publishers.

Howells, W.W.

(1948). Mankind So Far. Doubleday Doran: NY.

Howells, W.W.

(1959). Mankind in the Making. Doubleday & Company, Inc.: NY.

Howells, W.W.

(1989). *Skull Shapes and the Man.*, Cambridge: Mass., Peabody Museum of Archaeology and Ethnology.

Hrdy, S.B.,

& Whitten, P.L. (1987). Patterning of sexual activity. In *Primate Societies*, ed. B. Smuts et al., 370-384. University of Chicago Press.

$Hu,\,S.,$

et al. (2006). Comparison of stage at diagnosis of melanoma among Hispanic, black, and white patients in Miami-Dade County, Florida. *Arch. Dermatol.*, **142**:704-708.

Hublin, J-J.,

Barroso-Ruiz, C., Medina-Lara., P., Fontugne, M., & Reyss, J.-L. (1995). The Mousterian site of Zafarraya (Andalucía, Spain): Dating and implications on the Paleolithic peopling processes of Western Europe. *C. R. Acad. Sci.* Paris, **321**:931-937.

Hudjashov, G.,

Kivisild, T., Underhill, P.A., Endicott, P., Sanchez, J.J., Lin, A.A., Shen, P. Oefner, P. Renfrew, C., Villems, R., & Forster, P. (May 22, 2007). <u>Revealing the prehistoric</u> <u>settlement of Australia by Y chromosome and mtDNA analysis</u>, *PNAS*, **104**(21):8726-8739.

Hudson, A. I.

& Holbrook, A. (1982). Fundamental frequency characteristics of young black adults: Spontaneous speaking and oral reading. *Journal of speech and Hearing Research*, **25**:25-28.

$\textbf{Hui},\,S.L.,$

Dimeglio, L.A., Longcope, C., Peacock, M., McClintock, R., Perkins, A.J., & Johnston, Jr., C.C. (2003). Difference in bone mass between Black and White American children: Attributable to body build, sex hormone levels, or bone turnover? *Journal of Clinical Endocrinology & Metabolism*, 88:642–649.

Hunt, J.

(1864). *The Negro's Place in Nature*. Van Evrie, Horton & Co.: New York, reprinted by Cornell University Library Digital Collections.

Hunter, J.E.

& Hunter, R.F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin*, **96**:72–98.

Ingman, M.

& Gyllensten, U. (2003). Mitochondrial genome variation and evolutionary history of Australian and New Guinean aborigines. *Genome Research*, **13**:1600-1606.

Irish, J.D.

(1998). Characteristic high- and low-frequency dental traits in sub-Saharan African populations. *American Journal of Physical Anthropology*, **102**(4):455-467.

lrish, J.D.

& Steinberg, D.G. (Aug., 2003). Ancient teeth and modern human origins: An expanded comparison of African Plio-Pleistocene and recent world dental samples. *Journal of Human Evolution*, **45**(2):113-144.

Irmak, M.K.,

Korkmaz, A., Erogul, O. (2004). Selective brain cooling seems to be a mechanism leading to human craniofacial diversity observed in different geographical regions. Medical Hypotheses, **63**(6):974-979.

Irving, D.,

(1996). *Nuremberg: The Last Battle*. Focal Point.

İşcan, M.Y.

(Oct., 1983). Assessment of race from the pelvis. *Am. J. Phys. Anthropol.*, **62**(2):205-208. **işcan**, M.Y.

et al. (Mar., 1987). Racial variation in sternal extremity of the ribs and its effect on age. The *Journal of Forensic Science*, **32**(2):452-466.

Isler, K.

& van Schaik, C.P. (Dec. 22, 2006). Metabolic costs of brain size evolution. *Biology Letters*, **2**(4):557-560.

Jablonski, N.G.

& Chaplin, G. (July, 2000). The evolution of human skin coloration, *J. Hum. Evol.*, **39**(1): 57-106.

Jablonski, N.G.

(2006). Skin: A Natural History. University of California Press.

Jackson, D.N.

& Rushton, J.P. (2006). Males have greater g: Sex differences in general mental ability from 100,000 17- to 18-year-olds on the Scholastic Assessment Test. *Intelligence*, **34**:479-486.

Jackson, Jr., J.P.

(2004). The scientific defense of racial segregation, 1954-1964. *American Psychologist* **59**:530-537.

Jackson, P.L.,

Meltzoff, A.N., & Decety, J. (Feb. 1, 2005). How do we perceive the pain of others? A window into the neural processes involved in empathy. *Neuroimage*, **24**(3):771-779.

Jacob, S.,

McClintock, M.K., Zelano, B., & Ober, C. (2002). Paternally inherited HLA alleles are associated with women's choice of male odor. *Nature Genetics*, **30**:175 – 779.

Jaeger, J-J,

Thein, T., Benammi, M., Chaimanee, Y., Soe, A.N., Lwin, T., Tun, T., Wai, S., & Ducrocq, S. (Oct. 15, 1999). A new primate from the Middle Eocene of Myanmar and the Asian early origin of anthropoids. *Science*, **286**(5439):528-530.

Jaeger, J-J,

Thein, T., Benammi, M., Chaimanee, Y., Soe, A.N., Lwin, T., Tun, T., Wai, S., & Ducrocq, S. (Oct. 15, 1999). A new primate from the Middle Eocene of Myanmar and the Asian early origin of anthropoids. *Science*, **286**(5439):528-530.

Janeka, J.E.,

Miller, W., Pringle, T.H., Wiens, F., Zitzmann, A., Helgen, K.M., Springer, M.S., & Murphy, W.J. (Nov. 2, 2007). <u>Molecular and Genomic Data Identify the Closest Living Relative of</u> <u>Primates</u>, *Science*, **318**(5851):792-794.

Jaynes, G.D.

& Williams, Jr., R.M. (1989). *A Common Destiny: Blacks and American Society*. National Academy Press: Washington, D.C.

Jensen, A.R.

(1974a). Interaction of level I and level II abilities with race and socioeconomic status. *Journal of Educational Psychology*, **66**:99-111.

Jensen, A.R.

(1974b). Cumulative deficit: A testable hypothesis? *Developmental Psychology*, **10** (6):996-1019.

Jensen, A.R.

(1977). Cumulative deficit in IQ of Blacks in the rural South. *Developmental Psychology*, **13**(3):184-191.

Jensen, A.R.

(1980). Bias in Mental Testing. The Free Press: NY.

Jensen, A.R.

(1982). The debunking of scientific fossils and straw persons. *Contemporary Education Review*, **1**(2):121-135.

Jensen, A.R.

(1998). The g Factor. Praeger: Connecticut, USA.

Jensen-Seaman, M.

(June, 2000). <u>Western and Eastern Gorillas: Estimates of the Genetic Distance</u>. *Gorilla Journal*, **20**:21-23.

Jeon, J.

& Buss, D.M. (Feb. 27, 2007). Altruism towards cousins. *Proc. R. Soc. B*, **274**:1181–1187. Jerison, HJ,

(1973). Evolution of the brain and intelligence. Academic Press: NY.

Jiménez-Espejo, F.J.,

Martínez-Ruiz, F., Finlayson, C., Paytan, A., Sakamoto, T., Ortega-Huertas, Finlayson, G., lijima, K., Gallego-Torres, D., & Fa, D. (April, 2007). Climate forcing and Neanderthal extinction in Southern Iberia: insights from a multiproxy marine record. *Quaternary Science Reviews*, **26**(7-8):836-852.

Johnston, H.H.

(1910). The Negro In the New World. Macmillan: New York.

Johnston, V.S.

(Jan., 2006). Mate choice decisions: the role of facial beauty. *Trends in cognitive sciences*, **10**(1):9-13.

Jones, G.

& Schneider, W.J. (2006a). Intelligence, human capital, and economic growth: A Bayesian averaging of classical estimates (BACE) approach. *Journal of Economic Growth*, **11** (1):71-93.

Jones, G.

(2006b). Are smarter groups more cooperative? Evidence from prisoner's dilemma experiments, 1959-2003.

Joyner, K.

& Kao, G. (Aug., 2005). Interracial relationships and the transition to adulthood. *American Sociological Review*, **70**(4):563-581.

Juurikkala, Ö.

(Jan. 24, 2007). Making kids worthless: Social Security's contribution to the fertility crisis. *Ludwig Von Mises Institute*, Online.

Kalb, C.

& Murr, A. (May 15, 2006). Battling a black epidemic. *Newsweek Health*.

Kamboh, M.I.,

Sanghera, K.K., Mehdi, H., Nestlerode, C.S., Chen, Q., Khalifa, O., Naqvi, A., Manzi, S., & Bunker, C.H. (2004). Single nucleotide polymorphisms in the coding region of the Apolipoprotein H (B2-Glycoprotein I) gene and their correlation with the protein polymorphism, Anti-B2Glycoprotein I antibodies and cardiolipin binding: Description of novel haplotypes and their evolution. *Annuls of Human Genetics*, **68**(4).

Kanazawa, S.

& Kovar, J. (2004). Why beautiful people are more intelligent. *Intelligence*, **32**:227-243. **Kanazawa**, S.

(2006). No, it ain't gonna be like that. *Evolutionary Psychology*, **4**:120-128. **Kanazawa**, S.

(Nov., 2006). <u>Mind the gap...in intelligence: Re-examining the relationship between inequality and health.</u> *British Journal of Health Psychology*, **11**(4):623-642.

Kanazawa, S.

(Jan. 7, 2007). Beautiful parents have more daughters: A further implication of the generalized Trivers–Willard hypothesis (gTWH). *Journal of Theoretical Biology*, **244** (1):133- 140.

Kaplan, G.

& Rogers, L.J. (2000). *The Orangutans: Their evolution, behavior, and future*. Perseus: Cambridge, MA.

Kaplowitz, P.B.,

Slora, E.J., Wasserman, R.C., Pedlow, S.E., & Herman-Giddens, M.E. (Aug. 2, 2001). Earlier onset of puberty in girls: Relation to increased Body Mass Index and race. *Pediatrics*, **108**(2):347-353.

Kappelman, J.,

Alçiçek, M.C., Kazanc, N., Schultz, M., Özkul, M., & en, . (Jan., 2008). First Homo erectus from Turkey and implications for migrations into temperate Eurasia. *American Journal of Physical Anthropology*, **135**(1):110-116.

Kashtan, N,

Noor, E., & Alon, U. (2007. Varying environments can speed up evolution. *PNAS*, **104**(34): 13711-13716.

Kealey, T.

(Apr. 3, 2006). Why is a woman's brain smaller than a man's. Maybe because she's a fox. www.timesonline.co.uk.

Keeley, L.H.

(1996). War Before Civilization. Oxford University Press.

Keeling, R.F.

(1947). *Gruesome Harvest: The Allies' Postwar War Against the German People*. The Truth At Last: GA.

Keller, C.C.,

Kremsner, P.G., Hittner, J.B., Misukonis, M.A., Weinberg, J.B., Perkins, D.J. (2004). Elevated Nitric Oxide Production in Children with Malarial Anemia: Hemozoin-Induced Nitric Oxide Synthase Type 2 Transcripts and Nitric Oxide in Blood Mononuclear Cells. *Infect. Immun.* **72**:4868-4873.

Keller, A.,

Zhuang, H., Chi, Q., Vosshall, L.B., & Matsunami, H. (Sept. 27, 2007). Genetic variation in a human odorant receptor alters odour perception. *Nature*, **449**:468-472.

Kellis, M.

(2008). A single Hox locus in Drosophila produces functional microRNAs from opposite DNA strands. *Genes & Development*, **22**:8-13.

Kelly, D.J.,

Quinn, P.C., Slater, A.M., Lee, K., Gibson, A., Smith, M., Liezhong, G., Pascalis, O. (Nov., 2005). Three-month-olds, but not newborns, prefer own-race faces. *Developmental Science*, **8**(6): F31–F36.

Kemp, A.

(2006). *March of the Titans: A History of the White Race*. Ostara Publications: Iowa. **Kennedy**, G.E.

(Mar., 1984). The emergence of homo sapiens: The post cranial evidence. *Man, New Series*, **19**(1):94-110.

Kiang, L,

Yip, T., Gonzales-Backen, M. Witkow, M. Fulign, A. (Sept.-Oct., 2006). Ethnic identity and the daily psychological well-being of adolescents from Mexican and Chinese backgrounds. *Child Development*, **77**(5):1338.

King, T.E.,

Bowden, G.R., Balaresque, P.L., Adams, S.M., Shanks, M.E., & Jobling, M.A. (Apr., 2007). Thomas Jefferson's Y chromosome belongs to a rare European lineage. *American Journal of Physical Anthropology*, **132**(4):584-589.

Kiontke, K.,

Barrière, A., Kolotuev, I., Podbilewicz, B., Sommer, R., Fitch, D.H.A., & Félix, M-A. (2007). Trends, stasis, and drift in the evolution of nematode vulva development. *Current Biology*, **17**:1925-1937.

Kirsanow, P.

(June 27, 2006). Affirmative damage. National Review Online.

Kistka, Z.A-F.,

Palomar, L. Lee, K.A., Boslaugh, S.E., Wangler, M.F., Cole, F.S., DeBaun, M.R., & Muglia, L.J. (2007). Racial disparity in the frequency of recurrence of preterm birth.

American Journal of Obstetrics and Gynecology, **196**(2):131.e1-131.e6.

Kittler, R.,

Kayser, M., & Stoneking, M. (2003). Molecular evolution of Pediculus humanus and the origin of clothing. *Current Biology*, **13**:1414-1417.

Klein, J.

& Takahata, N. (2002). Where do we come from? The molecular evidence for human descent. Springer-Verlag.

Kleindienst, M.R.

(1975). On new perspectives on ape and human evolution. *Current Anthropology*, **18** (4):644-651.

Kleinfeld, J. S.

(1971). Visual memory in village Eskimo and urban Caucasian children. *Arctic*, **24**:132-138.

Klitgaard, R.

(Apr., 1985). Choosing Elites. Basic Books.

Knafo, A.,

et al. (2007). Individual differences in allocation of funds in the dictator game associated with length of the arginine vasopressin 1a receptor RS3 promoter region and correlation between RS3 length and hippocampal mRNA. *Genes, Brain and Behavior*, (Online).

Knight, A.

et al. (Mar. 18, 2003). African Y chromosome and mtDNA divergence provides insight into the history of click languages, *Current Biology*, **13**:464-473.

Knutson, B.,

Wimmer, G.E., Kuhnen, C.M., & Winkielman, P. (Mar. 26, 2008). Nucleus accumbens activation mediates the influence of reward cues on financial risk taking. *Neuroreport*, **19** (5):509-513.

Kobayashi, H.

& Kohshima, S. (May, 2001). Unique morphology of the human eye and its adaptive meaning: comparative studies on external morphology of the primate eye. *Journal of Human Evolution*, **40**(5):419-435.

Koger, L.

(1985). *Black Slaveowners: Free Black Slave Masters in South Carolina, 1790-1860.* University of South Carolina Press. Reviewed by Wilson, W.S. (May, 1996). <u>The Color of Slavery</u>, *American Renaissance*, **7**(5).

Köhler, M.

& Moyà-Solà, S. (Oct., 1997). Ape-like or hominid-like? The positional behavior of Oreopithecus bambolii reconsidered. *PNAS*, **94**:11747-11750.

Komura, D.

et al. (Dec., 2006). Genome-wide detection of human copy number variations using high-density DNA oligonucleotide arrays. *Genome Res.*, **16**:1575 – 1584.

Korbel, J.O.

et al. (Sept. 27, 2007). Paired-End Mapping Reveals Extensive Structural Variation in the Human Genome. *Science Express* Online.

Kordos, L.

(2000). New results of hominoid research in the Carpathian Basin. *Acta Biologica*, 44(1-4): 71-74.

Krause, J.,

Orlando, L., Serre, D., Viola, B., Prüfer, K., Richards, M.P., Hublin, J-J. Hänni, C., Derevianko, A.P., & Svante Pääbo. (Oct. 18, 2007a). Neanderthals in Central Asia and Siberia. *Nature*, **449**:902-904.

Krause, J.

(Nov. 6, 2007b). The Derived FOXP2 Variant of Modern Humans Was Shared with Neandertals. *Current Biology*, **17**:1908-1012.

Krings, M.,

Stone, A., Schmitz, R.W., Krainitzki, K., Stoneking, M., & Paabo, S. (July 11, 1997). Neandertal DNA sequences and the origins of modern humans. *Cell*, **90**:19-30.

Krings, M.,

Geisert, H., Schmitz, R.W., Krainitzki, H., & Pääbo S. (May 11, 1999). DNA sequence of the mitochondrial hypervariable region II from the Neandertal type specimen. *PNAS*, **96** (10):5581-5585.

Kuliukas, A.

(2001). Bipedal wading in Hominoidae past and present. Dissertation for M.S. in *Human Evolution and Behaviour*, Department of Anthropology, University College, London.

Kuliukas, A.

(2002). Wading for food: The driving force of the evolution of bipedalism. *Nutrition and Health*, **16**(4):267-290.

Kulozik, A.E.

(1986). Geographical survey of beta S-globin gene haplotypes: Evidence for an Asian origin of the sickle-cell mutation. *American Journal of Human Genetics*, **39**(2):239-244.

Kwak, J.,

Willse, A., Matsumura, K., Opiekun, M.C., Yi, W., et al. (2008). Genetically-Based Olfactory Signatures Persist Despite Dietary Variation. *PLoS ONE*, **3**(10):e3591.

LaBlanc, S.

& Register, K.E. (2003). *Constant battles: The myth of the peaceful, noble savage*. St. Martin's Press.

Laeng, B.,

Mathisen, R., & Johnsen, J.A. (Jan., 2007). Why do blue-eyed men prefer women with the same eye color? *Behavioral Ecology and Sociobiology*. **61**(3):371-384.

La Griffe du Lion.

(Nov., 1999a). <u>Crime in the Hood.</u> **1**(3).

La Griffe du Lion.

(Dec., 1999b). Affirmative Action: The Robin Hood Effect. 1(4).

La Griffe du Lion.

(Jan., 2000). Black Athletes: Can Whites Measure Up?. 2(1).

La Griffe du Lion.

(Mar., 2000a). <u>Standardized tests: The interpretation of racial and ethnic gaps.</u> **2**(3).

La Griffe du Lion.

(May, 2000b). Analysis of Hate Crime. 2(5).

La Griffe du Lion.

(June, 2000c). The Death of Meritocracy. 2(6).

La Griffe du Lion.

(Sept., 2000d). The politics of mental retardation: A tail of the bell curve. 2(9).

La Griffe du Lion.

(Dec. 2000e). <u>Aggressiveness, criminality and sex drive by race, gender and ethnicity.</u> **2** (11).

La Griffe du Lion.

(Mar. 2002). The smart fraction theory of IQ and the Wealth of Nations. 4(1).

La Griffe du Lion.

(Feb. 2003). <u>How to Optimize Productivity with a Multiracial Workforce: The Theory of Differential Cutoff.</u> **5**(1).

La Griffe du Lion.

(Jan., 2005). Cognitive decline: The irreducible legacy of open borders. 7(1).

La Griffe du Lion.

(Jan., 2007). Intelligence, gender and race. 9(1).

Lahr, M.M.

& Foley, R. (2004). Human evolution writ small. Nature, 431:1043-4.

Lamason, R.L.

et al. (Dec. 16, 2005). SLC24A5, a Putative Cation Exchanger, Affects Pigmentation in Zebrafish and Humans. *Science*, **310**(5755):1782-1686.

Lao, O.,

de Gruijter, J. M., van Duijn, K., Navarro, A., & Kayser, M. (May, 2007). Signatures of Positive Selection in Genes Associated with Human Skin Pigmentation as Revealed from Analyses of Single Nucleotide Polymorphisms. *Annals of Human Genetics*, **71**(3):354-369.

Larsson, M.,

Pedersen, N.L., & Stattin, H. (May, 2007). Associations between iris characteristics and personality in adulthood. *Biological Psychology*, **75**(2):165-175.

Lazare, D.

(Mar., 2002). False Testament. Harpers.

Leach, H.M.

(June, 2003). Human domestication reconsidered. *Current Anthropology*, **44**(3):349. **Leakey**, R.

(1994). The Origin of Humankind. Basic Books: NY.

Lee, J.

(2005). *The Evolution of General Intelligence in the Primate Clade*. International Society for Intelligence Research, Albuguerque, NM. p. 40.

Lee, R.B.

& Lee, I.D. (1968). *Man the Hunter: The First Intensive Survey of a Single, Crucial Stage of human Development*. Aldine Publishing Company.

Lee, S-H

& Wolpoff, M.H. (2003). The pattern of evolution in Pleistocene human brain size. *Paleobiology*, **29**(2):186-196.

Lee, S.T.,

Nicholls, R.D., Schnur, R.E., Guida, L.C., Lu-Kuo, J., Spinner, N.B., Zackai, E.H., & Spitz, R.A. (1994). Diverse mutations of the P gene among African-Americans with type II (tyrosinase positive) oculocutaneous albinism (OCA2). *Human Molecular Genetics*, **3** (11):2047-2051.

Lefkowitz, M.

(1997). *Not out of Africa: How Afrocentrism became an excuse to teach myth as history.* Basic Books Reprint.

Leibbrandt, M.,

Levinsohn, J. & McCrary, J. (2005). Incomes in South Africa since the fall of Apartheid. Working Papers 11384. *National Bureau of Economic Research, Inc.*

Leingärtner, A.,

Thuret, S., Kroll, T.T., Chou, S-J., J. Leasure, L., Gage, F.H., & O'Leary, D.D.M. (Mar. 6, 2007). Cortical area size dictates performance at modality-specific behaviors. *PNAS*, **104** (10): 4153-4158.

LePage, M.

(Jan. 13, 2007). The ancestor within. New Scientist, 193(2586).

Lerner, B,

Vining, D.R., & Cattell, R.B., (editor). (1984). *Intelligence and National Achievement*. Institute for the Study of Man, Inc.

$\textbf{Levin},\,M.$

(1994). Comment on The Minnesota Transracial Adoption Study. Intelligence, **19**:3-20.

Levin, M.

(1997; reprint 2005). Why Race Matters. New Century Foundation.

Lewin, R.

(1993). *The Origin of Modern Humans*. Scientific American Library.

Lewin, R.

(1998). Principles of Human Evolution. Blackwell Science, Inc.

Leynaert, B,

Downs, A.M., de Vincenzi, I. (1998). Heterosexual transmission of human immunodeficiency virus: variability of infectivity throughout the course of infection. European Study Group on Heterosexual Transmission of HIV. *Am. J. Epidemiol.*, **148**:88-96.

Libert, F.

et al. (1998). The \triangle ccr5 mutation conferring protection against HIV-1 in Caucasian populations has a single and recent origin in Northeastern Europe. *Human Molecular Genetics*, **7**(3):399-406.

Lieberman, M. D.,

Hariri, A., Jarcho, J.M., Eisenberger, N.I., & Bookheimer, S.Y. (June 1, 2005). An fMRI investigation of race-related amygdala activity in African-American and Caucasian-American individuals. *Nature Neuroscience*, **8**:720-722.

Liggett, S.B.,

et al. (Apr. 20, 2008). <u>A GRK5 polymorphism that inhibits -adrenergic receptor signaling is protective in heart failure</u>. *Nature Medicine*, Online. **14**:510-517.

Lim, M.,

Metzler, R., & Bar-Yam, Y. (Sept. 14, 2007). Global pattern formation and ethnic/cultural violence. *Science*, **14**:1540-1544.

Lin, L-H.,

et al. (Oct. 20, 2006). Long-term sustainability of a high-energy, low-diversity crustal biome. *Science*, **20**:479-482.

Lind, J.M.,

Hutcheson-Dilks, H.B., Williams, S.M., Moore, J.H., Essex, M., Ruiz-Pesini, E., Wallace, D.C., Tishkoff, S.A., O'Brien, S.J., & Smith, M.W. (Jan., 2007). Elevated male European and female African contributions to the genomes of African American individuals. *Hum. Genet.* **120**(5):713-722.

Lindvall, O.

& McKay, R. (June 24, 2003). Brain repair by cell replacement and regeneration. *PNAS*, **100**(13):7430-7431.

Lippsett, L.

(Feb. 6, 1998). Lamont scientists: African climate changes quickly. *Columbia University Record*, **23**(14).

Littlefield, C.H.

& Rushton, J.P. (1986). When a child dies: The sociobiology of bereavement. Journal of *Personality and Social Psychology*, **51**:797-802.

Lloyd, J.

(Oct. 8, 2006). Study paints bleak picture of ethnic diversity. London Financial Times. **LoBue**, V.

& DeLoache, J.S. (Mar., 2008). Detecting the Snake in the Grass: Attention to Fear-Relevant Stimuli by Adults and Young Children. *Psychological Science*, **19**(3):284–289. **Lohmueller**, K.E.,

Indap, A.R., Schmidt, S., Boyko, A.R., Hernandez, R.D., Hubisz, M.J., Sninsky, J.J., White, T.J., Sunyaev, S.R., Nielsen, R., Clark, A.G., & Bustamante, C.D. (Feb. 21, 2008). Proportionally more deleterious genetic variation in European than in African populations.

Nature, Letter, **451**:994-997.

Long, J.C.

(Nov. 21, 2003). Human genetic variation: The mechanisms and results of microevolution. Presented at the session "Exploring the Nature of Human Biological Diversity: Myth v. reality," *American Anthropological Association*.

Lordkipanidze, D,,

Vekua, A,, Ferring R., Rightmire, G.P., Zollikofer, C.P., Ponce de Leon, M.S., Agusti J., Kiladze, G., Mouskhelishvili, A., Nioradze, M., & Tappen, M. (Oct. 9, 2006). A fourth hominin skull from Dmanisi, Georgia. *Anat. Rec. A Discov. Mol. Cell. Evol. Biol.*, **288A** (11):1146-1157.

Losos, J.B.,

Schoener, T.W., Langerhans, R.B., & Spiller, D.A. (Nov. 17, 2006). Rapid temporal reversal in predator-driven natural selection. *Science*, **314**(5802):1111.

Lott, Jr., J.R.,

(Apr., 2000). Does a Helping Hand Put Others at Risk?: Affirmative Action, Police Departments, and Crime. *Economic Inquiry*, **38**(2):249.

Lovejoy, O.C.

(1981). The origin of man. *Science*, **221**:341-350.

Lovgren, S.

(Jan. 28, 2004). Fossil jaw grows orangutan family tree, scientists say. *National Geographic News*.

Lowe, C.B.,

Begerano, G., & Haussler, D. (May, 8, 2007). Thousands of human mobile element fragments undergo strong purifying selection near developmental genes. *PNAS*, **104** (19):8005-8010.

Lubenow, M.

(1998). Recovery of Neandertal mtDNA: an evaluation. *TJ* **12**(1):87–97.

Luboga, S.A.

& Wood, B.A. (1990). Position and orientation of the foramen magnum in higher primates. *American Journal of Physical Anthropology*, **81**(1):67-76.

Lucito, R.J.

et al. (2003). Representational oligonucleotide microarray analysis: a high-resolution method to detect genome copy number variation. *Genome. Res.*, **10**:2291–2305.

Luis, J.R.,

Rowold, D.J., Regueiro, M., Caeiro, B., Cinnioğlu, C. Roseman, C., Underhill, P.A., Cavalli- Sforza, L.L., & Herrera, R.J. (Mar. 1, 2004). The Levant versus the Horn of Africa: Evidence for bidirectional corridors of human migrations. *American Journal of Human Genetics*, **74**(3):532-544.

Lykken, D.T.

& Bouchard, T.J.Jr. and McGue, M. and Tellegen, A. (1992). Emergenesis: Genetic traits that may not run in families. *American Psychologist*, **47**:1565-1577.

Lynch, M.

in W. Stewart Grant, ed. (1997). Genetic effects of straying of non-native fish hatchery fish into natural populations: proceedings of the workshop. U.S. Dep. Commer., NOAA Tech Memo. NMFS-NWFSC-30, 130p.

Lynn, R.

(May 20, 1982). IQ in Japan and the United States shows a growing disparity. *Nature*, **297**:222- 223.

Lynn, R.

(Fall/Winter, 1991). The evolution of racial differences in intelligence. *Mankind Quarterly*, **32**(1/2):99-.

Lynn, R.

(1994). Reinterpretations Of The Minnesota Transracial Adoption Study. *Intelligence*, **19**:1-27.

Lynn, R.

(1995). Dysgenic fertility for criminal behaviour. J. Biosoc. Sci., 27(4):405-408.

Lynn, R.

(1996). Dysgenics: Genetic Deterioration in Modern Populations. Praeger.

Lynn, R.

(1998). New data on black infant precocity. *Personality and Individual Differences*, **25**:801-804.

Lynn, R.

& Vanhanen, T. (2002a). IQ and the Wealth Of Nations. Praeger: CT.

Lynn, R.

(2002b). Skin color and intelligence in African Americans. *Population and Environment*, **23**: 365-375.

Lynn, R.

(2002c & Oct., 2003). Racial and ethnic differences in psychopathic personality. *Personality and Individual Differences*, **32**(2):273-316 & **35**(2):1463-1469.

Lynn, R.

(July, 2002d). Science in the service of ideology: Stephen Jay Gould was admired by journalists but not by scientists. *American Rennaisance*, **13**(7).

Lynn, R.

(July, 2002e). <u>Race and Psychopathic Personality: Racial differences in "average personality."</u>. *American Rennaisance*, **13**(7).

Lynn, R.

& Van Court, M. (March-April, 2004). New evidence of dysgenic fertility for intelligence in the United States. *Intelligence*, **32**(2):193-201.

Lynn, R.

(2006a). *Race Differences in Intelligence: An evolutionary Analysis*. Washington Summit Publishers: Augusta.

Lynn, R.

& Vanhanen, T. (2006b). *IQ and Global Inequality*. Washington Summit Publishers: Augusta.

Lynn, R.

& Harvey, J. (Apr. 27, 2007). The decline of the world's IQ. *Intelligence*, Online; in press. **Maca-Meyer**, N.

González, A.M., Pestano, J. Flores, C., Larruga, J.M., & Cabrera, V.M. (2003). Mitochondrial DNA transit between West Asia and North Africa inferred from U6 phylogeography. *BioMed Central Genetics*, **4**:15.

MacDonald, K.B.

(2002a). What Makes Western Culture Unique? *The Occidental Quarterly*, **2**(2):8-38. **MacDonald**, K.B.

(2002b). *The Culture of Critique*. 1ST Books.

MacDonald, K.B.

(2004). <u>Understanding Jewish Influence: A Study in Ethnic Activism</u>. Washington Summit Publishers: Augusta.

MacDonald, K.B.

(Winter, 2006). Psychology and white ethnocentrism. *The Occidental Quarterly*, **6**(4). **MacGregor**, A.J.

(1985). *The Impacted Lower Wisdom Tooth*, Oxford University Press: NY. **Mackintoch**, B.

(Nov., 1976) <u>George Washington Carver: The Making of a Myth</u>. *The Journal of Southern History*, **XLII**(4):507-528.

Mackintosh, J.A.

(July 21, 2001). The antimicrobial properties of melanocytes, melanosomes and melanin and the evolution of black skin. *Journal of Theoretical Biology*, **211**(2):101-113.

Mackintosh, N.

(1998). IQ and Human Intelligence. Oxford: University Press.

Maestripieri, D.,

Higley, J.D., Lindell, S.G., Newman, T.K., McCormack, K.M., & Sanchez, M.M. (2006). Early maternal rejection affects the development of monoaminergic systems and adult abusive parenting in Rhesus macaques. *Behavioral Neuroscience*, **120**(5).

Maestripieri, D.

(2007). *Macachiavellian Intelligence: How Rhesus Macaques and Humans Have Conquered the World*. University of Chicago Press.

Manning, J.T.,

Stewart, A., Bundred, P.E., & Trivers, R.L. (Nov., 2004). Sex and ethnic differences in 2nd to 4th digit ratio of children. *Early Human Development*, **80**(2):161-168.

March, L.T.

(2004). Harvest of lies: The black farmer lawsuit against the U.S. Department of Agriculture. *Representative Government Press*.

March, L.T.

(Nov. 6, 2006). The rest of the story: Fraud and murder follows "black farmer" consent decree. VDARE.com.

Mare, R.D.

(2006). Educational assortative mating and the family background of the next generation. *Sociological Theory and Methods*, **21**(2):253-278.

Marean, C.W.

et al. (Oct. 18, 2007). Early human use of marine resources and pigment in South Africa in the Middle Pleistocene. *Nature*, **449**:905-908.

Marino, E.A.

(Nov., 1997). A Pilot Study Using the First Cervical Vertebra as an Indicator of Race. *Journal of Forensic Sciences*, **42**(6).

Marth, G.,

et al. (2003). Sequence variations in the public human genome data reflect a bottlenecked population history. *PNAS*, **100**:376-381.

Martin, G.M.

(July 26, 2005). Epigenetic drift in aging identical twins. *PNAS*, **102**(30):10413-10414. **Martin**, N.G.

Eaves, L.J., Heath, A.C., Jardine, R., Feingold, L.M., & Eysenck, H.J. (1986).

Transmission of Social Attitudes. PNAS, 83(12):4364-4368.

Martinón-Torres, M.

et al. (Aug. 14, 2007). Dental evidence on the hominin dispersals during the Pleistocene. *PNAS*, **104**(33):13279-13282.

Masly, J.P.,

Jones, C.D., Noor, M.A.F., Locke, J., & Orr., H.A. (Sept., 8, 2006). Gene transposition as a cause of hybrid sterility in Drosophila. *Science*, **313**(5792):1448-1450.

Masters, M.W.

(1995). The morality of survival: Part I (and Part II). *American Renaissance*, **6**(7). **Matchock**, R.L.

& Susman, E.J. (2006). Family composition and menarcheal age: Anti-inbreeding strategies. *Am. J. Hum. Biol.*, **18**:481-491.

McConchie, C.A.,

Batten, D.J., & Vithanage, V. (1994). Intergeneric hybridization between litchi (Litchi chinensis Sonn.) and longan (Dimocarpus longan Lour.) *Annals of Botany*, **74**:111–118.

McDaniel, M.

(2005). Big-brained people are smarter: A meta-analysis of the relationship between in vivo brain volume and intelligence. *Intelligence*, **33**:337-346.

McDougall, I.,

Brown, F.H., & Fleagle, J.G. (Feb. 17, 2005). Stratigraphic placement and age of modern humans from Kibish, Ethiopia. *Nature*, **433**:733-736.

McGowan, W.,

(2001). Coloring the News: How Crusading for Diversity Has Corrupted American Journalism. *Encounter Books*: San Francisco.

McKie, R.

(2000). *Dawn of Man: The Story of Human Evolution*. Dorling Kindersley Pub. Inc.: NY. **McNulty**, J.K.,

Neff, L.A., Karney, B.R. (Feb., 2008). Beyond initial attraction: Physical attractiveness in newlywed marriage. *Journal of Family Psychology*, **22**(1).

Mekel-Bobrov, N.,

Gilbert, S.L., Evans, P.D., Vallender, E.J., Anderson, J.R., Hudson, R.R., Tishkoff, S.A., & Lahn, B.T. (Sept. 9, 2005). <u>Ongoing Adaptive Evolution of ASPM, a Brain Size</u> Determinant in Homo sapiens. *Science*, **309**(5741):1720-1722.

Mellars, P.

(Feb. 23, 2006). A new radiocarbon revolution and the dispersal of modern humans in Eurasia. *Nature*, **439**:931-935.

Mendes, N.

Hanus, D., & Call, J. (Oct. 22, 2007). <u>Raising the level: orangutans use water as a tool</u>. *Royal Society Biology Letters*, **3**(5):453-455.

Meng, H.

(Nov. 22, 2005). DCDC2 is associated with reading disability and modulates neuronal development in the brain. *PNAS*, **102**(47):17053-17058.

Mercy, J.A.

& Saltzman, L.E. (May, 1989). Fatal violence among spouses in the United States, 1976-85. *American Journal of Public Health*, **79**(5):595-599.

Meredith, H.V.,

& Spurgeon, J.H. (Mar., 1976). Comparative findings on the skelic index of black and white children and youths residing in South Carolina. *Growth*, **40**(1):75-81.

Mes, G.M.

(1964). *Now-Men and Tomorrow-Men: Why We Are Not Equal.* Afrikaanse Pers-Boekhandel: Union of South Africa.

Mes, G.M.

(1965). *Mr. White Man, What Now?* Afrikaanse Pers-Boekhandel: Union of South Africa. **Meyer-Lindenberg**, A.

et al. (Apr. 18, 2006). Neural mechanisms of genetic risk for impulsivity and violence in humans. *PNAS*, **103**(16):6269-6274.

Meyer-Lindenberg, A.,

Straub, R.E., Lipska, B.E., Verchinski, B.A., Goldberg, T., Callicott, J.H., Egan, M.F., Huffake, S.S., Mattay, V.S., Kolachana, B., Kleinman, J.E., & Weinberge, D.R. (Mar., 2007). Genetic evidence implicating DARPP-32 in human frontostriatal structure, function, and cognition. *J. Clin. Invest.*, **117**:672–682.

Migliano, A.B.,

Vinicius, L., & Lahr, M.M. (Dec., 11, 2007). Life history trade-offs explain the evolution of

human pygmies. PNAS, 104:20216-20219.

Mikkelsen, T.S.

(July 20, 2005). Initial sequence of the chimpanzee genome and comparison with the human genome. *Nature* **437**:69-87.

Miller, A.S.

& Kanazawa, S. (2007). *Why Beautiful People Have More Daughters*. Perigree. **Miller**, C.T.,

Beleza, S., Pollen, A.A., Schluter, D., Kittles, R.A., Shriver, M.D., & Kingsley, D.M. (2007). cis-Regulatory Changes in Kit Ligand Expression and Parallel Evolution of Pigmentation in Sticklebacks and Humans. *Cell*, **131**:1179-1189.

Miller, E.M.

(Aug., 1994a). Paternal provisioning versus mate seeking in human populations. *Personality and Individual Differences*, **17**(2):227-255.

Miller, E.M.

(Fall, 1994b). <u>The relevance of group membership for personnel selection: A</u> <u>demonstration using Bayes' Theorem.</u> *The Journal of Social, Political, and Economic Studies*, **19**(3):323-359.

Miller, E.M.

(Winter, 1994c). Tracing the genetic history of modern man. *Mankind Quarterly*, **35**(1-2):71-108.

Miller, E.M.

(Dec., 1994d). Intelligence and brain myelination: A hypothesis. *Personallity and Individual Differences*, **17**(6):803-833.

Miller, R.M.

& Federoff, H.J. (Nov. 11, 2006). Isoform-specific effects of ApoE on HSV immediate early gene expression and establishment of latency. *Neurobiology of Aging*, Published Online.

Mischel, W.

(1961). "Preference for Delayed Reinforcement and Social Responsibility," *Journal of Abnormal and Social Psychology*, **62**(1).

Mishmar, D.,

Ruiz-Pesini, E., Golik, P., Macaulay, V., Clark, A.G., Hosseini, S., Brandon, M., Easley, K., Chen, E., Brown, M.D., Sukernik, R.I., Olckers, A., & Douglas C. Wallace D.C. (Jan. 7, 2003). Natural selection shaped regional mtDNA variation in humans. *PNAS*, **100**(1):171-176.

Mitchell, J.P.

& Manaji, M.R. (May 18, 2006). Dissociable medial prefrontal contributions to judgments of similar and dissimilar others. *Neuron*, **50**:655–663.

Moffitt, T.E.

(2005). The new look of behavioral genetics in developmental psychopathology: Geneenvironment interplay in antisocial behaviors. *Psychological Bulletin*, **131**(4):533-554.

Mogk, L.G.

& Mogk, M. (Jan. 1, 2003). *Macular Degeneration--The Complete Guide To Saving And Maximizing Your Sight*. Ballantine Books, 2nd Ed.

Molnar-Szakacs, I.,

Wu, A.D., Robles, F.J., Iacoboni, M. (2007). Do you see what I mean? Corticospinal excitability during observation of culture-specific gestures. *PLOS ONE* **2**(7).

Montgomery, N.D.,

Yee, D., Chen, A., Kalantry, S., Chamberlain, S.J., Otte, A.P., & Magnuson, T. (May, 24, 2005). The Murine Polycomb Group Protein Eed Is Required for Global Histone H3 Lysine-27 Methylation. *Current Biology*. **15**:942-947.

Moody, J.

(2002). Race, school integration and friendship segregation in America. *American Journal of Sociology*, **107**:679–716.

Mooney, M.P.

& Siegel, M.I. (May, 2, 2005). Premaxillary-maxillary suture fusion and anterior nasal tubercle morphology in the chimpanzee. *American Journal of Physical Anthropology*, **85** (4):451 - 456.

Moore, F.R.,

Cassidy, C., Smith, M.J.L., & Perrett, D.I. (May, 2006). The effects of female control of resources on sex-differentiated mate preferences. *Evolution and Human Behavior*, **27** (3):193-205.

Moore, M. J.

(1987). Inbreeding and reproductive parameters among Mennonites in Kansas. *Social Biology*, **34**:180-186.

Moran, M.

(Nov. 3, 2006). July still out on impact of genes on trial verdicts. *Psychiatric News*, 41 (21):12.

Morris, D.

(1967). The Naked Ape. Dell Publishing Co., Inc.: NY.

Morton, G.R.

(2002). History of human technology. http://www.asa3.org/archive/ASA/199707/0013.html. **Morton**, S.G.,

(1839). Crania Americana; or, A Comparative View of the Skulls of Various Aboriginal Nations of North and South America: To which is Prefixed An Essay on the Varieties of the Human Species. J. Dobson: Philadelphia.

Morwood, M,J.,

O'Sullivan, P.B., Aziz, F., & Raza, A. (Mar. 12, 1998). Fission-track ages of stone tools and fossils on the east Indonesian island of Flores. *Nature*, **392**(6672):173-176.

Morwood, M.,

et al. (2004). Archaeology and age of a new hominin from Flores in eastern Indonesia. *Nature*, **431**:1087-1091.

Morwood, M.

et al. (2005) Further evidence for small-bodied hominins from the Late Pleistocene of Flores, Indonesia. *Nature*, **437**:1012-1017.

Moyà-Sollà, S.

& Kohler, M. (Jan. 11, 1996). A Dryopithecus Skeleton and the origins of Great-Ape Locomotion. *Nature*, **379**:157-158.

Moyà-Solà, S.,

Köhler, M., & Rook, L. (Jan. 5, 1999). Evidence of hominid-like precision grip capability in the hand of the Miocene ape Oreopithecus. *PNAS*, **96**(1):313-317.

Moynihan, R.

& Henry, D. (Apr., 2006). The Fight against Disease Mongering: Generating Knowledge for Action. *PLoS Med.*, **3**(4):e191.

Mueller, J.

& Kelsh, R.N. (2006). A golden clue to human skin colour variation. *Bioessays*, **28**(6):578-582.

Murphy, W.

(2006). Acoustical Society of America's 151st Meeting, Providence, R.I.

Murray, C.

(2003). Human Accomplishment: The Pursuit of Excellence in the Arts and Sciences, 800 B.C. to 1950.HarperCollins.

Murray, C.
(Sept., 2005). The inequality taboo. Commentary.

Murray, C.

(2007). The magnitude and components of change in the black-white IQ difference from 1920-1991: A birth cohort analysis of the Woodcock-Johnson standardizations. *Intelligence*, **35**(4):305-318.

Myers, R.H.

& Shafer, D.A. (July 20, 1979). Hybrid ape offspring of a mating of gibbon and siamang. *Science*, **205**(4403):308 – 310.

Nagel, R.

& Fleming, A. (1992). Genetic epidemiology of the ßS gene. *Baillieres Clin. Haematol.*, **5**:331-365.

Nascimento, J.M.,

Shi, L.Z., Meyers, S., Gagneux, P., Loskutoff, N.M., Botvinick E.L., & M.W. (July 24, 2007). The use of optical tweezers to study sperm competition and motility in primates. *Journal of the Royal Society Interface*, 10.1098/rsif.2007.1118.

Navarrete, D.

& Fessler, D.M.T. (2006). Disease avoidance and ethnocentrism: the effects of disease vulnerability and disgust sensitivity on intergroup attitudes. *Evolution and Human Behavior*, **27**: 270–282.

Navas, A.,

Cobas, G., Talavera, M., Ayala, J.A., López, J.A., & Martínez, J.L. (Aug. 21, 2007). Experimental validation of Haldane's hypothesis on the role of infection as an evolutionary force for Metazoans. *PNAS*, **104**(34):13728-13731.

NCF, New Century Foundation.

(2005). <u>The Color of Crime: Race, Crime and Justice in America</u>, 2nd expanded ed., available online at www.amren.com.

Nedelcu, A.M.

& Michod, R.E. (Aug. 15, 2006). The Evolutionary Origin of an Altruistic Gene. *Molecular Biology and Evolution*, **23**(8):1460-1464.

Ness, R.B.

Haggerty, C.L., Harger, G., & Ferrell, R. (2004). <u>Differential Distribution of Allelic Variants</u> in Cytokine Genes among African Americans and White Americans. *American Journal of Epidemiology*, **160**(11):1033-1038.

Nevin, E.

(1967). The Black brainwash in America. *Mankind Quarterly*, VII(4).

Newman, M.T.

(Autumn, 1950). <u>The Blond Mandan: A Critical View of an Old Problem</u>. *Southwestern Journal of Anthropology*, **6**(3):255-272.

Nguyen, D-Q,

Webber, C., & Ponting, C.P. (Feb. 17, 2006). Bias of selection on human copy-number variants. *PLoS*, **2**(2):e20.

Nicklas, T.A.,

Frank, G.C., Webber, L.S., Zinkgraf, S.A., Cresanta, J.L., Gatewood, L.C., & Berenson, G.S. (Oct., 1987). Racial contrasts in hemoglobin levels and dietary patterns related to hematopoiesis in children: the Bogalusa Heart Study. *Am. J. Public Health*, **77**(10):1320-1323.

Noonan, J.P.

et al. (Nov. 17, 2006). Sequencing and analysis of Neanderthal genomic DNA. *Science*, **314**(5802):1113-1118.

Nordborg, M.

(1998). On the probability of Neanderthal ancestry. Am. J. Human Genetics, 63:1237-

1240.

Norton, H.L.,

Kittles, R.A., Parra, E., McKeigue, P., Mao, X., Cheng, K., Canfield, V.A., Bradley, D.G., McEvoy, B., & Shriver, M.D. (Dec. 20, 2006). Genetic Evidence for the Convergent Evolution of Light Skin in Europeans and East Asians. *Mol. Biol. Evol.*, **24**(3):710-722.

Novembre, J.,

Johnson, T., Bryc, K., Kutalik, Z., Boyko, A.R., Auton, A., Indap, A., King, K.S., Bergmann, S., Nelson, M.R., Stephens, M., & Bustamante, C.D. (Oct., 2008). Genes mirror geography within Europe. *Nature*, **455**:861.

Nyborg, H.

(1987). Covariant Trait Development Across Species, Races, and Within Individuals: Differential K Theory, Genes, and Hormone. International Society for the Study of Individual Differences.

Nyborg, H.

& Jensen, A.R. (2001). Occupation and income related to psychometric g. *Intelligence*, **29**: 45-55.

Nyborg, H., (Ed.),

(2003). *The Scientific Study of General Intelligence: A Tribute to Arthur Jensen*. Pergamon.

Nyborg, H.

(Aug., 2005). Sex-related differences in general intelligence g, brain size, and social status. *Personality and Individual Differences*, **39**(3):497-509.

Nylander, P.P.S.

(1975). Frequency of multiple births. In MacGillivray, I. Nylander, P.P.S., & Corney, G. (Eds.). *Human Multiple Reproduction*. Saunders: Philadelphia.

Nystrom, M.J.,

Caughey, A.B., Lyell, D.J., Druzin, M.L., & El-Sayed, Y.Y. (Oct., 2008). <u>Perinatal</u> <u>outcomes among Asian–white interracial couples</u>. *American Journal of Obstetrics & Gynecology*, **199**(4):385.e1-385.e5.

Olivieri, A.

et al. (Dec. 15, 2006). The mtDNA legacy of the Levantine early upper Palaeolithic in Africa. *Science*, **314**(5806):1767-1770.

Olneck, M.R.

& Crouse, J. (Nov., 1979). The IQ meritocracy reconsidered: Cognitive skill and adult success in the United States. *American Journal of Education*, **88**(1):1-31.

Olsen, S.J.

& Olsen, J.W. (Aug. 5, 1977). The Chinese wolf ancestor of new world dogs. *Science*, **197**: 533-535.

Olsen, S.J.

(1985). *Origins of the Domestic Dog: The Fossil Record*. University of Arizona Press. **Olze**, A.,

Schmeling, A., Taniguchi, M., Maeda, H., van Niekerk, P., Wernecke, K.-D., & Geserick, G. (June, 2004). Forensic age estimation in living subjects: the ethnic factor in wisdom tooth mineralization. *International Journal of Legal Medicine*, **118**(3):170-173.

Onyango-Obbo, C.

(Jan. 20, 2003). Stop the war, and maybe I won't eat you, *The East African*. **Ostatnikova**, D.,

Laznibatova, J., Putz, Z., Mataseje, A., Dohnanyiova, M., & Pastor, K. (June 1, 2000). Salivary Testosterone Levels in Intellectually Gifted and Non-Intellectually Gifted Preadolescents: an exploratory study. *High Ability Studies*, **11**(1).

Ostrovsky, V.

& Hoy, C. (1990). By Way of Deception. St. Martin's Press: NY.

O'Sullivan, P.B.,

Morwood, M. Hobbs, D. Suminto, F.A. Situmorang, M. Raza, A., & Roland, M. (July 21, 2001). Archaeological implications of the geology and chronology of the Soa basin, Flores, Indonesia. *Geology*, **29**:(7):607-610.

Ovchinnikov, I.V.

et al. (Mar., 2000) Molecular analysis of Neanderthal DNA from the northern Caucasus. *Nature*, **404**:490-493.

Pääbo, S.

(Feb. 16, 2001). The human genome and our view of ourselves. *Science*, **16**(5507):1219-1220.

Pagel, M.

& Bodmer, W. (Aug. 7, 2003). A naked ape would have fewer parasites. *Proceedings of the Royal Society B: Biological Sciences*, **270**(0):S117 - S119.

Parfitt, S.A.

et al. (2005). The earliest record of human activity in Northern Europe. *Nature*, **438**:1008-1012.

Parker, J.B.,

Bianchet, M.A., Krosky, D.J., Friedman, J.I., Amzel, M., Stivers, J.T. (Sept. 27, 2007). Enzymatic capture of an extrahelical thymine in the search for uracil in DNA. *Nature*, **449**:433-437.

Parker, S.

1992. The dawn of man. Crescent books.

Parra, E.J.,

et al. (1998). Estimating African American admixture proportions by use of populationspecific alleles. *American Journal of Human Genetics*, **63**:1839-1851.

Paschou, P.

et al. (Sept. 21, 2007). PCA-Correlated SNPs for Structure Identification in Worldwide Human Populations. *PLoS Genetics*, **3**(9).

Passingham, R.E.

(1982). The Human Primate. W.H. Freeman: San Francisco.

Passingham, R.E.

(2002). The frontal cortex: does size matter? *Nature Neuroscience*, **5**:190-192.

Patterson, C.

(1999). *Evolution*. 2nd Ed., Cornell University Press: Ithaca, NY.

Patterson, N.,

Richter, D.J., Gnerre, S., Lander, E.S., & Reich, D. (June 29, 2006). Genetic evidence for complex speciation of humans and chimpanzees. *Nature* Online. **441**(7097):1103-1108.

Peleg, G.,

Datzir, G., Peleg, O., Kamara, M., Brodsky, L., Hel-Or, H., Keren, D., & Nevo, E. (Oct. 16, 2006). Heriditary family signature of facial expression. *PNAS*, **10**:1073.

Penfield, W.

& Rasmussen, T. (1957). *The Cerebral Cortex of Man*. Macmillan.

Penn, D.J.,

Oberzaucher, E., Grammer, K., Fischer, G. Soini, H.A., Wiesler, D. Novotny, M.V., Dixon, S.J., Xu, Y. & Brereton, R.G. (Apr. 22, 2007). <u>Individual and gender fingerprints in human</u> body odour. *Journal of the Royal Society Interface*, **4**(13):331–340.

Pennisi, É.

(Mar. 26, 1999). Did Cooked Tubers Spur the Evolution of Big Brains? *Science*, **283** (5410): 2004-2005.

Pennisi, E.

(Apr. 11, 2003). Cannibalism and prion disease may have been rampant in ancient humans, *Science*, 300(5617):227-228.

Penrose, L. S.,

& Raven, J. C. (1936). A new series of perceptual tests: Preliminary communication. British *Journal of Medical Psychology*, **16**:97-104.

Penton-Voak, I.S.,

Perrett, D.I., & Pierce, J. (1999). Computer graphic studies of the role of facial similarity in judgements of attractiveness. *Current Psychology*, 18:104-117.

Pereira, L.,

Prata, M.J., & Amorim, A. (2000). Diversity of mtDNA lineages in Portugal: not a genetic edge of European variation. *Annals of Human Genetics*, **64**(6):491-506.

Peresani, M.,

(Aug., 2008). A New Cultural Frontier for the Last Neanderthals: The Uluzzian in Northern Italy. *Current Anthropology*, **49**(4):725-731.

Perry, G.H.,

Dominy, N., Claw, K.G., Lee, A.S., Fiegler, H., Redon, R., Werner, J., Villanea, F.A., Mountain, J.L., Misra, R., Carter, N.P., Lee, C., & Stone, A.C. (Oct., 2007). Diet and the evolution of human amylase gene copy number variation. *Nature Genetics*, 39(10):1256-60.

Petraglia, M.

et al. (2007). Middle Paleolithic assemblages from the Indian subcontinent before and after the Toba super-eruption. *Science*, 317:114-116.

Pinker, S.

(2002). The Blank Slate: The Modern Denial of Human Nature. Penguin Putnam.

Pitnick, S.,

Jones, K.E., & Wilkinson, G.S. (2006). Mating system and brain size in bats. *PNAS Royal Society B*, **273**:719-724.

Plagnol, V.

& Wall J.D. (2006). Possible ancestral structure in human populations. *PLoS Genet.*, **2**(7): e105.

Plomin, R.

& Spinath, F.M. (Jan., 2004). Intelligence: Genetics, Genes, and Genomics. *Journal of Personality and Social Psychology*, **86**(1):112-129.

Plomin, R.

& Turic, D.M., Hill, L., Turic, D.E., Stephens, M., Williams, J. Owen, M.J., & O'Donovan, M.C. (Feb. 24, 2004). <u>A functional polymorphism in the succinate-semialdehyde</u> dehydrogenase (aldehyde dehydrogenase 5 family, member A1) gene is associated with cognitive ability. *Molecular Psychiatry*, **9**:582-586.

Plutchik, R.

(1980). A general psychoevolutionary theory of emotion. In R. Plutchik & H. Kellerman (Eds.), *Emotion: Theory, research, and experience: Vol. 1. Theories of emotion* (pp. 3-33). Academic: NY.

Polavarapu, N.,

Bowen, N.J., & McDonald, J.F. (2006). Identification, characterization and comparative genomics of chimpanzee endogenous retroviruses. *Genome Biology*, 7:R51.

Pollard, K.S.

et al. (Sept. 14, 2006). An RNA gene expressed during cortical development evolved rapidly in humans. *Nature*, 443:167-172.

Pollet, T.V.,

Nettle, D., & Nelisson, M. (2007). Maternal Grandmothers do go the Extra Mile: Factoring Distance and Lineage into Differential Contact with Grandchildren. *Evolutionary*

Psychology, **5**(4):832-843.

Pollet, T.V.

& Nettle, D. (Dec. 4, 2007). Driving a hard bargain: sex ratio and male marriage success in a historical US population. *Biology Letters*, DOI: 10.1098/rsbl.2007.0543.

Pollick, A.S.

& de Waals, F.B.M. (May 8, 2007). Ape gestures and language evolution. *PNAS*, 104(19): 8184-8189.

Pollitzer, W. S.

& Anderson, J. J. (1989). Ethnic and genetic differences in bone mass: a review with a hereditary vs environmental perspective. *American Journal of Clinical Nutrition*, **50**:1244-1259.

Poloni, E.S.,

Semino, O., Passarino, G., Santachiara-Benerecetti, A.S., Dupanloup, I., Langaney, A., & Excoffier, L. (1997). <u>Human Genetic Affinities for Y-Chromosome P49a,f/Taql Haplotypes</u> Show Strong Correspondence with Linguistics. *Am. J. Hum. Genet.*; **61**:1015-35.

Pontzer, H.

(2007. Predicting the energy cost of terrestrial locomotion: a test of the LiMb model in humans and quadrupeds. *Journal of Experimental Biology*, **210**:484-494.

Pope, G. (1992). Craniofacial evidence for the origins of modern humans in China. *Yearbook of Physical Anthropology*, **35**:243-297.

Popesco, M.C.,

MacLaren, E.J., Hopkins, J., Dumas, L., Cox, M., Meltesen, L., McGavran, L., Wyckoff, G.J., & Sikela, M.J. (Sept. 1, 2006). Human Lineage–Specific Amplification, Selection, and Neuronal Expression of DUF1220 Domains. *Science*, **313**(5791):1304-1307.

Popp, J.L.

(2000). *Popular Evolution: Life Lessons From Anthropology*. Man and Nature Press: Lake Jackson, TX.

Porteus, S.D.

(Jan. 1961). Ethnic group differences. *Mankind Quarterly*, **3**(1).

Posthuma, D.,

de Geus, E.J., Baare, W.F., Hulshoff, Pol, H.E., Kahn, R.S., & Boomsma, D.I.(2002). The association between brain volumeand intelligence is of genetic origin. *Nature Neuroscience*, **5**:83-84.

Potischman, N.,

Troisi, R., Thadhani, R., Hoover, R.N., Dodd, K., Davis, W.W., Sluss, P.M., Hsieh, C-C., & Ballard-Barbash, R. (June, 2005). <u>Pregnancy Hormone Concentrations Across Ethnic</u> Groups: Implications for Later Cancer Risk. *Biomarkers & Prevention*, **14**:1514-1520.

Power, C.

(2006). Sexual selection models for the emergence of symbolic communication: why they should be reversed. Cradle of Language Conference.

Powledge, T.M.

(Dec. 12, 2006). What is the Hobbit? *PLoS Biology*, **4**(12).

Poynter, C.W.M.

& Keegan, J.J. (1915). A study of the American Negro brain. *Journal of Comparative Neurology*, **25**:183-212.

Pratt, D.

(Feb., 2004). Human origins: The ape ancestry myth.

http://ourworld.compuserve.com/homepages/dp5/ape3.htm#al.

Pray, L.A.

(July 5, 2004). Epigenetics: Genome, meet your environment. *The Scientist*, **18**(13):14. **Premack**, D.

(1988). Minds with and without language. In L. Weiskrantz (ed.) *Thought without language*, (pp. 46-65). Clarendon Press: Oxford.

Prichard, J.C.

(1836). *Researches into the Physical History of Mankind*. Sherwood, Gilbert, and Piper: London.

$\label{eq:prideaux} \textbf{Prideaux},\, G.J.,$

Roberts, R.G., Megirian, D. Westaway, K.E., Hellstrom, J.C., & Olle, J.M. (Jan., 2007). Mammalian responses to Pleistocene climate change in southeastern Australia. *Geology*, **35**(1):33-36.

Purucker, G. de.

(1977). Man in Evolution, 2nd Ed. Theosophical University Press: Pasadena, CA.

Pusey, A.

& Wolf, M. (1996). Inbreeding avoidance in animals. *Trends Ecol. Evol.*, **11**:201-206. **Putnam**, C.

(1961). *Race and Reason: a Yankee view*, reprinted by New Century Foundation (2006). **Putnam**, C.

(1967). Race and Reality. Public Affairs Press.

Putnam, R.D.

(2007). E Pluribus Unum: Diversity and Community in the Twenty-first Century The 2006 Johan Skytte Prize Lecture. *Journal of Scandinavian Political Studies*, **30**(2):137–174.

Raffaele, P.

(Nov., 2006). The smart and swinging bonobo. Smithsonian.com.

Rajkumar, R.,

Banerjee, J., Gunturi, H.B., Trivedi, R., & Kashyap, V.K. (2006). Phylogeny and antiquity of M macrohaplogroup inferred from complete mtDNA sequence of Indian specific lineages. *BMC Evolutionary Biology*, **6**(9).

Ramadhani, M.K.,

Elias, S.G., van Noord, P.A.H., Grobbee, D.E., Peeters, P.H.M., & Uiterwaal, C.S.P.M. (Mar., 2007). Innate Handedness and Disease-Specific Mortality in Women. *Epidemiology*, **18**(2): 208-212.

Rampino, M.R.

(1988). Volcanic winters. Ann. Rev. Earth Planet. Sci. 16:73-99.

Rand, A.

(1961) The Virtue of Selfishness. Signet: NY.

Randall, L.

(Oct. 17, 2005). The aquatic ape theory: Jury still out? Deeperblue.net.

Rantala, M.J.

(1999). Human nakedness: adaptation against ectoparasites? *International Journal for Parasitology*, **29**:1987-1989.

Raphael, S.

(March, 2004). *The socioeconomic status of black males: The increasing importance of Incarceration*. Goldman School of Public Policy, University of California, Berkeley.

Rassoulzadegan, M.

et al. (May 25, 2006). RNA-mediated non-mendelian inheritance of an epigenetic change in the mouse. *Nature*, **441**:469-474.

Ravitch, D.

(2003). *The Language Police: How Pressure Groups Restrict What Students Learn.* Knopf.

Redon, R.

et al. (Nov. 23, 2006). Global variation in copy number in the human genome. *Nature*, 444: 444-445.

Ree, M.J.,

Earles, J.A. (June, 1992). Intelligence Is the Best Predictor of Job Performance. *Current Directions in Psychological Science*, **1**(3):86.

Reed, D.L.,

Smith, V.S., Hammond, S.L., Rogers, A.R., & Clayton, D.H. (2004). Genetic Analysis of Lice Supports Direct Contact between Modern and Archaic Humans. *PLoS Biol.*, **2** (11):e340.

Reed, T.

(1969). Caucasian genes in American Negroes. *Science*, **165**:762-768.

Regalado, A.

(June 16, 2006). Dr. Lahn connects evolution in some groups to IQ debate on race and DNA 'Speculating is dangerous.' *The Wall Street Journal* (Eastern Edition).

Reich, D.

et al. (2005). A whole-genome admixture scan finds a candidate locus for multiple sclerosis susceptibility. *Nature Genetics*, **37**:1113–1118.

Reidla, M.,

et al. (2003). Origin and diffusion of mtDNA haplogroup X. Am. J. Hum. Genet., **73**:1178-1190.

Reiland, R.R.,

(1995). Affirmative Action or Equal Opportunity? *Regulation*, **18**(3).

Relethford, J.H.

& Harpending, H.C. (Aug.-Oct., 1995). Ancient differences in population size can mimic recent a recent African origin of modern humans. *Current Anthropology*, **36**(4):667-674. **[ethford**, J.H.

Relethford, J.H.

(Jan. 16, 2001). Ancient DNA and the origin of modern humans. *PNAS*, **98**(2):390-391. **Rennie**, D.W.,

Covino, B.G., Howell, B.J., Song, S.H., Kang, B.S., & Hong, S.K. (1962). Physical insulation of Korean diving women. *J. Appl. Physiol.*, **17**:961-966.

Rhine, S.,

(1990). *Non Metric Skull Racing, in Skeletal Attribution of Race*. Gill, G.W. & Rhine, S., eds. pp.9-20, Albuquerque: University of New Mexico Press.

Richards, J.

(June 6, 2005). The health consequences of race-mixing. www.MajorityRights.com. **Richards**, J.

(Oct. 14, 2006). Book review of 'Breeding Between the Lines" by Alon Ziv. www.MajorityRights.com.

Richeson, J.A.,

Baird, A.A., Gordon, H.L., Heatherton, T.F., Wyland, C.L., Trawalter, S., & Shelton, J.N. (2003). An fMRI investigation of the impact of interracial contact on executive function. *Nature Neuroscience*, **6**:1323–1328.

Richmond, B.G.,

Begun, D.R., & Strait, D.S. (2001). Origin of human bipedalism: The knuckle-walking hypothesis revisited. *Yearbook of Physical Anthropology*, **44**:70–105.

Richmond, B.G.

& Jungers, W.L. (Mar. 21, 2008). Orrorin tugenensis Femoral Morphology and the Evolution of Hominin Bipedalism. *Science*, **319**:1662-1665.

Ridley, M.

(1996). *Evolution*. 2nd Ed. Cambridge, MA: Blackwell Science.

Riley, J.L.

(Dec. 8, 2006). Race through a liberal lens. *Wall Street Journal* Editorial Page. **Risch**, N.,

Burchard, E., Ziv, E., & Tang., H. (July 1, 2002). Categorization of humans in biomedical research: Genes, race, and disease, *Genome Biol.*, **3**(7).

Roberts, R.G.,

Jones, R., & Smith, M.A. (1993). Optical dating at Deaf Adder Gorge, NT indicates human occupation back to between 53,000 and 60,000 years ago. *Australian Archaeology*, **37**:58-59.

Roberts, S.C.,

Little, A.C., Gosling, L., Jones, B.C., Perrett, D.I., Carter, V., & Petriel, M. (Dec. 22, 2005). MHC-assortative facial preferences in humans. *Biol. Lett.* **1**(4):400–403.

Roberts-Thomson, J.M.,

et al. (1996). An ancient common origin of aboriginal Australians and New Guinea highlanders is supported by alpha-globin haplotype analysis. *Am J Hum Genet.*, **59** (1):277.

Robson, A.

(Oct. 26, 2006). *The chosen ones: Slavery in the name of God*. The Independent (UK). **Robson**, S.L.

& Wood, B. (Apr., 2008). Hominin life history: reconstruction and life history. *Journal of Anatomy*, **212** (4):394-425.

Rodriguez-Girones, M.A.

& Enquist, M. (2001). The evolution of female sexuality. *Animal Behaviour*, **61**(4):695-704. **Rogers**, A.R.,

Iltis, D., & Wooding, S. (2004). Genetic variation at the MC1R locus and the time since loss of human body hair. *Current Anthropology*, **45**(1):105-108.

Rogers, D.S.

& Ehrlich, P.R. (Mar. 4, 2008). Natural selection and cultural rates of change. *PNAS*, **105** (9):3416-3420.

Roney, J.R.,

Hanson, K.N., Durante, K.M. & Maestripieri, D. (2006). Reading men's faces: women's mate attractiveness judgments track men's testosterone and interest in infants. *Proc. R. Soc. B*, **273**:2169–2175.

Rook, L.

Bondioli, L., Köhler, M., Moyà-Solà S.,& Macchiarelli, R. (July 20,1999). Oreopithecus was a bipedal ape after all: Evidence from the iliac cancellous architecture. *PNAS*, **96** (15):8795-8799.

Rosas, Á.

et al. (Dec. 19, 2006). Paleobiology and comparative morphology of a late Neandertal sample from El Sidrón, Asturias, Spain. *PNAS*, **103**(51):19266-19271.

Rosenberg, J.,

& Tunney, R.J. (2008). <u>Human vocabulary use as display</u>. *Evolutionary Psychology*, **6** (3):538-549.

Rosenberg, K.R.,

Zuné, L., & Ruff, C.B. (Mar. 6, 2006). Body size, body proportions, and encephalization in a Middle Pleistocene archaic human from northern China. *PNAS*, **103**:3552-3556.

Rosenberg, N.A.,

Pritchard, J.K., Weber, J.L., Cann, H.M., Kidd, K.K., Zhivotovsky, L.A., & Feldmaan, M.W. (Dec., 20, 2002). Genetic structure of human populations. *Science*, **298**(5602):2381-2385. **Rosenberg**, N.A.,

Mahajan, S., Ramachandran, S., Zhao, C., Pritchard, J.K., & Feldman, M.W. (2005). Clines, Clusters, and the Effect of Study Design on the Inference of Human Population Structure. *PLOS*, **1**(6):70.

Ross, C.N.,

French, J.A., & Ortí, G. (2007). Germ-line chimerism and paternal care in marmosets (Callithrix kuhlii). *PNAS*, **104**(15):6278-6282.

Ross, L.E.

(Mar., 1997). Mate selection preferences among African American college students. *Journal of Black Studies*, **27**(4):554-569.

Ross, R.,

Bernstein, L., Judd, H., Hanisch, R., Pike, M., & Henderson, B.(1986). Serum testosterone levels in healthy young black and white men. *Journal of the National Cancer Institute*, **76**:45-48.

Rossie, J.B.,

Ni, X., & Beard, K.C. (Mar. 21, 2006). Cranial remains of an Eocene tarsier. *PNAS*, **103** (12): 4381-4385.

Roth, P.L.,

Bevier, C.A., Bobko, P., Switzer III, F.S., & Tyler, P. (2001). Ethnic group differences in cognitive ability in employment and educational settings: A meta-analysis. *Personal Psychology*, **54**(2):297-330.

Rougier, H.

et al. (2007). Pe tera cu Oase 2 and the cranial morphology of early modern Europeans. *PNAS*, **10**:1073.

Roy, J-N.,

Lajoie, J., Zijenah, L.S., Barama, A., Poirier, C., Ward, B.J., & Roger, M. (Apr. 15, 2005). CYP3A5 genetic polymorphisms in different ethnic populations. Drug Metalbolism and Disposition.

Rubenstein, E.S.

(August 29, 2006). <u>National Data: From your friendly federal government – the coming</u> white minority. *VDARE.com*.

Rubenstein, E.S.

(Aug., 2007). "A Statistical Review of the Condition of Whites in the United States," in The National Policy Institute, *The State of White America, 2007*.

Rubenstein, E.S.

(Oct., 2008). <u>Economic Costs of Racial and Cultural Diversity</u>. *National Policy Institute*, Issue 803.

Ruff, C.,

Trinkaus, E., & Holliday, T. (1997). Body mass and encephalization in Pleistocene Homo. *Nature*, **387**:173-176.

Ruhlen, M.

(Nov. 10, 1998). The origin of the Na-Dene. PNAS, 95(23):13994-13996.

Rushton, J.P.

(1988). <u>Genetic similarity, mate choice, and fecundity in humans</u>. *Ethology & Sociobiology*, **9**(6):329-333.

Rushton, J.P.

(1989). Genetic similarity, human altruism, and group selection. *Behavioral and Brain Sciences*, **12**:503-559.

Rushton, J.P.,

(Mar.-Apr., 1994). "<u>Victim of scientific hoax – Cyril Burt and the genetic IQ controversy</u>," *Society*, **31**(3):40-45.

Rushton, J.P.

& Osborne, R.T. (1995). Genetic and Environmental Contributions to Cranial Capacity in Black and White Adolescents. *Intelligence*, **20**:1-13.

Rushton, J.P.

& Ankney, C.D. (1996). Brain size and cognitive ability: Correlations with age, sex, social

class, and race. *Psychonomic Bulletin & Review*, **3**(I):21-36.

Rushton, J.P.

(July, 1997). <u>Race, Intelligence, and the Brain: The Errors and Omissions of the Revised</u> <u>Edition of S. J. Gould's The Mismeasure of Man (1996)</u>. *Personality and Individual Differences*, **23**(1):169-180.

Rushton, J.P.

(Mar., 1998). The new enemies of evolutionary science. Liberty, II(4):31-35.

Rushton, J.P.

(2000a). *Race, Evolution, and Behavior: A Life History Perspective*, Third Edition, Charles Darwin Research Foundation: Michigan.

Rushton, J.P.

(2000b). <u>*Race, Evolution, and Behavior: A Life History Perspective*</u>, 2nd Special Abridged, Charles Darwin Research Foundation: Michigan.

Rushton, J.P.

(2005a). Ethnic nepotism, evolutionary psychology, and genetic similarity theory. *Nations and Nationalism*, **11**:489-507.

Rushton, J.P.

& Bons, T. A. (2005b). Mate choice and friendship in twins. *Psychological Science*, 16(2): 555 – 559.

Rushton, J.P.

& Jensen, A.R. (June, 2005c). Thirty years of research on race differences in cognitive ability. Psychology, *Public Policy, and Law*, **11**(2):235-294.

Rushton, J.P.

& Jensen, A.R. (Sept., 2005d). Correction to Rushton and Jensen (2005). *Psychology, Public Policy, and Law*, **11**(3):406.

Rushton, J.P.

& Jensen, A.R. (Oct., 2006). The totality of available evidence shows the race IQ gap still remains. *Psychological Science*, **17**(10):921.

Rushton, J.P.,

Vernon, P.A., & Bons, T.A. (2007a). No evidence that polymorphisms of brain regulator genes Microcephalin and ASPM are associated with general mental ability, head circumference or altruism. *Biology Letters*, **3**:157-160.

Rushton, J.P.,

Čvorović, J., & Bons, T.A. (2007b). General mental ability in South Asians: Data from three Roma (Gypsy) communities in Serbia. *Intelligence*, **35**:1-12.

Russell, R.J.H.,

& Wells, P.A. (1991). Personality similarity and quality of marriage. *Personality and Individual Differences*, **12**:406-412.

Russon, A.E.

(2004). Orangutans: Wizards of the Rain Forest. Firefly Books: Buffalo, NY.

Sablin, M.V.

& Khlopachev, G.A. (2002). The earliest ice age dogs: Evidence from Eliseevichi 1. *Current Anthropology*, **43**:795-799.

Sackett, P.R.,

Hardison, C.M., & Cullen, M.J. (Jan., 2004). On Interpreting Stereotype Threat as Accounting for African American–White Differences on Cognitive Tests. *American Psychologist*, **59**(1):7–13.

Sailer, S.

(Aug. 2, 2002). <u>It's All Relative: Putting Race in Its Proper Perspective</u>, *VDARE.com*. **Sailer**, S.

(Jan. 13, 2003). Cousin marriage conund/A>. The American Conservative, pp. 20-22.

(Feb. 22, 2004a). Stereotype threat a.k.a. Occam's butterknife, VDARE.com. Sailer. S. (Aug. 22, 2004b). Importing a new underclass, more evidence. VDARE.com. Sailer. S. (Feb. 13, 2005a). Mapping the Unmentionable: Race and Crime. VDARE.com. Sailer, S. (Aug. 16, 2005b). Lee Kwan Yew on Democracy vs. Multiculturalism, isteve.com. Sailer, S. (Nov. 16, 2005c). America is dumbing down, isteve.com. Sailer, S. (Dec. 18, 2006). Is America headed for Idjocy? VDARE.com. Sailer, S. (Aug., 2007a). Two Cheers For Pinker On Genealogy ... But What About Race?, VDARE.com. Sailer, S. (Aug. 12, 2007b) A Real Diamond," VDARE.com. Sailer, S. (Oct. 21, 2007c). James D. Watson – A Modern Galileo, VDARE.com. Sailer. S. (Nov. 4, 2007d). Reflecting on James D. Watson, VDARE.com. Sailer. S. (Dec. 9, 2007e). Diversity Is Strength! It's Also...2006's Demographic Death Spiral/A>. VDARE.com. Sailer, S. (Feb. 10, 2008a). Will McCain Go to the Mat with Obama? VDARE.com. Sailer. S. (Apr. 13, 2008b). Obama's "Civil Rights" Vision: Quotas, Increased Crime, More Socialism. VDARE.com. Saito, N. & Nei, M. (July, 1987). The neighbor-joining method: a new method for reconstructing phylogenetic trees. *Molecular Biology and Evolution*, **4**(4):406-425. Salter, F.K. (1996). Carrier females and sender males: An evolutionary hypothesis linkig female attractiveness, family resemblance, and paternity confidence. *Ethology and Sociobiology*, 17:211-220. Salter. F.K. (Nov., 2002a). Estimating ethnic genetic interests: Is it adaptive to resist replacement migration? Population and Environment, 24(2):111-140. Salter, F. K. (2002b). Ethnic nepotism as a two-edged sword: The risk-mitigating role of ethnicity among mafiosi, nationalist fighters, middleman, and dissidents. In F. K. Salter (Ed.), Risky *Transactions. Kinship, Ethnicity, and Trust* (pp. 243–289). Oxford and New York: Berghahn. Salter, F.K. (2003). On Genetic Interests: Family, Ethny, and Humanity in an Age of Mass Migration. Peter Lang: Frankfurt. Salter, F.K. (2004). Welfare, Ethnicity and Altruism: New Data and Evolutionary Theory, Routledge. Sarich. V.

Sailer. S.

& Miele, F. (2004). Race: The Reality of Human Differences. Mass.: Westview Press.

Savic, I.

& Lindström, P. (June 16, 2008). <u>PET and MRI show differences in cerebral asymmetry</u> and functional connectivity between homo- and heterosexual subjects, *PNAS*, **105**:9403-9408.

Savino, J.

& Jones, M.D. (2007). *Supervolcano: The Catastrophic Event that Changed the Course of Human History*. New Page Books: NJ.

Scarr, S,

Weinberg, R.A., Waldman, D. (1993). IQ correlations in transracial adoptive families. *Intelligence*, **17**:541–555.

Schaffner, S.S.

& Sabeti, P.C. (June 16, 2006). Examining natural selection in humans.

http://www.sciencemag.org/multimedia/video/seminars/

Schillaci, M.A.

(2006). Sexual selection and the evolution of brain size in primates. *PLOS ONE*, **1**(1):e62. **Schmidt**, K.L.

& Cohn, J.F. (2001). Human facial expressions as adaptations: Evolutionary questions in facial expression research. *Yearbook of Physical Anthropology*, **44**:3-24.

Schmidt, F.L.

& Hunter, J. (2004). General Mental Ability in the World of Work: Occupational Attainment and Job Performance. *Journal of Personality and Social Psychology*, **86**(1):162–173.

Schnitzer, P.G.

& Ewigman, B.G. (Nov. 5, 2005). Child deaths resulting from inflicted injuries: Household risk factors and perpetrator characteristics. *Pediatrics*, **116**(5):e687-e693.

Schnitzler, C.M.

(Feb., 1993). Bone quality: A determinant for certain risk factors for bone fragility. *Calcified Tissue International*, **53**(1).

Scholz, C.A.,

et al. (Sept. 4, 2007). East African megadroughts between 135 and 75 thousand years ago and bearing on early-modern human origins. *PNAS* Online, **10**:1073.

Schulting, R.J.

& Wysocki, M. (July, 2002). Cranial trauma in the British earlier Neolithic. The *Newsletter* of the *Prehistoric Society*, No. 41.

Schultz, A.H.

(1936). Characters common to higher primates and characters specific for man. *Quarterly Review of Biology*, **11**:259-283, 425-455.

Schulz, H-P.

(1998). [Wolf Cave]. Populär Arkeologi.

Schumann, T.E.

(Fall, 1960). The unpreparedness of civilized countries for the twentieth century racial revolution. *Mankind Quarterly*, **VIII**(2).

Schuster, R.

(Apr., 1982). An Investigation of the Intellectual Capabilities of Juvenile Offenders. *Journal of Forensic Sciences*, **27**(2).

Schwartz, G.

(2000). Taxonomic and functional aspects of the patterning of enamel thickness distribution in extant large-bodied hominoids. *American Journal of Physical Anthropology*, **111**:221-244.

Schwartz, J.H.

(1988). *History, morphology, paleontology, and evolution. Orangutan biology*. (ed. by J.H. Schwartz), pp. 59-85. Oxford University Press: NY.

Schwartz, J.H.

(1999). *Sudden Origins: Fossils, Genes, and the Emergence of Species*. John Wiley and Sons, Inc.: NY.

Schwartz, J.H.

2nd Ed. (2005). The red ape: Orangutans and human origins. Westview Press.

Schwartz, M.

& Vissing, J. (2002). Paternal inheritance of mitochondrial DNA. *New England Journal of Medicine*, **347**(8):576-580.

Segal, E.

et al. (July 23, 2006). A genomic code for nucleosome positioning. *Nature*, **34**(2):455-456. **Segal**, N.L.

(1999) *Entwined Lives: Twins and What They Tell Us About Human Behavior*. Penguin: NY.

Segal, N.L.,

Sussman, L.J., Marelich, W.D., Mearns, J., & Blozis, S.A. (June, 2002). Monozygotic and dizygotic twins' retrospective and current bereavement-related behaviors: an evolutionary perspective. *Twin Research*, **5**(3):189-195.

Seldin, M.F.

et al. (Sept., 2006). European population substructure: Clustering of northern and southern Populations. *PLoS Genetics*, **2**(9).

Seligman, D.

(Apr. 15, 1991). Is America smart enough? IQ and national productivity. *National Review*. **Seligman**, D.

(1992). A Question of Intelligence. Carol Publishing Group.

Semino, O.

et al. (Nov. 10, 2000) The Genetic Legacy of Paleolithic Homo sapiens sapiens in Extant Europeans: A Y Chromosome Perspective. *Science*, **290**(5494):1155 – 1159.

Senner, W.M.

(1989). The origins of writing. Lincoln: University of Nebraska Press.

Serpell, J.

(1995). *The Domestic Dog*. Cambridge University Press: Cambridge.

Serre, D.,

Langaney, A, Chech, M. Teschler-Nicola, M., Paunovic, M., Mennecier, P., Hofreiter, M., Possnert, G., & Pääbo, S. (Mar., 2004). <u>No evidence of Neandertal mtDNA contribution to</u> <u>early modern humans</u>. *PLoS Biology*, **2**(3).

Shackelford, T.K.

& Goetz, A.T. (2007). Adaptation to Sperm Competition in Humans Current Directions in *Psychological Science*, 16(1):47–50.

Shahak, I.

(1994). *Jewish History, Jewish Religion: The weight of three thousand years*. Pluto Press: London.

Shatz, S.M.

(Mar.-Apr., 2008). IQ and fertility: A cross-national study. *Intelligence*, **36**(2):109-111. **Shaw**, P.,

Greenstein, D., Lerch, J., Clasen, L., Lenroot, R., Gogtay, N., Evans, A., Rapoport, J. & Giedd, J. (Mar. 30, 2006). Intellectual ability and cortical development in children and adolescents. *Nature*, **440**:676-679.

Shea, J.J.

(2001). Modern human origins and the extinction of the Neanderthals in the Levant. Athena Review, 2(4):21-32.

Shea, J.J.,

Brown, K., & Davis, Z. (2002). Controlled experiments with Middle Paleolithic spear points: Levallois points. In Mathieu, James R. (ed.) 2002 *Experimental Archaeology: Replicating Past Objects, Behaviors, and Processes*, pp. 55-72. Oxford: British Archaeological Reports, International Series 1035 (Oxford).

Shen, G.,

Wang, W. et al. (Dec. 1, 2002) U-series dating of Liujiang hominid site in Guangxi, Southern China. *Journal of Human Evolution*, **43**:817-829.

Shields, W.M.

& Shields, L.M. (1983). Forcible rape: An evolutionary perspective. *Ethology and Sociobiology*, **4**:115-136.

Shreeve, J.

(1995). The Neandertal Enigma. William Morrow and Co., Inc.

Shreeve, J.

(Mar., 2006). *The Greatest Journey*. National Geographic.

Shriver, M.D.,

et al. (2003). Skin pigmentation, biogeographical ancestry and admixture mapping. *Human Genetics*, **112**:387–399.

Shuey, A.H.

(1966). The Testing of Negro Intelligence, Social Science Press: New York.

Shultz, S.

& Dunbar, R.I.M. (Dec. 22, 2006). Chimpanzee and felid diet composition is influenced by prey brain size. *Biology Letters*, **2**(4).

Shur, M.D.,

Palombit, R.A., and Whitten, P.L. (2008). Association between male testosterone and friendship formation with lactating females in wild olive baboons (*Papio hamadryas anubis*). *Program of the 77th Annual Meeting of the American Association of Physical Anthropologists*, p. 193.

Shurkin, J.Ń.

(1992). *Terman's Kids: The Groundbreaking Study of How the Gifted Grow Up*. Little Brown & Co.

Sikkink, D.

& Emerson, M.O. (July 16, 2007). *School Choice and Racial Residential Segregation in U.S. Schools: The Role of Parents' Education, Ethnic and Racial Studies*, in press.

Silva, D.A,

Carvalho, E., Costa, G., Tavares, L., Amorim, A., & Gusmao, L. (Oct. 12, 2006). Ychromosome genetic variation in Rio De Janeiro population. *Am. J. Hum. Biol.*, **18**(6):829-837.

Simpson, W.G.

(2003). Which Way Western Man? National Vanguard Books: Hillsboro, WV.

Small, M.F.

(1995). What's Love Got to Do with It? Doubleday: NY.

Smith, F.H.

(1985). Continuity and change in the origin of modern humans. *Z. Morphol. Anthropol.*, **75** (197):e222.

Smith, F.H.,

Jankovic, I., & Karavanic, I., (2005). The assimilation model, modern human origins in Europe, and the extinction of Neandertals. *Quaternary International*, **137**:7-19.

Smith, K.

(Aug. 16, 2006). Homing in on Genes for Humanity. Nature, 442:725-725.

Smith, M.W.,

Dean, M., Carrington, M., Huttley, G.A., & O'Brien S.J. (Sept. 6, 1997). CCR5-delta 32

gene deletion in HIV-1 infected patients. Lancet, 350(9079):741.

Smith, T.,

Rose, K., & Gingerich, P.D. (July 25, 2006). Rapid Asia-Europe-North America geographic dispersal of earliest Eocene primate Teilhardina during the Paleocene-Eocene Thermal Maximum. *PNAS*, **103**(30):11223-11227.

Smith, T.M.,

Tafforeau, P., Reid, D.J., Grün, R., Eggins, S., Boutakiout, M., Hublin, J-J. (Apr., 10, 2007). Earliest evidence of modern human life history in North African early Homo sapiens. *PNAS*, **104**(15):6128-6133.

Sniegowski, P.D.,

Gerrish, P.J., Johnson, T., & Shaver, A. (2000). The evolution of mutation rates:

separating causes from consequences. *BioEssays*, **22**(12):1057-1066.

Soejima, M.,

Tachida, H., Ishida, T., Sano, A., & Koda, Y. (2006). Evidence for recent positive selection at the human AIM1 locus in a European population. *Molecular Biology and Evolution*, **23** (1):179-188.

Soffer, O.,

Adovasio, J.M., & Hyland, D.C. (Aug.-Oct., 2000). The "Venus" figurines: Textiles, basketry, gender, and status in the Upper Paleolithic. *Current Anthropology*, **41**(4).

Soficaru, A.,

Petrea, C., Dobo, A., & Trinkaus, E. (Aug., 2007). The Human Cranium from the Pestera Cioclovina Uscata, Romania: Context, Age, Taphonomy, Morphology, and Paleopathology. *Current Anthropology*, **48**(4):611-619.

Sola, S.M.

& Kohler, M. (Oct. 7, 1993). Recent discoveries of Dryopithecus shed new light on evolution of great apes. *Nature*, **365**(6446):543-545.

Sonada, S.,

Li, H-C., Cartier, L., Nunez, L., & Tajima, K. (Nov., 2000). Ancient HTLV Type 1 Provirus DNA of Andean Mummy. *AIDS Research and Human Retroviruses*, **16**(16):1753 -1756.

Spielman, R.S.,

Bastone, L.A., Burdick, J.T., Morley, M., Ewens, W.J., & Cheung, V.G., (Jan. 7, 2007). Common genetic variants account for differences in gene expression among ethnic groups. *Nature Genetics*, **39**(2):226-231.

Stark, A.,

Bushati, N., Jan, C.H., Kheradpour, P., Hodges, E., Brennecke, J., Bartel, D.P., Cohen, S.M., & Kellis, M. (Jan. 1, 2008). <u>A single Hox locus in Drosophila produces functional microRNAs from opposite DNA strands</u>. *Genes and Development*, **22**:8-13.

Stead, W.W.,

Senner, J.W., Reddick, W.T., & Lofgren, J.P. (Feb. 15, 1990). Racial differences in susceptibility to infection by Mycobacterium tuberculosis. *New England Journal of Medicine*, 322(7):422-427.

Stedman, H.H.,

et al. (Mar. 25, 2004). Myosin gene mutation correlates with anatomical changes in the human lineage. *Nature*, **428**:415-418.

Steegmann, Jr., A.T.,

Cherny, F.J., & Holliday, T.W. (Aug. 21, 2002). Neandertal cold adaptation: Physiological and energetic factors. *American Journal of Human Biology*, **14**(5):566-583.

Steele, C.M.

& Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality & Social Psychology*, **69**:797–811.

Stefansson, H.

et al. (Feb., 2005). <u>A common inversion under selection in Europeans</u>. *Nature Genetics*, 37:129 – 137.

Stein, H.

(Autumn, 2006). Now the GOP is for affirmative action. *City Journal*.

Steinhorn, L.

& Diggs-Brown, B. (1999). *By the Color of our Skin: The Illusion of Integration and the Reality of Race*. Dutton: England.

Stephens, J.C.

et al. (June, 1998). Dating the origin of the CCR5- Δ 32 AIDS-resistance allele by the coalescence of haplotypes. *American Journal of Human Genetics*, **62**(6):1507-1515.

Sternberg, R.J., ed.

(1994). Encyclopedia of Human Intelligence. Macmillan: NY.

Steudel-Numbers, K.L.

& Tilken, M.J. (2004). The effect of lower limb length on the energetic cost of locomotion: implications for fossil hominins. *Journal of Human Evolution*, **47**(1-2):95-109.

Stout, M.

(2005). *The Sociopath Next Door: The Ruthless Versus the Rest of Us.* Broadway Books: NY.

Strassburg, A.,

Strassburg, C.P., Manns, M.P., & Tukey, R.H. (2002). Differential Gene Expression of NAD(P)H:Quinone Oxidoreductase and NRH:Quinone Oxidoreductase in Human Hepatocellular and Biliary Tissue. *Molecular Pharmacology*, **61**(2):320-325.

Swan, L.W.,

(1990). The concordance of ontogeny with phylogeny. *Bioscience*, **40**:383.

Swisher III, C.C.

(2001). *Java Man: How Two Geologists Changed Our Understanding of Human Evolution*. University of Chicago Press.

Sykes, B.

(2001). The Seven Daughters of Eve. W.W. Norton: NY.

Tajima, F.

(1989). Statistical Method for Testing the Neutral Mutation Hypothesis by DNA Polymorphism. *Genetics*, **123**:585-595.

Tang, H.

et al. (2005). Genetic Structure, Self-Identified Race/Ethnicity, and Confounding in Case-Control Association Studies. *American Journal of Human Genetics*, **76**:268-275.

Tangley, L.

(2006). Cat on the spot. *National Wildlife*, **44**(3).

Tankersley, D.,

Stowe, C.J. & Huettel, S.A. (Jan. 21, 2007). Altruism is associated with an increased neural response to agency. *Nature Neuroscience*. Brief Communications.

Tashakkori, A.

(1993). Race, gender and pre-adolescent self-structure: A test of construct-specificity hypothesis. Personality and Individual Differences, **14**:591-598.

Tattersall, I..

(1993). Speciation and morphological differentiation in the genus Lemur. In Kimbel, W.H. & Lawrence, L.B. (eds), Species, Species Concepts, and Primate Evolution. Plenum Press. NY, pp. 163-176.

Taylor, A.B.

& van Schaik, C.P. (Jan. 7, 2007). Variation in brain size and ecology in Pongo. Journal of Human Evolution, **52**(1):59-71.

Templer, D.I.,

& Arikawa, H. (Mar.-Apr., 2006). <u>Temperature, skin color, per capita income, and IQ: An</u> international perspective. *Intelligence*, **34**(2):121-139.

Templeton, A.R.

(Mar. 7, 2002). Out of Africa again and again. Nature, 416:45-51.

Templeton, A.R.

(2005). Haplotype Trees and Modern Human Origins. Yearbook of Physical Anthropology, **128**(S41):33-59.

Thernstrom, A.

& Thernstrom, S. (2003). No Excuses: Closing the Racial Gap in Learning. Simon & Schuster:NY.

Thery, I.,

Gril, J., Vernet, J.L., Meignen, L., & Maury, J. (July, 1996). Coal used for Fuel at Two Prehistoric Sites in Southern France: Les Canalettes (Mousterian) and Les Usclades (Mesolithic). Journal of Archaeological Science, 23(4):509-512.

Thieme, H.

(July, 1997). Lower Paleolithic hunting weapons from Schöningen, Germany: The oldest spears in the world. PAST, the Newsletter of the Prehistoric Society, No. 26.

Thomas, M.G.,

Miller, K.W.P., & Mascie-Taylor, C.G.N. (1998). Mitochondrial DNA and IQ in Europe. *Intelligence*, **26**:167-173.

Thomas, S.B.

& Hirschman, J.L. (1995). Minority-targeted scholarships: More than a black-white issue. *Journal of College and University Law*, **21**(3):555-590.

Thompson, E.E.,

Kuttab-Boulos, H., Witonsky, D., Yang, L., Roe, B.A., & DiRienzo, A. (2004). CYP3A Variation and the Evolution of Salt-Sensitivity Variants. *Am. J. Hum. Genet.*, **75**:1059-1069.

Thompson, P.M.

et al. (2001). Genetic influences on brain structure. *Nature Neuroscience*, **4**:1253–1258. **Thorpe**, S.K.S.,

Holder, R.L., & Crompton, R.H. (June 1, 2007). Origin of human bipedalism as an adaptation for locomotion on flexible branches. *Science*, **316**(5829):1328-1331.

Thünken,

Bakker, T.C.M., Baldauf, S.A., & Kullmann, H. (Feb. 6, 2007). Active Inbreeding in a Cichlid Fish and Its Adaptive Significance. *Current Biology*, **17**:225-229.

Tian, C.,

Plenge, R.M., Ransom, M., Lee, A., Villoslada, P., et al. (2008). Analysis and Application of European Genetic Substructure Using 300 K SNP Information. *PLoS Genet.*, **4**(1):e4.

Tiedemann, F.

(1836). On the Brain of the Negro, compared with that of the European and the Orang-Outang. *The Philosophical Transactions of the Royal Society of London*.

Tobin, R.G.

(Jan., 2008). On the potential of a chemical Bonds: Possible effects of steroids on home run production in baseball. *American Journal of Physics*, **76**(1):15-20.

Tocheri, M.W.,

et al. (Sept. 21, 2007). The primitive wrist of Homo floresiensis and its implications for hominin evolution. *Science*, **317**(5845):1743-1745.

Tompkins, R.L.

(Jan., 1996). Relative dental development of Upper Pleistocene hominids compared to human population variation. *American Journal of Physical Anthropology*, **99**(1):103-118. **Trinkaus**, E.

& Howells, W.W. (1979). The neanderthals. *Scientific American*, **241**(6):118-33.

Trinkaus, E.,

et al. (Sept. 30, 2003). An early modern human from the Pe tera cu Oase, Romania. *PNAS*, 100(20):11231-11236.

Trinkaus, E.

(Oct., 2005). Anatomical evidence for the antiquity of human footwear use. *Journal of Archaelogical Science*, **32**(10):1515-1526.

Trinkaus, E.

(Apr. 23, 2007). <u>European early modern humans and the fate of the Neandertals</u>. *PNAS*, Online.

Trotter, M.

(1970). in *Personal Identification in Mass Disasters* ed. Stewart, T. D. (Natl. Museum of Natural History, Washington, DC).

Trudell, M.B.

(Sept., 1999). Anterior femoral curvature revisted: race assessment from the femur. *Journal of Forensic Sciences*, **44**(5).

Trut, L.

(Mar.-Apr., 1999). Early Canid Domestication: The Farm-Fox Experiment. *American Scientist*, **87**(2).

Turner, W.

(1886). The sacral index in various races of mankind. J. Anat. Physiol., 20.

Udry, J.R.,

Li, R.M., & Hendrickson-Smith, J. (Nov., 2003). Health and behavior risks of adolescents with mixed-race identity. *Am. J. Public Health*, **93**(11):1865–1870.

Underhill, P.A.,

Passarino, G., Lin, A.A., Shen, P., Lahr, M.M., Foley, R.A., Oefner, P.J., & Cavalli- Sforza, L.L. (2001). The phylogeography of Y chromosome binary haplotypes and the origins of modern human populations. *Ann. Hum. Genet.*, **65**:43-62.

Van Court, M.

& Bean, F.D. (1985) Intelligence and fertility in the United States: 1912 – 1982. *Intelligence*, **9**:23-32.

Vanhaeren, M.

et al. (June, 23, 2006). Oldest known beads reported found. *Science*, **312**(5781):1785-1788.

Van Heuverswyn, F.

(Nov. 9, 2006). Human immunodeficiency viruses: SIV infection in wild gorillas. *Nature*, **444**:164.

Van Schaik, C.P.,

Ancrenaz, M., Borgen, G., Galdikas, B. Knott, C.D., Singleton, I., Suzuki, A., Utami, S.S., & Merrill, M. (Jan. 3, 2003). Orangutan cultures and the evolution of material culture. *Science*, **299**(5603):102-105.

Van Vugt, M.,

De Cremer, D., & Janssen, D. P. (Jan., 2007). Gender differences in cooperation and competition: The male warrior hypothesis. *Psychological Science*, **18**(1):19-23.

Vasey, P.L.,

Pocock, D.S., & Vanderlaan, D.P. (May, 2007). Kin selection and male androphilia in Samoan fa'afafine. *Evolution and Human Behavior*, **28**(3):159-167.

Viding, E.,

Blair, R.J.R., Moffitt, T.E., & Plomin, R. (2005). Strong genetic risk for psychopathic syndrome in children. *Journal of Child Psychology and Psychiatry*, **46**:592-597.

Vilakazi, A.

(1962). *Zulu Transformations : A study of the dynamics of social change*. Pietermaritzburg: University of Natal Press.

Vining, D.R.

(1982). On the possibility of the reemergence of a dysgenic trend with respect to intelligence in American fertility differentials. *Intelligence*, **6**:241-264.

Vining, D.Ř., Jr.

(1984).Subfertility among the very intelligent: An examination of the American Mensa. *Personality and Individual Differneces*, **5**(6):725-733.

Vining, D.R.

(Aug., 1995). On the possibility of the reemergence of a dysgenic trend with respect to intelligence in American fertility differentials: an update. *Personality and Individual Differences*, **19**(2):259-263.

Vint, F.W.

(1934). The Brain of the Kenya Native, Journal of Anatomy, 68:216-223.

Voight, B,

Kudaravalli, S, Wen, X, & Pritchard, J.K. (Mar., 2006). A Map of Recent Positive Selection in the Human Genome. *PLoS Biology*, **4**:3.

Wade, N.

(2006). Before the Dawn. Penguin: NY.

Waechter, J.

(1990). Man before history: The Making of the Past. Equinox.

Wagner, D.R.,

& Heyward, V.H. (2000). Measures of body composition in blacks and whites: a

comparative review. American Journal of Clinical Nutrition, 71:1392-1402.

Walsh, A.

(2005). African Americans and Serial Killing in the Media: The Myth and the Reality. *Homicide Studies*, **9**:271-291.

Wang, E.T.,

Kodama, G., Baldi, P. & Moyzis, R.K. (Jan. 3, 2006). Global landscape of recent inferred Darwinian selection for Homo sapiens. *PNAS*, 103(1):135-140.

Wang, E.T.,

Sandberg, R., Luo, S., Khrebtukova, I., Zhang, L., Mayr, C., Kingsmore, S.F., Schroth, G.P., & Burge, C.B. (Nov. 2, 2008). Alternative isoform regulation in human tissue transcriptomes. *Nature*, Online.

Wang, H-Y.,

Chien, H-C., Osada, N. Hashimoto, K., Sugano, S., Gojobori, T., Chou, C-K., Tsai, S-F., Wu, C-I., Shen, C-K.J. (Dec. 26, 2006c). Rate of evolution in brain-expressed genes in humans and other primates. *PLoS Biology*, **5**(2).

Wang, L.,

Oota, H., Saitou, N., Jin, F., Matsushita, T., & Ueda, S. (2000). Genetic structure of a 2,500- year-old human population in China and its spatiotemporal changes. *Molecular Biology and Evolution*, **17**:1396-1400.

Wang, Y.

& Su, B. (2004). Molecular evolution of microcephalin, a gene determining human brain size. *Human Molecular Genetics*, **13**(11):1131-1137.

Wang, X.,

Grus, W.E., & Zhang, J. (Feb. 14, 2006b). Gene losses during human origins. *PLoS Biology*, 4(3):e52.

Warneken, F.

& Tomasello, M. (Mar. 3, 2006). Altruistic Helping in Human Infants and Young Chimpanzees. *Science*, **311**:1301-1303.

Warneken, F.,

Hare, B., Melis, A.P., Hanus, D., Tomasello, M. (2007). Spontaneous Altruism by Chimpanzees and Young Children. *PLoS Biol.*, **5**(7):e184.

Watanabe, H.

(May 27, 2004). DNA sequence and comparative analysis of chimpanzee chromosome 22. *Nature*, **429**:382-388.

Watkins, W.S.,

Ricker, C.E., Bamshad, M.J., Carroll, M.L., Nguyen, S.V., Baatzer, M.A., Harpending, H.C., Rogers, A.R., & Jorde, L.B. (2001). Patterns of ancestral human diversity: An analysis of Alu-insertion and restriction-site polymorphisms. *The American Journal of Human Genetics*, **68**: 738-752.

Watters, E.,

(Nov., 2006). DNA is not destiny. *Discover Magazine*.

Wayne, R.K.

(June, 1993). Molecular evolution of the dog family. *Trends in Genetics*, **9**(6):218-224. **Wax**, E.

(June 6, 2003). Africa's Women Beginning To See Progress in Politics. *Washington Post*, p. A14.

Weber, J.L.,

David, D., Heil, J., Fan, Y., Zhao, C., & Marth, G. (Oct., 2002). Human diallelic insertion/celetion polymorphisms. *Am. J. Hum. Genet.*, **71**(4):854–862.

Wedekind, C.,

Seebeck, T., Bettens, F. & Paepke, A.J. (1995). MHC-dependent mate preferences in humans. *Proceeding of the Royal Society of London*, **B260**:245-249.

Weidenreich, F.

(1947). Facts and speculations concerning the origin of Homo sapiens. *American Anthropologist*, **49**(2):187-203.

Weir, J.T.

& Schulter, D. (Mar. 16, 2007). The Latitudinal Gradient in Recent Speciation and Extinction Rates of Birds and Mammals. *Science*, **315**(5818):1574-1576.

Weiss, V.

(1992). Major genes of general intelligence. *Personality and Individual Differences*, **13**:1115-1134.

Weiss, V.

(Dec. 21, 2005). Major genes of general intelligence (IQ). *Personality and Individual Differences*, **13**(10):1115-1134.

Weller, L.

& Weller, A. (1993). Human menstrual synchrony : a critical assessment. *Neuroscience and Biobehavioral Reviews*, **17**:427-439.

Wen, B.

et al. (2004). Genetic evidence supports demic diffusion of Han culture. *J. Quaternary Sci.*, **21**: 471-483.

Wenban-Smith, F. F.,

Allen, P., Bates, M. R., Parfitt, S. A., Preece, R. C., Stewart, J. R., Turner, C. and Whittaker, J. E. (2006). The Clactonian elephant butchery site at Southfleet Road, Ebbsfleet, UK. *J. Quaternary Sci.*, **21**:471-483.

West, S.A.,

Diggle, S.P., Buckling, A., Gardner, A., Griffin, A.S. (2007). The social lives of microbes. *Annual Review of Ecology, Evolution, & Systematics*, **38**:53-77.

Weston, E.M.,

Friday, A.E., & Liò, P. (2007). Biometric evidence that sexual selection has shaped the

hominin face. *PLOS ONE*, **2**(8).

 Weyl, J. (1989). The Geography of American Achievement. Scott-Townsend: Washington, DC.
Wheeler, P.E.

(May 12, 1988). Stand tall and stay cool. New Scientist, 12:62-65.

Whitney, G.

(Oct., 1999). <u>The biological reality of race</u>. *American Renaissance*, **10**(10). **Wiercinski**, A.

(1979). Has the brain size decreased since the upper paleolithic. *Bull. Mem. Acad. R. Med. Belg.* **13**:419-427.

Williams, J.

(Nov., 1994). Violence, genes, and prejudice. *Discover* magazine, **15**(11). **Williams**, R.

(1999). Comparison of the Human and Great Ape Chromosomes as Evidence for Common Ancestry. http://www.gate.net/~rwms/EvoEvidence.html.

Williamson, S.H.,

Hubisz, M.J., Clark, A.G., Payseur, B.A., Bustamante, C.D., et al. (June 1, 2007). Localizing Recent Adaptive Evolution in the Human Genome. *PLoS Genet.*, **3**(6).

Wilson, A.C.

& Cann, R.L. (1992). The Recent African Genesis of Humans. *Scientific American*, **266**:68-73.

Wilson, C.G.

(May, 2008). <u>Male genital mutilation: an adaptation to sexual conflict</u>. *Evolution and Human Behavior*, **29**(3):149-164.

Wilson, A.N.,

(1978). *The Developmental Psychology of the Black Child*. Africana Research Pubns. **Wilson**, D.S.

& Wilson, E.O. (Dec., 2007). Rethinking the theoretical foundation of sociobiology. *The Quarterly Review of Biology*, **82**(4).

Wilson, E.O.

(1975). Sociobiology: The New Synthesis. Belknap Press.

Wilson, E.O.

(Jan., 2008). The evolution of eusociality in insects. *BioScience*, **58**(1):17.

Wilson, J.Q.

(2002). *The Marriage Problem: How Our Culture Has Weakened Families*. HarperCollins Publishers.

Windschuttle, K.

& Gilin, T. (June, 2002). The extinction of the Australian pygmies. *Quadrant*.

Wingreen, N.S.

& Levin, S.A. (Sept., 2006). Cooperation among micro-organisms. *PLoS Biology*, **4**(9). **Witelson**, S.F.,

Beresh, H., & Kiga, D.L. (2006). Intelligence and brain size in 100 postmortem brains: sex, lateralization and age factors. *Brain*, **129**(2):386-398.

Witherspoon, D.J.,

Wooding, S., Rogers, A.R., Marchani, E.E., Watkins, W.S., Batzer, M.A., & Jorde, L.B. (May, 2007). <u>Genetic similarities within and between human populations</u>, *Genetics*, **176**:351-359.

Wittmann, B.C.,

Daw, N.D., Seymour, B., & Dolan1, R.J. (June 26, 2008). <u>Striatal Activity Underlies</u> <u>Novelty-Based Choice in Humans</u>. *Neuron*, **58**(6):967-973. (1991). *The Beauty Myth: How Images of Beauty Are Used Against Women*. William Morrow & Co.

Wolfe, L.D.

(1984). Japanese macaque female sexual behavior: a comparison of Arashiyma East and West. In: Small, M.F., *Female primates: studies by women primatologists*. Alan R. Liss: NY

Wolpoff, M.

& Thorne, A.. (June 22, 1991). The case against Eve. *New Scientist*, **130**(1774):37. **Wolpoff**. M.

& Caspari, R. (1997). *Race and Human Evolution: A Fatal Attraction*. New York: Simon & Schuster.

Wolpoff, M.,

Mannheim, B., Mann, A., Hawks, J., Caspari, R., Rosenberg, K., Frayer, D.W., Gill, D.W., & Clark, G. (2004). Why not the Neandertals? *World Archeology*, **36**(4):527-546.

Woods, R..P,

Freimer, N.B., De Young, J.A., Fears, S.C., Sicotte, N.L., Service, S.K., Valentino, D.J., Toga, A.W., & Mazziotta, J.C. (2006). Normal variants of Microcephalin and ASPM do not account for brain size variability. *Human Molecular Genetics*, **15**(12):2025-2029.

Wrangham, R.

& Peterson, D. (1996). *Demonic Males*. Houghton Mifflin Co: NY.

Wright, L.

(1997). *Twins and What They Tell Us About Who We Are*. John Wiley & Sons: NY. **Wright**, N.M.,

Renault, J., Willi, S., Veldhuis, J.D., Pandey, J.P., Gordon, L., Key, L.L., & Bell, N.H. (1995). Greater secretion of growth hormone in black than in white men: possible factor in greater bone mineral density—a clinical research center study. *Journal of Clinical Endocrinology & Metabolism*, **80**:2291-2297.

Wright, S.

(1931). Evolution in Mendelian populations. Genetics, **16**(2):97-159.

Wu, T.,

Mendola, P., & Buck, G.M. (Oct., 2002). Ethnic Differences in the Presence of Secondary Sex Characteristics and Menarche Among US Girls: The Third National Health and Nutrition Examination Survey, 1988–1994. *Pediatrics*, **110**(4):752-757.

Wu, X.

& Poirier, F.E. (1995). *Human Evolution in Chin:* A metric description of the fossils and a review of the sites. Oxford University Press: NY.

Wyman, J.

(Apr., 1896). Position of the foramen magnum. *Anthropological Review*, **7**(25):152-154. **Xiao**, J.,

Jin, C., & Zhu, Y. (Nov. 12, 2002). Age of the fossil Dali Man in north-central China deduced from chronostratigraphy of the loess–paleosol sequence. *Quaternary Science Reviews*, **21**(20- 22):2191-2198.

Xue, Y.,

Zerjal, T., Bao, W., Zhu, S., Shu, Q., Xu, J., Du, R., Fu, S., Li, P., Hurles, M.E., Yang H., Tyler- Smith, C. (2006). Male demography in East Asia: a north-south contrast in human population expansion times. *Genetics*, **172**:2431-2439.

Yang, N.,

MacArthur, D.G., Gulbin, J.P., Hahn, A.G., Alan H. Beggs, A.H., Easteal, S., & Kathryn North, K. (2003). ACTN3 Genotype Is Associated with Human Elite Athletic Performance. *Am. J. Hum. Genet.*, **73**:627-631.

Yang, X.,

Schadt, E.E., Wang, S., Wang, H., Arnold, A.P., Ingram-Drake, L., Drake, T.A., & Lusis, A.J. (2006). Tissue-specific expression and regulation of sexually dimorphic genes in mice. *Genome Research*, **16**:995-1004.

Yohn, C.T.,

Jiang, Z., McGrath, S.D., Hayden, K.E., Khaitovich, P., Johnson, M.E., Eichler, M.Y., McPherson, J.D., Zhao, S., Pääbo, S., & Eichler, E.E. (Apr., 2005). Lineage-Specific Expansions of Retroviral Insertions within the Genomes of African Great Apes but Not Humans and Orangutans, *PLoS Biology*, **3**(4).

Young, E.

(May 11, 2006). Muggings were rife in New Stone Age. *New Scientist* Print Edition, issue 2551, p. 16.

Yu, N., Z.

Zhao, Fu, -X., Sambuughin, N., Ramsay, M., Jenkins, T., Leskinen, E., Patthy, L., Jorde, L.B., Kuromori, T., & Li, W-H. (2001). Global patterns of human DNA sequence variation in a 10-kb region on chromosome 1. *Molecular Biology and Evolution*, **18**:214-222.

Yuasa, I.,

Umetsu, K., Watanabe, G., Nakamura H., Endoh, M., & Irizawa, Y. (Dec., 2004). MATP polymorphisms in Germans and Japanese: The L374F mutation as a population marker for Caucasoids. *International Journal of Legal Medicine*, **118**(6):364-366.

Yunis, J.J.

& Prakash, O. (1982). The origin of man: A chromosomal pictorial legacy. *Science*, **215**: 1525-1530.

Zagorsky, J.L.

(Sept.-Oct., 2007). Do you have to be smart to be rich? The impact of IQ on wealth, income and financial distress. *Intelligence*, **35**(5):489-501.

Zakrzewski, S.R.

(2003). Variation in ancient Egyptian stature and body proportions. *Am. J. Phys. Anthropol.*, Wiley-Liss, Inc. **121**(3):219-229.

Zerjal, ⊺.

et al. (2003). The Genetic Legacy of the Mongols. *Am. J. Hum. Genet.*, **72**:717-721. **Zhang**, F.,

Su, B., & Ahang, Ya-ping (June 29, 2007). Genetic studies of human diversity in East Asia. *The Royal Society B*, **362**(1482):987-995.

Zhao, J.

(2004). Lecture 2004: U-series isotopes – Applications in igneous processes, climate change and hominid evolution. Acquire, University of Queensland.

Zhao, Z.,

Jin, L., Fu, Y-X., Ramsay, M., Jenkins, T. Leskinen, E., Pamilo, P., Trexler, M., Patthy, L., Jorde, L.B., Ramos-Onsins, S., Yu, N., & Li, W-H. (2000). Worldwide DNA sequence variation in a 10-kilobase noncoding region on human chromosome 22. *PNAS*, 97:11354-11358.

Zhu, R.X.,

Hoffman, K.A., Potts, R., Deng, C.L., Pan, Y.X., B. Guo, B., Sh*, C.D. Guo, Z.T., Yuan, B.Y., Hou, Y.M., & Huang, W.W. (2001). Earliest presence of humans in northeast Asia, *Nature*, **413**:413-417.

Zhu, R.X.,

Potts, R., Pan, Y.X., Yao, H.T., Lü, L.Q., Zhao, X., Gao, X., Chen, L.W., Gao, F., Deng, C.L. (2008). Early evidence of the genus Homo in East Asia. *Journal of Human Evolution*. **man**. A.L.,

Zihlman, A.L.,

Cronin, J.E., Cramer, D.L. & Sarich, V.M. (1978). Pygmy chimpanzees as a possible prototype for the common ancestor of humans, chimpanzees, and gorillas. *Nature*,

275:744-746.

Zilhão, J.,

d'Errico, F., Bordes, J-G., Lenoble, A., Texier, J-P., & Rigaud, J-P. (Aug. 15, 2006a). Analysis of Aurignacian interstratification at the Châtelperronian-type site and implications for the behavioral modernity of Neandertals. *PNAS*, **103**(33):12643-12648.

Zilhão, J.

(Oct. 24, 2006b). Neanderthals and moderns mixed, and it matters. *Evolutionary Anthropology*, **15**(5):183-195.

Zimmer, C.

(Jan., 1996). From fin to hand. *Discover* magazine, **17**(1).

Zimmer, C.

(1998). At the Water's Edge. The Free Press: NY.

Zimmer, C.

(2001). Evolution: The Triumph of an Idea. Harper Collins Pub.: NY.

Zimmer, C.

(May 6, 2008). Lots of Animals Learn, but Smarter Isn't Better. *New York Times*. **Zink**, C.F.,

Tong, Y., Chen, Q., Bassett, D.S., Stein, J.L., & Meyer-Lindenberg, A. (Apr. 24, 2008).

Know Your Place: Neural Processing of Social Hierarchy in Humans. *Neuron*, **58**:273-283. **Zion**, I.Z.B.,

Tessler, R., Cohen, L., Lerer, E., Raz, Y., Bachner-Melman, R., Gritsenko, I., Nemanov, L., Zohar, A.H., Belmaker, R.H., Benjamin, J., & Ebstein, R.P. (Aug. 1, 2006). Polymorphisms in the dopamine D4 receptor gene (DRD4) contribute to individual differences in human sexual behavior: desire, arousal and sexual function. *Molecular Psychiatry*, **11**:782-786.

Zischler, H.,

Geisert, H., von Haeseler, A. & Pääbo, S. (Nov. 30, 1995). <u>A nuclear 'fossil' of the</u> mitochondrial D-loop and the origin of modern humans. *Nature*, **378**:489-492.

Zuk, M.

(2007). *Riddled With Life: Friendly Worms, Ladybug Sex and the Parasites that Make Us Who We Are.* Hardcourt.

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