

The real question is this: Is there a mechanism by which the racial characteristics which we see today could have originated with one human couple—in the short, few thousand year or so history of the Earth?

The answer is a resounding yes! If Adam and Eve had been "heterozygous" (AaBb; two dominant, two recessive genes), they would have been middle-brown in color. And, from them—in one generation—racial differences could have occurred quite easily. Figure 1 expresses the genetic possibilities that could result if Adam and Eve had been heterozygous. Note that in a single generation, one could expect (theoretically) these colorations to be produced: 1 darkest; 4 dark; 6 medium; 4 light; and 1 lightest.

A person born AaBb carries genes for the darkest coloration possible, and since all genes are dominant, has no genes for lightness. If that person married another person who likewise carried all dominant genes, and moved to an area where no intermarriage with people of different colors occurred, the offspring resulting from this marriage then would carry the same dominant genes. These offspring will have "lost" the ability to be "white." Conversely, if a person who is aabb, and thus the lightest possible, marries another person who likewise carries all recessive genes, and moves into an area where no intermarriage with people of other colors occurs, henceforth this union will produce only offspring of the lightest possible coloration. The offspring so produced will have "lost" the ability to be "black." They no longer have the genes necessary to produce enough melanin for the black color.

Thus, starting with any two parents who were heterozygous (i.e., middle-brown in color), extreme racial colors (black and white, to name only two examples) could be produced in such a way that races would have permanently different colors. Of course, it also is possible to produce a middle-brown race that will have a fixed middle-brown color. If the original middle-brown parents produce offspring of either AaBb or aabb, and these offspring marry only others their own color, avoiding intermarriage with those not of their own genetic makeup, their descendants will be a fixed middle-brown color.

Is it likely that people of various colorations intermarried? The preponderance of so many colorations in the world is evidence aplenty that they did. Interestingly, even the evolutionists agree on this point. Rensberger says:

Race mixing has not only been a fact of human history but is, in this day of unprecedented global mobility, taking place at a more rapid rate than ever. It is not farfetched to envision the day when, generations hence, the entire "complexion" of major population centers will be different. Meanwhile, we can see such changes taking place before our eyes, for they are a part of everyday reality (1981, p. 54, emp. added). Dr. Francisco Ayala of the University of California has observed that if the process started out with a couple that had only a 6.7% heterozygosity (which is the average in modern humans), the different combinations possible would be 1x102,017 before the couple would have one child identical to another (1978, p 63)!

As Parker observed, it is likely that Adam and Eve were heterozygous. Otherwise, their descendants would have lacked variation. However, one might suggest that Adam and Eve began with all dominant (or all recessive) sets of genes, but that changes occurred after the Creation as the result of mutations. Indeed, many of the genetic differences, and many of the genetic disorders, no doubt have arisen since the first couple was removed from that original, pristine environment. Thus, the possibility that some heterozygosity is a product of mutations cannot be ruled out.

OTHER FACTORS

There can be little doubt that racial characteristics existed before the Flood, at least to some degree. However, regardless of just how well delineated the various groups of people were before the Flood, Noah's three sons and their wives were the only survivors to pass their genes to the post-Flood population. The inherent variability within these survivors, along with the possibility of mutations, would ensure continued diversity.

Furthermore, by dispersing linguistically isolated groups all over the world, the Tower of Babel incident had a significant effect on

the subsequent development and history of mankind. At least some of the differences that arose can be attributed to the various environments in which the people found themselves. While it certainly is true that genes control melanin production, it also is true that the body has the ability to "respond" (i.e., adapt), within certain limits, to environmental pressures. So, those people with darker skins who moved into equatorial regions could better adapt. Likewise, people with fairer skins who moved into Scandinavian countries would be favored, since darker-skinned people could not produce Vitamin D as easily and therefore would suffer from such diseases as rickets. Environmental pressures, therefore, could affect the genetic machinery, at least to some extent (see Mackay, 1984, pp. 6-12). But why are certain racial features as they are? Oftentimes we simply do not know. Nobody knows, for example, why Orientals have epicanthic eye folds or flatter facial profiles. The thin lips of Caucasoids and most Mongoloids have no known advantages over the full lips of Negroids. Why should middle-aged and older Caucasoid men go bald so much more frequently than the men of other races? Why does the skin of Bushmen wrinkle so heavily in the middle and later years? Or why does the skin of Negroids resist wrinkling so well? These are questions for which we currently possess no answers. What we do know is that the races were produced in a very short time span, and that the racial variations we see today are merely an expression of the original genetic endowment of Adam and Eve as carried through to us by Noah. No long evolutionary process was able, or needed, to produce them.

	AB	Ab	aB	ab
AB	AA BB	AA Bb	Aa BB	Aa Bb
Ab	AA Bb	AA bb	Aa Bb	Aa bb
aB	Aa BB	Aa Bb	aa BB	aa Bb
ab	Aa Bb	Aa bb	aa Bb	aa bb

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The Origin of "Races"

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The Origin of Races

INTRODUCTION

Humans come in a rainbow of colors: sandy yellows, reddish-tans, creamy whites, pale pinks. And who among us is not curious about the skin colors, hair textures, bodily structures and facial features associated with racial background. Why do many Africans have deep black skin, while that of most Europeans is pale pink? Why do the eyes of most “white” people and “black” people look pretty much alike but differ so much from the eyes of Orientals? Why do some races have kinky hair, while others have straight hair? Why do some races grow to over 7 feet tall (e.g., African Watusis), while others are less than 5 feet (e.g., African Pygmies)? The answers to some of these questions, and others, often may be found in a study of the origin of various races.

WHAT IS A “RACE”?

A human “race” is defined most often as a group of people with certain features in common that distinguish them from other groups of people. Currently there are three or four major “races” of humans, as the word race is commonly defined: (a) Australoid; (b) Caucasoid; (c) Mongoloid; and (d) Negroid. Generally speaking, the Australoids are considered a subgroup of the Caucasoids, simply because the two groups have so many features in common, despite the fact that Australoids possess dark skin (the Australoid group is often known as the Australian Aboriginal Group). If a breakdown by percentages of the world’s population were attempted, the groups would look like this: Caucasoid, 55%; Mongoloid, 33%; Negroid, 8%; Australoid, 4%. It is interesting to note that these races are distributed around the globe throughout over 100 nations, and speak 3,000+ tribal languages and dialects.

Speaking in broad terms, research on racial differences has led scientists to at least three major conclusions. First, there are many more differences among people than just hair texture, skin color, and facial features. Dozens of other variations have been found to exist. The following examples are taken from McCutcheon (1989, pp. 25-35).

- Apocrine glands, which produce scents that we commonly refer to as body odor, vary widely among the races. Asians have an extremely low distribution of apocrines (Koreans are among the least odor-producing people on Earth—50% of them have no apocrine glands at all). With regard to other races, blacks have a slightly higher distribution of apocrine glands than whites.
- Metabolic rates can differ significantly among races. The higher the metabolic rate, the higher the threshold for sensing cold. The Eskimo’s metabolic rate is 15-30% higher than that of a European. Equatorial people have the lowest metabolism of all because fewer calories are needed to keep their bodies warm.

There are many other differences that could be discussed—teeth, brain size, body shape, etc.

Second, research has shown that in many instances the success of a population’s survival has been aided by its genetic variability. While evolutionists equate this with chance processes operating in the sphere of “survival of the fittest,” creationists see it as just one more example of God’s beneficent design. He has given us such variability, genetically speaking, so that we can successfully adapt as the need arises. More will be said about this later.

Third, despite the human species’ wealth of built-in variation, and despite our constant references to “race,” no one ever has been able to suggest a truly reliable way to distinguish one race from another. While it is possible to classify a great many people on the basis of certain physical characteristics, there are no known features, or groups of features, that will do the job in all cases.

It has been suggested that **skin color** might be the criteri-

on for race determination. Yet, this provides innumerable difficulties because while most Africans from south of the Sahara and their descendants around the world have skin that is darker than that of most Europeans, there are millions of people in India, classified by many anthropologists as members of the Caucasoid race, who have darker skins than most American blacks. Some Africans, living in the sub-Saharan regions, have skin coloration that is no darker than that of some Spaniards, Italians, Greeks, or Lebanese.

Stature has been suggested as a determining factor for races. African Pygmies, because of their short height, have been considered racially distinct from other dark-skinned Africans, for example. Yet if stature is then to become a (or the) racial criterion, would it not be necessary to include in the same race both the tall African Watusis and Scandinavians of similar stature? Yet no one recommends such.

Various **appearance features** have also been suggested as the criterion for race determination. For example, most people are familiar with the almond-shaped eye of the Oriental. The little web of skin that is so characteristic in Oriental eyes is said to be a distinguishing feature of the Mongoloid race. Yet, if one were to accept that argument, how, then, could it be argued that the American Indian (who presently is classified as Mongoloid, yet lacks this epicanthic fold) also is Mongoloid? Other distinguishing features fare no better. Such features as hair color, eye color, hair form, the shapes of noses and lips, and many of the other traits set forth as “markers” of one race or another are found distributed all too often throughout many races. Among the tall people of the world there are those who exhibit every skin color imaginable—from black to white and everything in between. Among black people of the world there are some who possess kinky hair, some who possess straight or wavy hair, and again, many in between. Among the broad-nosed, full-lipped people of the world, there are many with dark skins, but there are likewise many with light skins, and many in between.

The complexity of this issue increases. The world is filled with populations that just seem to defy classification. Consider some of these well-known examples: (a) the Bushmen of southern Africa appear to be as much Mongoloid as Negroid; (b) the Negritos of the South Pacific do look Negroid, but are far removed from Africa and have no known links to that continent; (c) the Ainu of Japan are a hairy, aboriginal type of people who appear to be more Caucasoid than anything else; (d) the aborigines of Australia sometimes look Negroid, but often have straight or wavy hair and are occasionally blond as children.

To accommodate this immense diversity, different classification systems have been proposed. Some have suggested as many as two or three dozen races. But none has accomplished its task of successfully defining just how a race should be determined.

WHY SO MANY RACIAL CHARACTERISTICS?

Why are there so many different racial characteristics? What is their origin? And how long did it take for all this to occur?

Biologists determine species (among other ways) by including in a species all individuals that are capable of interbreeding to produce fertile offspring. There is only one species of man on the Earth—Homo sapiens. That, on the face of it, is an interesting fact. Anthropologists and biologists place all races in existence today into a single species, which points to the fact that the differences between human races are not really all that great. Members of all races can intermarry and produce fertile offspring.

It also is interesting to note that these “differences” within the groups are just as pronounced as differences among the groups. Negroid people range in color from black to light yellowish-brown; Mongoloid people range from yellow, to white, to bronze-brown; Caucasoids range from pink (as in England) to dark brown (as in Southern India). These skin colors—to which most people refer when they speak of a “race” of people—are caused by the brown pigment in the skin known as melanin. The more melanin a person has, the darker the skin will be as an adult. Conversely, the less melanin in the skin, the lighter the skin will be as an adult. A person whose skin possesses no melanin is referred to as an albino, and cannot produce body pigment. Such a person’s pinkish-white color is caused by blood vessels showing through the colorless skin. The claim that there are

many different skin colors in the world is not altogether accurate. The apparent differences in color are merely differences in the amount of the melanin found in the skin, not differences in the type of color. There is only one coloring agent for the human race; the shade of color simply depends upon how much melanin is present.

Melanin does far more than simply provide the body with pigmentation. Its most important role is in protecting the body by absorbing ultraviolet (UV) radiation from sunlight that falls on the skin. UV radiation can damage the skin and produce skin cancer if not filtered out by the melanin. People who have large amounts of melanin in their skin are generally very resistant to the effects of UV radiation. People with only small amounts of melanin may suffer badly if exposed to too much UV light. The energy of the UV light penetrates deeper into their skin and can cause damage to the skin tissues.

In the evolutionary scheme, mankind is the end product of changes occurring over millions of years. It has been suggested that anatomically modern humans first appeared in Africa about 200,000 years ago (Cann, et al., 1987; cf. Major, 1989). In this model, one group remained in Africa, while at least one other group migrated out of Africa, and evolved into all non-African populations. Hence, the different characteristics would have arisen within this time span. However, there is no need to suggest long periods of time. The creationist point of view takes at least three factors into account to explain the origin of variation: (a) the origin of man; (b) the known historical/biblical facts regarding man; and (c) the nature of the areas to which man migrated. Here are some pertinent facts bearing on each of these points.

First, the biblical record makes it abundantly clear that God created man. Thus, man did not “evolve” over millions of years. Rather, Adam was the first man (1 Corinthians 15:45) and, through Eve, all living would come (Genesis 3:20). This becomes critical in determining the origin of racial characteristics.

Second, we do know that historically, and biblically, the line of human descent passed from Adam and Eve and their descendants to Noah and his family. However, whatever genetic material had been dispersed into the human race prior to the global Flood was severely limited by the destruction of that Flood.

Third, after the Flood, the Tower of Babel incident occurred. Men refused to obey God and cover the Earth (Genesis 9:1). So, God confused their languages, and as a result men migrated to parts of the globe where they could be with others who spoke their language (Genesis 11:8). This migration, as will be discussed shortly, likely had a part to play in producing racial characteristics.

THE ORIGIN OF MAN’S “COLORS”

Most people, when they speak of a “race,” refer to the racial characteristic of skin coloration. For the purpose of the present discussion, I will limit my discussion, for the most part, to the origin of such a characteristic (being careful to do so only in an accommodative sense). In humans, production of the skin coloring agent melanin is controlled by two pairs of genes. We can designate them Aa and Bb, the capital letters representing dominant genes and the small letters recessive genes. A and B, being dominant, produce melanin very well; being recessive, a and b produce melanin to a lesser degree.

Gary Parker, in his book, *Creation: The Facts of Life* (1980, pp. 77-81), has observed that if Adam and Eve were both AABB, they could have produced only children with the darkest coloration possible, and they themselves likewise would have been dark. That, barring genetic mutations (to be discussed later), would have produced a world composed only of dark-skinned people. But, as has been noted already, the Negroid race composes less than 10% of the world’s population, so by a process of elimination, this choice can be ruled out.

If Adam and Eve both had been aabb, they could have had only children that were aabb, that being the lightest coloration possible. Then, the world would contain no other groupings. But it does. So, this option also is ruled out by a process of elimination.