ploiting its variational potential much more slowly than the one of the first example.

In addition to finding proportions of the population, the equations with f(x) and F(x) could also be used in the solution of problems dealing with the formation of intra-baramin taxa, dispersion, and adaptivity but only in connection with other equations which reflect some specific knowledge of baramin stability, equilibrium and so on. Much of the theoretical progress, then, will depend on research into baramin biology.

Finally, it should be realized that the foregoing is meant only to illustrate, in a simple and intuitive way, that creationist concepts pertaining to the created kind are susceptible of mathematical treatment. Many questions arise, such as the interpretation of the variable x and the calculation of the characteristic of variation c, which are properly the subjects of future research.

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# **EVOLUTION, RACE, AND EQUALITY OF INTELLIGENCE**

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Social scientists today almost universally believe that essentially, the races of men are largely equal in regard to intelligence. Although there is some disagreement, nonetheless, even among those who disagree, it is agreed that there is not more than approximately one standard deviation difference in the mean of intelligence between any two races. This fact though, is contrary to the basic assumptions of evolution. In order for selection to take place, differences must exist between individual organisms. Selection would then cause races to develop, a process which is called in Darwinian terms, speciation. The lack of important differences between races, especially in the crucial difference between men and "lower" forms of life, viz. intelligence, is seen as a serious difficulty for the evolutionary theory. In addition, the theory of evolution can also be seen as having been an important factor in the extreme forms of racism that existed at the turn of the century and for several years beyond, especially racism against blacks and Jews.

The theory of evolution teaches essentially that random mutations cause slight changes in the gene pool of a species. If random mutations produce a phenotype which confers upon the organism a slight survival advantage compared to species without it, the environment will affect the population in such a way that the organism (or organisms) with the slight advantage will have a greater chance of surviving and reproducing, and thus passing this characteristic on to its progeny.

Conversely, organisms without the advantageous characteristic will be less likely to survive so as to reproduce, and thus less likely to pass this characteristic on to its offspring. The result is that, in time, the organisms with the advantageous characteristic will increase in numbers, and the organisms without the advantageous characteristic will numerically decrease. Eventually the composition of the gene pool will

change, altering the characteristics of the population as a whole.

The key to the evolution theory, therefore, is differences within the species1. If every member of a population had an identical genotype, evolution could not occur because evolution purportedly results from nature's selecting from existing differences. Without differences, one organism could not have an advantage over any other, and thus survival would depend totally upon fortuitous factors and not upon any innate advantage that the structure of the organism itself confers. For an organism to have an innate survival advantage compared to others, structural differences must exist. These differences are the key to current evolutionary theory. Of course it is possible that a mutation could occur in a population which is homogeneous for a trait, but this would, if the trait produced from this mutation was favorable, then begin to change the population. Because it would take a long time for the population to again become homogeneous for that trait, variety in

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traits would seem more common in the natural history of most animals.

An important requirement for evolution to occur is not only differences, but differences within a *specific group* or species. The evolutionary theory also requires continual change in the environment, which would produce increased adaptation by certain living things, which in turn often forces other living things to change in order to survive. Environmental changes include changes in the mean temperature, changes in the composition of the land, the type and distribution of the foliage, and the type of animals in any particular region.

The increasing adaptation of other animals causes them to increase in number and thus consume a greater supply of the available life support resources. For animals to survive, in accordance with evolutionary theory, they have to continually increase their level of adaptation and improve their survival techniques. Thus, the existence of differences within the gene pool is crucial to both the survival and evolution of an animal species. Differences are imperative in order for nature to have something to select from to improve the animal and thus enable it to continue to compete with the ever increasing complexity, and competition of the organisms within the animal's environment. And because of the recent drastic changes in the environment brought about by man, it would seem that evolution would be occurring at a more rapid pace today than in the past. The assumption that most animals have maximized their adaption and thus little evolution is occurring today seems to be more an effort to respond to difficulties in the theory than anything based on empirical evidence.

## The Survival Advantage of Man

According to evolutionary theory, man's intelligence is the main quality which confers him his survival advantage over other animals.<sup>2,3,4</sup> Physiologically, the most important difference between humans and animals is the brain. Humans are classified as a high level primate with a brain superior to all primates.<sup>5</sup> Although mankind's upright posture, the development of his thumb and other characteristics differentiate him from other primates, the *crucial difference*, and the factor responsible for man's superior achievements compared to other primates, is clearly his brain.

It is hypothesized that the evolution of humans was the result of a fortunate set of conditions which, through the process of selection, caused some primates to develop a slightly higher intelligence than other primates. This slightly higher intelligence conferred upon these primates a clear survival advantage. Primates with the slightly higher intelligence had both a better chance of escaping other predators and of securing life support elements from the surrounding environment than their less fortunate relatives.6,7 To obtain food requires intelligent behavior, and thus the higher the intelligence of the animal, the more successful the organism would likely be in obtaining food, Further, it is reasoned, the higher the intelligence, in general the more capable the animal is in escaping predators. Intelligence enables one to learn methods and tricks from experience both so as to escape, and to avoid, possible predators.

This survival advantage caused those primates with higher intelligence to increase in number. Primates with lower intelligence decreased in numbers. Eventually, a large group of primates came into existence resulting in a fairly defined group which was separated from others by a higher intelligence. Importantly, even within this fairly defined group, there existed individual differences in intelligence. These differences caused certain members of the group to be more likely to survive than other members of the group for the reasons discussed above. Thus, growing out of this defined group would be another group, again having a higher intelligence. In time, according to this evolutionary theory, through this technique, mankind as we know him today resulted.

Theoretically, this process will continue and man will evolve to new heights in the future. Even in the last few thousand years, it is said, persons with a greater intelligence have had a better chance of surviving. Not only is increased intelligence important, but an extremely rapid increase in intelligence is seen by many evolutionists as crucial to the evolutionary theory. For example, Smith stated,

The evolution of modern man from non-tool-making ancestors has presumably been associated with and dependent upon a large increase in intelligence, but has been completed in what is, on an evolutionary scale, a rather short time—at most a few million years. This suggests the transformation in the brain which provided the required increase in intelligence may have been growth in size with relatively little increase in structural complexity—there was insufficient time for natural selection to do more.<sup>8</sup>

Pilbeam added: "The expansion of the human brain is extraordinarily late in the humanoid story, occupying perhaps only the last 15% or so of the total time." 9

In summary, for human evolution to occur, there has to be differences within the species "homo-sapiens". The crucial factor that gives humans their survival advantage is intelligence. Since as it has been hypothesized that this factor was important in man's numerical success, it would only follow that this factor would still be important today. Any structural differences in intelligence which give humans a survival advantage, and are genetically transmittable (even if they appeared in a single organism) would eventually spread to produce a defined group superior to that of the original group called a race.

## The Notion of Race

Man is sometimes divided into groups called races. Biologically, "races" are able to inter-breed with other races. They are differentiated primarily by such characteristics as skin color, hair color, skull shape, etc. <sup>10</sup> In evolutionary theory, the survival advantage factor is the chief explanation for the existence of most differences; therefore, because differences result from the survival advantage that they confer upon the organism, an evolutionist must assume that any dif-

ferences between, or within, a group have some inherent survival advantage. As the key survival advantage of man, over "lower animals" is his intelligence, it would be natural to suppose, then, that there are differences in intelligence between the races.

This is exactly what has been assumed by many eugenists, evolutionists, sociologists, and psychologists both before and since the time of Darwin.<sup>11,12,13</sup> This belief has justified a wide variety of governmental and scientific policies, not the least infamous of which was racial genocide, which will be discussed below.<sup>14</sup>

In Victorian times crude notions of social Darwinism were embraced by many scientists. The concept of race as we know it possibly has its roots here. An important argument Hitler used to support his programs of racial genocide of the Jews, Negroes and other groups was that they were genetically "inferior" and that interbreeding with the superior Aryan race would affect the gene pool, and thus lower the overall quality of the "pure race." <sup>115,16</sup> As Himmelfarb notes:

From the 'Preservation of Favored Races in the Struggle for Life' (i.e., Darwin's subtitle to *Origin of Species*) it was a short step to the preservation of favoured individuals, classes or nations—and from their preservation to their glorification . . . Thus, it has become a portmanteau of nationalism, imperialism, militarism, and dictatorship, of the cults of the hero, the superman, and the master race . . . recent expressions of this philosophy, such as *Mein Kampf*, are, unhappily, too familiar to require exposition here. 17

Hitler encouraged breeding only by those individuals he perceived as having Aryan traits, and discouraged "interbreeding," supposing that in time the entire race would improve. He believed that he was merely furthering evolution by deciding which traits were not beneficial and preventing the people with these traits from reproducing; and likewise by deciding which traits were beneficial, and encouraging those with the beneficial traits to reproduce. Instead of letting chance factors affect reproduction, Hitler attempted to influence reproduction so that the gene pool would shift in some desired direction. Man's success in breeding cattle, dogs and other animals and producing animals with desired characteristics, has given empirical (though specious) support to the concept of racial breeding as attempted by Hitler and others. This idea was part of the Eugenics Movement which was popular at the turn of the century. Eugenics, viz. the notion that man could improve the race by selective human breeding, was generally accepted by many of the educated public, especially in Europe and the Americas. Sir Arthur Keith, one of the leading evolutionary anthropologists of our century, concluded:

The German Fuhrer . . . has consciously sought to make the practice of Germany conform to the theory of evolution [by applying Eugenics to governmental policies.]<sup>18</sup>

On the question of racism, as exemplified especially in Germany, Sir Arthur also concluded:

Christianity makes no distinction of race or of colour; it seeks to break down all racial barriers. In this respect, the hand of Christianity is against that of Nature, for are not the races of mankind the evolutionary harvest which Nature has toiled through long ages to produce?<sup>19</sup>

The conclusion that evolution normally produced racial inequities, was exemplified in a number of references published around 1900. One popular high school biology textbook, George W. Hunter's A Civic Biology, 20 in the section on evolution under the subtitle "The Races of Man," stated that "at the present time there exists upon the earth five races or varieties of man, each very different from the other in instinct, social customs, and, to an extent, in structure." The five races are then listed, seemingly from the inferior to the superior, as follows:

There are the Ethiopian or Negro type originating in Africa; the Malayan or brown race from the islands of the Pacific; the American Indian; the Mongolian or yellow race including the natives of China, Japan and the Eskimoes; and finally, the highest type of all, the Caucasian, represented by the civilized, white inhabitants of Europe and America.<sup>21</sup> (emphasis mine)

While not directly stating that the "Negroids" are lowest on the evolutionary scale, the quote does state that the "highest type" of all races is the Caucasians, and that Caucasians are "higher" developed in terms of "instincts, social customs, and . . . [physical] structure." This book was widely used in American schools for over thirty years. It was the book which John Scopes used when he was a substitute teacher in a biology class and was later convicted of violating the Butler Act (the law against teaching evolution in the public schools).

The article in the Encyclopedia Britannica, under the heading "NEGRO", stated:

... the [Africans] present almost a greater uniformity of physical and moral type than any of the other great divisions... this type occupies... the lowest position in the evolutionary scale... the cranial sutures... close much earlier in the Negro than in other races. To this premature ossification of the skull, preventing all further development of the brain, many pathologists have attributed the inherent mental inferiority of the blacks... the development of the Negro and White proceeds on different lines... in the former the growth of the brain is... arrested by the premature closing of the cranial sutures...

... the mental [differences] are at least as marked as the physical differences... No full-blooded Negro has ever been distinguished as a man of science, a poet, or an artist...<sup>22</sup>

Moser argued that:

... as to whether the Negroes in America have produced any great men ... [it] is stated in the Encyclopedia Britannica, edition of 1903 [that they have not]: the 1970 edition does [not] make this admission. ... American Negroes have made contributions to various fields, sports, science, etc., but ... It is only the Negro that has a mixture of white genes in his system that has risen to

the level where he has produced on the level with the white race.<sup>23</sup>

Walbank and Taylor point out:

... Darwinism led to racism and anti-semitism and was used to show that only 'superior' nationalities and races were fit to survive. Thus, among the English-speaking peoples were to be found the champions of the 'white man's burden', an imperial mission carried out by Anglo-Saxons. ... Similarly, the Russians preach the doctrine of pan-Slavism and the Germans that of pan-Germanism.<sup>24</sup>

The man mainly responsible for the widespread acceptance of evolution in the nineteenth century, Thomas Huxley, soon after the black slaves were freed, wrote:

No rational man, cognizant of the facts, believes that the average negro is the equal, still less the superior, of the white man. And if this is true, it is simply incredible that, when all his disabilities are removed, and our prognathous relative has a fair field and no favour, as well as no oppressor, he will be able to compete successfully with his bigger-brained and smaller-jawed rival, in a contest which is to be carried out by thoughts and not by bites.<sup>25</sup>

Racist sentiments such as these were held by many 19th century evolutionists. A recent book has documented this beyond question.<sup>26</sup> In a review of this book, a writer says:

Ab initio, Afro-Americans were viewed by these [evolutionists] as being in certain ways unredeemably, unchangeably, irrevocably inferior.<sup>27</sup>

Another reviewer added:

After 1859, the evolutionary scheme raised additional questions, particularly whether or not Afro-Americans could survive competition with their white near-relations. The momentous answer was a resounding no... The African was inferior—he represented the missing link between ape and Teuton.<sup>28</sup>

Darwin was keenly aware of the implications of his theory of evolution on the races. In the sixth chapter of his *Descent of Man* he pointed out that survival of the fittest would eventually eliminate the black race, which he considered inferior. In addition, Darwin concluded:

I could show [that war had] done and [is] doing [much] . . . for the progress of civilization . . . The more civilized so-called Caucasian races have beaten the Turkish hollow in the struggle for existence. Looking to the world at no very distant date . . . an endless number of the lower races will have been eliminated by the higher civilized races throughout the world.<sup>29</sup>

Morris notes that:

Charles Darwin selected as the sub-title for his book *Origin of Species* the phrase "The Preservation of Favoured Races in the Struggle for Life." It is clear from the context that he had races of animals primarily in mind, but at the same time it is also clear . . . that he thought of races of men in the same way.<sup>30</sup>

That this concept is still held by some today is evident from the following words of the leading modern evolutionist, George Gaylord Simpson:

Races of men have, or perhaps one should say 'had', exactly the same biological significance as the sub-species of other species of mammals.<sup>31</sup>

One of the many examples which illustrates that the belief that "graduations in the evolutionary level of living man" has been a very important part of evolution for some time, is from the *Literary Digest* (February 16, 1929, pg. 28). This statement is in response to a theory by Dr. Clark which says that evolution proceeds in "jumps." Note the statement includes the Piltdown Man (now shown to be forgery), the Neanderthal Man and the Cro-magnon Man (now shown to be simply different races, and largely equal to man today).

Dr. Clark calmly reverses the old saying that nature never proceeds by leaps, and assures us that this is her only method of procedure. Yet man, as the skull history shows us so clearly, proceeded by slow steps from the Pithecantropus, the Piltdown man, the Neanderthal Man, to the Cromagnon Man, who distinctly represents the modern type. If nature were as broad as a jumper as Dr. Clark believes, the first man should have shown the high, civilized type of today. But we do not have to go back to fossils. The lowest type of men now living, the Australian savages, are at a sufficiently great remove from the civilized type to overthrow Dr. Clark's theory, which, instead of embodying the good points of the creational and developmental theories, actually combines the difficulties of both . . . (emphasis mine).

The foregoing should illustrate that it is a necessary assumption of the evolutionary theory that there are differences both between and within races, and that these differences give one race, or group, a survival advantage compared to other races or groups. The race with the survival advantage presumably will in time become dominant, numerically, compared to the race without this advantage. In summary, Morris concluded:

As the 19th century scientists were converted to evolution, they were thus also convinced of racism. They were certain that the white race was superior to other races, and the reason for this superiority was to be found in Darwinian theory. The white race had advanced farther up the evolutionary ladder and, therefore, was destined either to eliminate the other races in the struggle for existence or else to have to assume the "white man's burden" and to care for those inferior races that were incompetent to survive otherwise.<sup>32</sup>

The two races that most often have been compared are the "Caucasian" and "Negroid" races, commonly called the "white" and "black" races. It has often been assumed that the white race is "superior" and the black race is "inferior," and more "apelike." This is illustrated in that most drawings of "ape-men," or ancient men show very strong Negroid characteristics.<sup>33</sup> In addition, the fact that some facial features of Negroids are closer to the facial characteristics of many of the primates (the flat-nosed and sloping forehead, as well as the cheek and jaw bones) has lent support to this

contention that Caucasians are more advanced in evolution than Negroids. According to this supposition, the Caucasian race would be, in evolutionary terms, the more "fit," or "superior," race. Especially in that the key survival factor in man's evolution is intelligence, the Caucasian race would be assumed to have a superior intelligence. The races would have to have differences in intelligence, for, as noted above, this is the key factor to man's evolution, because intelligence is a key factor to survival, and thus selection.

This belief has been predominant especially in whites' treatment of blacks, and has been used to justify social policies ranging from slavery to segregated schools. The assumption that blacks are innately inferior and less intelligent compared to whites has been an important factor in the racist policies of America and Europe for at least 100 years. 34 As noted above, a review of early literature written by whites about blacks shows that this feeling was prominent in most discussions of race up until very recently. Current research into the characteristics of the black population is seriously questioning the validity of the commonly held assumption that blacks are intellectually and in other ways inferior to whites. More and more research is supporting the contention that what differences exist are predominantly the effects of accumulated discrimination, poverty and cultural deprivation. 35,36 It is now generally accepted that, on the whole, given equality of background, i.e. similarity of experience, blacks will equal whites in performance.

It is true that in the past blacks have had lower IQ and achievement scores than whites, but blacks have also usually been raised in very different social and cultural environments from whites, even if the parents have the same occupation and incomes. The dominant professional opinion, though, is that black-white cultural differences and past discrimination can largely explain the observed differences, although we have no way of measuring the exact effect of cultural differences. Impressive research has demonstrated that black-white cultural differences could easily explain the observed IQ difference, which is less than 15 points. For example, white school children in eastern Tennessee improved their average IQ score by almost this much between 1930 and 1940, apparently as a result of the introduction of schools, more outside stimulation, radios.

An argument which is used to support the belief that, as a group, whites and blacks are for most traits innately equal (viz., the biological organism is equal) is the comparisons of northern blacks with southern whites. For example, a southern white from Mississippi according to the median scores of the army AEF intelligence test scored 41.25 compared to 49.50 for blacks from Ohio.<sup>37,38</sup> And since the majority of blacks live in the south or under conditions where they have monetary, educational and cultural disadvantages, the difference would be, according to this evidence, not because of differences in the organism, but because of environmental differences. And many times these differences came about because of racial prejudice in the first place.

Increasingly, scholarly works are attempting to justify what is now prevailing opinion among

psychologists and scientists, i.e. that there is no innate difference between the intelligence of blacks and whites, allowance being made for environment.<sup>39-42</sup>

Regarding this, it was stated by Richard Leakey, the son of the famous anthropologist Lewis Leakey, that his father's

... life work, in fact, has made him impatient with those of narrow ethnic and national perspectives ... furthermore, he notes that racial differences, as they are commonly perceived, are a superficial and recent development having arisen only about 15,000 years ago. Says Leakey, 'I am aghast that people think they are different from each other. We all share a tremendous heritage, an exciting bond. We are all the same.'"<sup>43</sup>

Yet, as noted above, the drawings which depict man's supposed immediate forerunners such as *Homo Erectus* and *Homo Habilis* have very pronounced negroid features, including dark skin, kinky hair, negroid lips, nose and other facial features. 44 Modern man (Homo Sapiens), though, is clearly pictured as a light skinned, straight hair, straight forehead, narrow nose and small lips. 45

The prominent anthropologist, Ruth Benedict stated under the topic 'One Human Race' that "the peoples of the earth are a single family and have a common origin." Elaborating on this concept, she continued:

Science describes the intricate makeup of the human body ... all its different organs cooperating keeping us alive, its curious anatomy that couldn't possibly have 'just happened' to be the same in all men if they did not have a common origin. Take the structure of the human foot, for instance. When you list all of the little bones and muscles and the joints of the toes, it is impossible to imagine that that would all happen twice. Or take our teeth . . . so many front teeth, so many canines, so many molars. Who can imagine finding the same arrangements in two human species if they weren't one family? The fact of the unity of the human race is proved, therefore, in its anatomy . . . no difference among human races has affected limbs and teeth and relative strength so that one race is biologically outfitted like a lion and another biologically outfitted like a lamb. All races of men either plow or fight, and all the racial differences among them are in nonessentials such as texture of head hair, amount of body hair, shape of the nose or head, or color of the eyes and the skin.46

Benedict, in other words, believes that the differences that do exist do not confer a survival advantage of one race over another. She spends considerable time discussing the conception that the differences are what she calls the "non-essentials." Thus we have a state of affairs which cannot result in evolution. Without any clear differences within man, there is nothing to select from. And without selection there is no evolution. Presumably differences even within a very small group of people would confer to that group of people a survival advantage. Thus that group would become larger and larger and as selection continues to occur in that group, such would cause it to become more and more

discernible from the outside population. This, though, is not happening because the evidence is that there are no major differences to select from, nor do separate populations seem to be developing from the main populations as predicted by the evolutionary theory.

If, as most anthropologists acknowledge, "all...racial differences... are in non-essentials" then, to repeat, there is nothing to select from. And the non-essentials, by definition, do not affect fitness but tend to be irrelevant to survival. Texture of hair, for example, does not affect survival but may, to some extent, affect one's comfort in varying types of climates, an affect which is easily offset by the invention of clothes and scissors. Since clothes have been part of man's culture since earliest recorded history, this trait would never had had a selection advantage.

For this reason, Benedict concludes, "The races of mankind are what the Bible says they are—brother. In their body is the record of their brotherhood." 48

Although most studies find that blacks score 10-15 points lower than Europeans, and orientals and Jews score 10 points higher, researchers have, as noted above, been trying to find a reason other than race why there is this difference. They look for a reason other than that there is an innate difference because few scientists accept the idea that there are genetic differences in intelligence between the races. (There are, it is true, some exceptions, such as Carleton Coon<sup>40</sup> and Arthur Jensen. 50.) Most, however, believe that for instance "the differences are caused by early environmental deprivation" (this was behind beginning such programs as Sesame Street and the Electric Company and developing programs such as Head Start); or "the tests themselves are not valid" (which has prompted the legal banning of IQ tests in a number of areas of the United States; see footnotes 35 and 36.)

Probably the most commonly looked at difference between blacks and whites is skin color (thus the name "blacks" and "whites"). Dark skin of blacks may give them some protection against strong sunlight in the tropics, but whites can and do easily protect themselves by utilizing sun helmets, special clothes, and suntan oil. This protection will enable them to survive quite well in very warm areas. Black skin, if it is an advantage, is more for individual comfort rather than survival. Skin color is not a difference of quality but only quantity—the darker the person's skin the more melanin (the chemical which causes brown color) and the more vellow the skin the more the carotene (a chemical which gives skin the yellow tinge). Every person, however dark or light their skin (except albinos who lack coloring substances, and albinos appear among all races) is affected by the sun in much the same way. Again these qualities have little to do with survival and thus cannot be accounted for by evolution. The purpose of these differences seems to be primarily to increase the variety so evident in the creation today—variety which not only makes man's sojourn on the earth more enjoyable, but which also helps us to differentiate the scores of people

As for the brain, although the absolute average size of the brain varies from individual to individual, it tends to be correlated with body size. Anyway, the size of the brain in man has little to do with intelligence (nor any other observable trait); so size of brain differences are evidently a non-functional characteristic, not affecting survival in any way. Some of the most brilliant men have had very small brains and likewise some men with large brains are mentally retarded.<sup>51</sup>

Other alleged racial differences include blood differences. Thus we have the expression "blood relations" and the old belief that there exists Aryan blood, Chinese blood, or Negroid blood. Actually, there are dozens of blood groups, but most of these are found in all races. For example, the A, B, AB, and O types of blood are present in all races, although in different percentages. This is why blood transfusions are given without regard to race—only a "blood type" match is necessary.

## Responses to the Implications of This Paper

After consulting dozens of references relative to this problem, the writer found that none adequately deals with the issue this paper raises. The general arguments include the assumption that in the past selection was important, but because of the structure of our present society, "natural selection" is no longer as important. Another argument is that selection works at the *individual level*, not at the *species or subspecies* level. Yet, superior individuals become superior groups, and this process is central to evolution. The Neanderthals (and other groups) were said to not have survived as a group because supposedly they were inferior to other existing humanoid groups and thus, in the competition for survival, were eliminated.

Burt<sup>52</sup> feels that genera spread over a wide area; then, after some individuals become highly successful (evolutionarily speaking), they evolve, eventually into a distinct species. A problem Burt notes is that there is only one surviving species of mankind. To explain this, he hypothesizes a "race-making period" where men scattered far and wide forming geographically isolated groups and "as a result of natural selection, became differently adapted to the different conditions"53 that existed. Then, he hypothesizes, the migration started once again for what he attributes as the most common reason for all evolutionary changes, differences in climate and, later, interbreeding. The "ensuing recombination of different sets of genes produce still greater variations and therefore still greater adaptability."54 Here, in essence, he is stating that differences existed at one time, but then later were obliterated through massive interbreeding. This is the reason why few differences exist today. Two pages later he argues for the belief that "there has been no appreciable change in man's innate constitution or in the general quality of his brain throughout the last 20,000 years."55 Thus, in essence, evolution has stopped or, as Burt puts it, biological evolution has stopped but cultural evolution has con-

These ideas may attempt to explain the failure to find innate differences in intelligence between races (although Burt's purpose here was not to argue for the belief that all races are equal); but they raise a number of questions if they are going to be used to attempt to counter the belief among scientists today that all races are essentially equal. These questions include:

- 1. Specifically, why has evolution evidently stopped for man in the last 20,000 years? Especially would the doctrine of uniformitarianism not accord with this.
- 2. What evidence is there for factors which would first disperse a race, and then cause the many separate races that developed to interbreed—in essence, uniting different groups?
- 3. What factors would cause men to leave the homeland they were adapted for, venture into other areas, and then marry their "long lost kin" (who now have evolved into distinct differing groups, although evidently not into a new species)?

It is difficult empirically to support Burt's arguments. Many of them assume a great deal; and some contradict others.

If several identical or similar mutations which would confer survival advantages on two or three individuals occurred, these traits would then numerically increase. The result would be a state of affairs such that we would not have one race which was superior to all others, but 3 small groups superior in at least one way to the members of the population not part of these three groups. Thus we would have three discernible groups which would eventually grow larger, as the beneficial trait spread throughout the population. Even here, though, we still would have a state of affairs in which there would be groups with discernible differences which would confer upon them a survival advantage compared to the population which was not part of the "better" group. Thus we would have, in essence, three superior races which would eventually predominate. Again, though, within each of these races, we would have ongoing evolution, and from these three groups evolution would cause a discernible difference between the developing subgroups of one group. And, presumably, so on to infinity.

So the theory would say. What are the facts?

IQ tests throughout the world have found that, with allowance for cultural differences, the IQ range is extremely close. The pygmy population of Africa is supposedly the most backward race extant today, but individuals have IQ's that are quite average when they are acclimated to Western life with its Western culture. We find few differences between second and third generation pygmies living in e.g. large Australian cities and the established European population. And this is comparing supposedly the most backward group of people today (aside from the Tasaday Indians which are very small and culturally primitive) with those supposed the most advanced, the white Anglo-Saxons. This shows that indeed we have a situation confirming the statements of Benedict quoted above that all races are essentially equal. As Benedict<sup>56</sup> concludes: "The most careful investigation shows there is no difference between the scores of blacks and whites even though it is difficult to control for the accumulative effects of deprivation."

A number of researchers have recognized that the implications of the information we have outlined above apply not only to man, but to animals as well. For this reason, a number of leading biologists have proposed

that evolution as a whole presently has stopped. For example, the well-known French biologist, Pierre-P. Grasse, stated:

Biologists find it hard to admit that . . . present living beings differ at all from those of the past . . . But facts are facts; no new broad organizational plan has appeared for several hundred million years, and for an equally long time, numerous species, animals as well as plants, have ceased evolving. We have said that evolution in the present is difficult, [if not extremely difficult,] to observe. Some biologists maintain that they can not only observe it but also describe it in action; the facts that they describe, however, either have nothing to do with evolution or are insignificant. At best present evolutionary phenomena are simply slight changes of genotypes within populations, or substitutions of an allele by a new one. <sup>57</sup>

### Summary

The evolution theory requires differences within a species in order to progress forward. The raw material of evolution is differences—differences which natural selection can "select" from and in time, spread throughout the population. These differences are the key to evolution; without them evolution could not occur. In the case of mankind, research has strongly supported the belief that few significant differences exist between the various groups (races) of humans living today. If it can be shown, as seems to be true, that with the species the few differences that do exist do not confer any survival advantages, contemporary evidence for human evolution would be completely lacking.

Most importantly, this evidence argues against the 'survival of the fittest" hypothesis, the cornerstone of the evolutionary theory. It is possible that at one time there were discernible differences among the different groups of mankind, but these differences were either eradicated; or they never existed; they have been hypothesized, not observed. Besides, man's environment was much more uniform throughout much of history than it has been in the past hundred to two hundred years. There was little difference between, for example, a man who lived in a cave and a man who lived in a castle; and historical study has shown that the man in the cave was in some ways better off, at least as regards certain health factors. There is, though, today a great difference betwen the life of Tasaday Indians in the Philippines and scientists living in a university town; but there is slight, if any, genetic difference. All available evidence indicates that differences which could conceivably confer a survival advantage to one group of humans over another do not exist. In other words, according to the evolutionary arguments evolution should now be proceeding more rapidly than it ever did in the past; but we do not observe it proceeding at all.

The fact that there are more differences within the races than between them does not support what we would expect to find if the evolutionary theory was operative upon humans. Even the few fairly clear differences between the races (differences which cause us to group in terms of races) are only differences of degree and frequency, not absolute differences. And these dif-

ferences are clearly non-essentials and are not important to survival.

It is also difficult to explain why (as evolutionists maintain) man's evolutionary tree shows many branches<sup>58</sup> and yet today only one branch, man, exists. One arguing for evolution must explain why, in this period of history, a state of affairs exists which is in so great a contrast to that for most of mankind's hypothesized evolutionary history.59

### **Acknowledgements**

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## REPORT OF 1980 BOARD OF DIRECTORS MEETING

The annual meeting of the Board of Directors of the Creation Research Society was held on 18 and 19 April, at Concordia College, Ann Arbor, Michigan.

An open session for the presentation of papers was held on the afternoon of the 18th, as had been announced; and the following papers were presented: Clifford Burdick, the Galapagos Islands; Jerry Bergman, Vestigial Organs; E. Theo Agard, Extrapolation; George Howe, Cultivated Plants do not Show an Evolutionary Ancestry; Russell Akridge, The 2.8° K Temperature of Free Space Indicates a Recent Creation; Ralph Ancill, A Proposal for a New Creationist