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Comments on "The Evolutionary Theories of Charles Darwin and Herbert Spencer" by Derek Freeman

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owe little or none of their superiority to direct inheritance from the old Greeks, though they owe much to the written works of that wonderful people." Here, it will be discerned, not only does Darwin distinguish between heredity and learned repertory, but he also attributes the superiority in civilization of certain 19th-century "western nations of Europe" over their own "savage progenitors" predominantly to elements in ancient Greek civilization which (as we would now say) had been culturally transmitted to them.

As I have already shown, Darwin considered that progress in human societies was "no invariable rule" and, further, that progress depended on "many concurrent favourable conditions far too complex to be followed out." However, while thus refraining from any premature attempt to analyse the complex etiology of such human progress as had occurred, Darwin (1901[1871]:220) was prepared to venture a broad general opinion as to the probable nature of the significant variables: "The more efficient causes of progress seem to consist of a good education during youth whilst the brain is impressible, and of a high standard of excellence, inculcated by the ablest and best men, embodied in the laws, customs and traditions of the nation and enforced by public opinion." Here again, Darwin explicitly recognized the learned repertory of a society as one of the "more efficient causes" of progress in civilization, while specifically stating that natural selection acts, in such conditions, "only tentatively" (p. 217) and in "a subordinate degree" (p. 220).

That Darwin did indeed recognize the superordinate importance of what are now called cultural adaptations is further confirmed by his restatement, in summary, of his views on this issue (1901[1871]:945):

Important as the struggle for existence has been and even still is, yet as far as the highest part of man's nature is concerned there are other agencies more important. For the moral qualities are advanced, either directly or indirectly, much more through the effects of habit, the reasoning powers, instruction, religion, &cc., than through natural selection; though to this latter agency may be safely attributed the social instincts, which afforded the basis for the development of the moral sense.

Here, Darwin adopted, in embryonic form, what today would be called an interactionist position. That is, while acknowledging the superordinate importance of learned behaviour as the adaptation on which human civilization is founded, he at the same time recognized that some learned behaviour has, in part, a biological basis. Darwin's view thus foreshadowed the contemporary scientific paradigm succinctly expressed by Dobzhansky (1969:290): ". . . mankind's principal adaptive instrument is culture. Culture is acquired and transmitted not through genes; symbol formation and symbolic language are the chief modes of transmission. Yet this non-genetic transmission has a genetic foundation."

In other words, while some of his interpretations are at error and require substantial revision, Darwin did recognize (and at a time when the concept of culture was in a rudimentary state of development) that human history had long since reached a phase in which learned behavioural adaptations had become "much more" important than genetic variables in determining social change, while still attaching importance to the nature of the brain and body of man as these evolved, in earlier times, predominantly by means of natural selection.

* * * *

As Stocking (1968:365) has shown, the propounding of the theory that culture is "a thing sui generis" by Kroeber, Lowie, and others was linked with the overthrow of "the Lamarckian notion of the inheritance of acquired charac-

ters." At that time, the conceptualization of culture as a "closed system" (Jenks 1918:490) was seen by Lowie (1917:5) as "a declaration of independence against the older 'more general' sciences of biology and psychology." By the 1950s, however, the limitations of the cultural determinist paradigm that emerged in the wake of Kroeber's (1915) "eighteen professions" had become apparent; and in 1955, Kroeber himself gave it as his opinion (1955:198) that the period during which "generic human nature" had been discounted by the great majority of anthropologists was "drawing to a close." The course of events since then has borne out Kroeber's prediction,³⁷ and it has now become evident that an authentic science of anthropology must be based on a paradigm that gives recognition to the interaction of cultural, biological, and environmental variables in historical and contemporary situations, as during the evolutionary past of the human species (cf. Freeman 1970:68).

The modern biological theory of evolution is basic to such an anthropological paradigm, being in no way incompatible with the recognition of the emergence of learned behaviour and symbolic systems as factors of ever increasing significance in human evolution and history. It is of importance, therefore, that contemporary anthropologists should have an accurate understanding of those concepts of Charles Darwin on which the modern biological theory of evolution is founded, and that these concepts should not be confused with the obsolete Lamarckian evolutionism of Herbert Spencer. It is hoped that this paper will be a contribution to that end.

Abstract

In this paper certain crucial differences between the evolutionary theories of Charles Darwin and Herbert Spencer are explored. Particular attention is given to the Lamarckian basis of Spencer's evolutionary doctrine.

Comments

by CARL JAY BAJEMA

Allendale, Mich., U.S.A. 2 xi 73

The resurgence of interest in evolutionary theories among anthropologists makes Freeman's paper very timely. My only criticism is that sometimes it doesn't go far enough.

For example, the differing views that Spencer and Darwin held with respect to "progress" led to their adopting different definitions of evolution. Spencer was the first person to extend the meaning of the word evolution to include some of the changes in species over time. Spencer (1857b:446[1891a:10]) defined evolution as change in a particular direction—change of the simple into the complex ("a change from the homogeneous to the heterogeneous"). Darwin (1859:171,340,443,456) essentially considered evolution to be any hereditary change occurring within a species over time ("descent with modification") regardless of the direction of the change. Although "evolved" is the last word of the first edition of On the Origin of Species,

³⁷ Cf. Chapple (1970:viii–xv) for a listing of "the advances in biology and anthropology over the last twenty-five years which have contributed so much to the formulation of a consistent and integrated approach to human behaviour and to culture."

Darwin rarely used the term evolution in his published works—perhaps because Spencer had defined evolution as progress from the simple to the complex. Spencer's idea that evolution must be progressive has become so ingrained in the minds of some modern anthropologists that they have even resorted to using the term devolution to describe changes which lead to a decrease in complexity of organization (Carneiro 1972). Freeman's analysis should help make anthropologists more aware that not all scientists define evolution in the same way and that differences in definition lead to different conclusions.

Second, Spencer (1864) invented the phrase "survival of the fittest" to describe natural selection, and Darwin (1869) adopted this phrase to define natural selection in the fifth and subsequent editions of the *Origin of Species*. This has probably led many modern scientists to believe that there must have been a great deal of similarity between the evolutionary theories of Darwin and Spencer. Freeman's paper helps dispel this misconception. Interestingly, while the phrase "survival of the fittest" led many people to the erroneous conclusion that natural selection operates to perpetuate the individual (longevity), both Darwin (1859:62) and Spencer (1864:444) understood that natural selection operates to bring about the multiplication (reproduction) of individuals with favorable variations.

We owe Freeman a debt of gratitude for his efforts to help us better understand the historical roots of some of the controversies that have occurred (and in some instances are still raging) in evolutionary anthropology.

by JOHN BLACKING

Belfast, Northern Ireland. 18 xi 73

Freeman is to be congratulated on his characteristically thorough and scholarly examination of the evolutionary theories of Darwin and Spencer. Although Harris was justified in noting the effect of contemporary social and economic structures on the development of theory and methods in the social and natural sciences, Freeman makes it clear that even if Darwin published his results long after Spencer and Marx he had worked out his theory earlier. Moreover, although Darwin had been reared in a culture in which evolutionary ideas had been under discussion for over half a century, it was the array of data collected during the voyage of the *Beagle* that crystallized his thought about the origin of species.

If Harris's admirably provocative book has come in for further attack, it is perhaps his fault for not applying his own principles to his writing. Why did he fall victim to the cult of personalities and events and use a personal label to describe aspects of a system that transcends individual idiosyncracies? The term "Spencerism," like "Darwinism" or "Marxism" or any other "personal-name-ism," suggests dogma and invites polemic rather than scientific discussion, testing, and refinement. It is to be hoped that Freeman's timely emphasis on the modern biological theory of evolution as an integral part of anthropological investigation will not cause some to dismiss altogether Harris's arguments about Spencer's work, or indeed several of Spencer's own insights and analyses which are not automatically falsified because of the faults in his evolutionary doctrine.

by ROBERT L. CARNEIRO

New York, N.Y., U.S.A. 16 xi 73

Freeman wants us to believe that whereas Darwin was an illustrious scientist whose work on evolution was rigorous and illuminating, Spencer was merely a "fashionable publicist" whose evolutionary writings were metaphysical and

unsound. Such a distorted view of Spencer can be sustained only by a very careful selection and skillful interweaving of a limited body of evidence. While quite properly pointing out certain errors in Spencer's views on organic evolution, Freeman nevertheless minimizes, ignores, or suppresses a much larger part of Spencer's evolutionism. The result is a serious misrepresentation of intellectual history.

Freeman's attack centers on Spencer's belief in the inheritance of acquired characteristics and on the prominent role he assigned to it in organic evolution. He shows quite correctly that in clinging to this belief in the face of mounting evidence against it, Spencer was dogmatic and even perverse. Not content with this, however, he goes on to say that Spencer's social evolutionism also rested squarely on the inheritance of acquired characteristics, and that when this doctrine fell, his social evolutionism fell with it. But this contention cannot be sustained.

According to Freeman, by 1873 Spencer had "opted for the theory that the mental and social evolution of the species *Homo sapiens* was primarily caused by the inheritance of acquired characters, producing a gradual and inevitable modification of human nature and human institutions." He adds, moreover, that this doctrine was one "to which Spencer became increasingly committed during the remaining 30 years of his life." But as far as Spencer's social evolutionism is concerned, the facts show quite the opposite. From 1873 on, Spencer became less, rather than more, inclined to see social institutions as arising from changing attributes of human nature.

Spencer's original belief that the institutions of a society were a direct reflection of the innate qualities of its members dates from a time when he looked at society purely as a moralist, that is, before he began to contemplate it from the standpoint of science. Thus in Social Statics he wrote that "every phenomenon exhibited by an aggregation of men, originates in some quality of man himself" (1851:16), and he continued to hold much the same view as late as 1873, when he wrote in The Study of Sociology that "the nature of the aggregate is determined by the nature of its units" (1891c:411). By the 1870s, however, Spencer was becoming increasingly familiar with a very large body of cross-cultural data being collected for his use in writing his magnum opus, The Principles of Sociology, and this exposure clearly changed his thinking. Spencer now recognized that "social phenomena depend in part on the natures of the individuals and in part on the forces the individuals are subject to" (1890:14). Moreover, he saw factors external to individuals as playing an increasingly greater role as societies evolved. Thus he noted that "the ever-accumulating, ever-complicating super-organic products, material and mental [i.e., culture], constitute a further set of factors which become more and more influential causes of change" (1890:14). Freeman totally ignores this evidence of change in Spencer's ideas. Though he cites no fewer than 27 of Spencer's works, Principles of Sociology is not among them.

Freeman would have us believe that Spencer found Darwin's principle of natural selection uncongenial and accepted it only after he had found a way to subsume it under one of his own general principles. This is simply not true. Spencer welcomed natural selection from the start. Indeed, he expressed his chagrin at not having thought of it himself (1924:390). His *Principles of Biology* makes repeated use of natural selection, and his *Principles of Sociology* is studded with it. Over and over in the latter work Spencer shows that certain forms of social organization became widespread largely by giving some societies an advantage over others in the struggle for existence.

Turning to the inevitability of progress, we find Freeman again quoting an early opinion of Spencer's as if it were his mature and final thought. True enough, Spencer once