

Darwin as a Social Evolutionist Author(s): John C. Greene Source: *Journal of the History of Biology*, Vol. 10, No. 1 (Spring, 1977), pp. 1-27 Published by: Springer Stable URL: https://www.jstor.org/stable/4330666 Accessed: 16-11-2018 19:02 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at https://about.jstor.org/terms



 $Springer \ {\rm is \ collaborating \ with \ JSTOR \ to \ digitize, \ preserve \ {\rm and \ extend \ access \ to \ } Journal \ of \ the \ History \ of \ Biology$ 

# Darwin as a Social Evolutionist

JOHN C. GREENE

Department of History University of Connecticut

The question of Darwin's views on social evolution has long been a controversial one. At one extreme, writers like the anthropologist Marvin Harris have represented Darwin as a Spencerian in his general outlook, accusing him of "biological Spencerism" or racial determinism. To these writers Darwin was a powerful exponent, though not the originator, of "social Darwinism" – the belief that competitive struggle between individuals, tribes, nations, and races has been the chief engine of progress in social evolution. Authors of this persuasion have not hesitated to call Darwin a "racist."<sup>1</sup>

At the other end of the spectrum, writers like the Australian anthropologist Derek Freeman have insisted that Darwin had nothing to do with "social Darwinism" and that his views on biological and social evolution were entirely different from those of Herbert Spencer, whose speculative methods he distrusted. Darwin, Freeman would have us believe, was an "interactionist" who "recognized 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."<sup>2</sup>

The fifteen commentaries on Freeman's essay published in the September 1974 issue of *Current Anthropology* illustrate the wide disparity of opinions prevailing on the subject of Darwin's concept of social evolution. Ernst Mayr, George Gaylord Simpson, Carl Bajema, John Blacking, U. M. Cowgill, Santiago Genovès, Michael Ghiselin, Neven P. Lamb, and Johannes Raum support Freeman's position with few qualifications. Marvin Harris defends his own position against Freeman's attack. Charles Gillispie, John Greene, Robert Carneiro, Daniel Heyduk, and Kinji Imanishi take

1. Marvin Harris, The Rise of Anthropological Theory: A History of Theories of Culture (New York: Thomas Y. Crowell Co., 1968), pp. 116-123.

2. Derek Freeman, "The Evolutionary Theories of Charles Darwin and Herbert Spencer," *Current Anthropol.*, 15 (1974), 221. Fifteen commentaries and a reply by Freeman follow this essay.

Journal of the History of Biology, vol. 10, no. 1 (Spring 1977), pp. 1-27. Copyright © 1977 by D. Reidel Publishing Company, Dordrecht, Holland.

issue with Freeman on one or more matters of substantive importance. Furthermore, in the intellectual community at large the diversity of opinions concerning Darwin as a social evolutionist is no less striking.<sup>3</sup>

How is it possible that Darwin scholars can disagree so violently about a historical question that is presumably subject to historical inquiry and verification? Preconceived ideas and prejudices - modern antipathy to biological interpretations of human behavior, Marxist prejudice against Malthus and Spencer, the tendency of biologists to make Darwin into a patron saint unblemished by any fault of mind or character - may provide a partial explanation, but something more is involved. The main difficulty is that The Descent of Man, the chief source of information about Darwin's views on social evolution, is ambiguous on the point at issue. Those who view Darwin as a "social Darwinist" have no difficulty in finding passages which seem to out-Spencer Spencer in proclaiming the necessity of competitive struggle between individuals, tribes, nations, and races as a prerequisite for social progress. Perhaps the best example of such a passage is the paragraph in the "General Summary" in which Darwin asserts that man, having "advanced to his present high condition through a struggle for existence consequent on his rapid multiplication," must remain subject to a severe struggle if he is to advance still further.

Hence our natural rate of increase, though leading to many and obvious evils, must not be greatly diminished by any means. There should be

3. Robert Young, "Malthus and the Evolutionists: The Common Context of Biological and Social Theory," Past and Present, 1969, pp. 109-145, stresses the Malthusian context of the writings of Spencer, Darwin, Wallace, and others. Gertrude Himmelfarb, Darwin and the Darwinian Revolution (Garden City, N.Y.: Doubleday, 1959), chap. 19, takes the position that Darwin was not interested in the bearing of his theory on problems of social evolution. John S. Haller, Jr., Outcasts from Evolution: Scientific Attitudes of Racial Inferiority, 1859-1900 (Urbana: University of Illinois Press, 1971), pp. 86-88, recognizes that Darwin believed in the existence of superior and inferior races but does not discuss his social evolutionism. Richard Hofstadter, Social Darwinism in American Thought, rev. ed. (Boston: Beacon Press, 1955), pp. 90-91, seems uncertain whether to regard Darwin as a "social Darwinist" or not, stressing the contradictory character of his utterances in this connection. Jacob W. Gruber, "Darwinism and Its Critics," Hist. Sci., 3, (1964), 123, states that "Darwin did not use the idea of competition or 'struggle for existence' in the interpersonal and aggressive sense in which Spencer and the social Darwinists used it." Howard E. Gruber, in H. E. Gruber and Paul H. Barrett, Darwin on Man: A Psychological Study of Scientific Creativity (New York: E. P. Dutton, 1974), p. 240, asserts that Darwin "never entertained" the social Darwinist idea of "the pitiless struggle of man against man as a defensible social arrangement." The foregoing are but a few of the varying and contradictory opinions concerning Darwin's views as a social evolutionist.

open competition for all men; and the most able should not be prevented by laws or customs from succeeding best and rearing the largest number of offspring.

On the other side of the argument, there are equally striking passages in which Darwin seems to recognize the role of education, public opinion, religion, humanitarian sentiments, and social institutions generally in social evolution, especially in civilized societies. Even in precivilized societies he attributes some influence to what he calls "the standard of excellence" prevailing in each society. It is not surprising, then, that readers of *The Descent of Man* have drawn different conclusions about Darwin's views on social evolution. Darwin seems to contradict himself, leaving scholars free to draw whatever conclusions fit best with their preconceived ideas about Darwin and his role in Western thought.

It was this situation with respect to the interpretation of *The Descent of Man* that led me to search the Darwin Papers at the Cambridge University Library for evidence that might resolve the long standing controversy. Perhaps there were early drafts of *The Descent of Man* or collections of notes gathered by Darwin for use in writing the sections on progress and retrogression in human history. But I found no such materials. It then occurred to me to examine Darwin's annotations of books and reprints in his personal library dealing with human evolution. Peter Vorzimmer's manuscript catalogues of Darwin's books and reprints lay at hand. The search for annotations began. The results proved interesting and enlightening.

The purpose of this essay is to present evidence gleaned from Darwin's annotations of books and articles concerned with human evolution and related topics and then to review his discussion of social evolution in *The Descent of Man* in the light of this new evidence. In keeping with this purpose, attention will be focused on Darwin's own statements and those of his contemporaries. A brief discussion of the implications of the new findings for the future course of Darwin studies concludes the paper. Readers interested in the extensive secondary literature on social Darwinism are referred to the bibliographies in the works by Derek Freeman and Marvin Harris cited above and to the essays by various authors in Thomas F. Glick's *The Comparative Reception of Darwinism.*<sup>5</sup>

<sup>4.</sup> Charles Darwin, *The Descent of Man and Selection in Relation to Sex* (New York: D. Appleton, 1896), p. 618.

<sup>5.</sup> Thomas F. Glick, ed., *The Comparative Reception of Darwinism* (Austin: University of Texas Press, 1972).

For the period before 1859, Darwin's book annotations provide the main source of new information. Besides annotating the margins of pages, Darwin usually jotted comments and page references on the back flyleaf or on one or more sheets pinned to the flyleaf. Among the pre-1859 books with annotations of this kind were William Lawrence's Lectures on Physiology, Zoology, and the Natural History of Man (1822); Robert Chambers' Vestiges of the Natural History of Creation (6th ed., 1847); Robert G. Latham's Man and His Migrations (1851); James Cowles Prichard's Researches on the Physical History of Mankind (3rd ed., 1844, and 4th ed., 1851); Lt. Col. Charles Hamilton Smith's The Natural History of the Human Species, Its Typical Forms, Primaeval Distribution, Filiations, and Migrations (1848); Josiah Nott and George Gliddon, Types of Mankind (1854); and Herbert Spencer's Principles of Psychology (1855). In some cases it was possible to determine exactly when Darwin read a given book from his entries in a notebook of books read.

Darwin's annotations of these books show that he was looking for evidence that the same natural agencies which disseminate, modify, improve, or bring about the decline and extinction of varieties of plants and animals had also acted on the various tribes and races of man in early human history. Thus Darwin noted on a sheet pinned to the flyleaf of Prichard's Researches on the Physical History of Mankind: "How like my book all this will be." For Prichard, like Darwin, attempted to throw light on the origin and development of human races by gathering information on processes of variation in plants and animals generally, arguing by analogy to the case of man. In his annotations Darwin showed particular interest in passages concerning the distribution and migrations of plants and animals, sexual selection, Buffon's ideas on the aversion of species to crossing with each other, diseases like plica polonica peculiar to particular races or nations, the effects of racial intermixture, and geographic barriers opposing the extension of Mediterranean influences into central Africa. "If I ever consider Man," Darwin reminded himself, "look over other and earlier edition."

Latham's Man and His Migrations was of interest to Darwin for its speculations on the processes by which the human race, presumably originating in a single locality, slowly became diffused over the earth. Two ideas in particular caught Darwin's attention. The first was Latham's distinction between the "primary diffusion," when man's dissemination was opposed only by natural obstacles, and the "secondary diffusion," when tribes encountered other tribes in their migrations. Of the primary diffusion, Darwin wrote: "N. B. the wide and rapid spreading of introduced plant is something like this – its preyers [?] are not yet developed." With respect to the secondary diffusion, Darwin took special note of Latham's description of encroachment, displacement, and obliteration of intermediate forms in the conflict of tribes and races, resulting in the geographical proximity of strikingly different types, such as the Hottentots and the Caffres in southern Africa. "Excellent remarks (quote in Ch 6?)," Darwin noted, "on how during encroachment, one race will obliterate intermediate forms: I do not see force of Displacement – If one form gains an advantage over other independent of *climate*, it will overwhelm the graduated intermediate forms."

Darwin's query - "quote in Ch 6?" - shows that he was contemplating discussing human evolution in the treatise on the origin of species on which he was working at the time he read these books. That he was seriously considering this is confirmed by a penciled notation in the table of contents of the "long version" of the Origin of Species recently published by Robert Stauffer under the title Charles Darwin's Natural Selection. This notation, which reads "Theory Applied to the Races of Man," shows that Darwin contemplated including a section in Chapter 6 designed to show that his theory of natural selection was applicable to human evolution and, in particular, to the evolution of human races. The proposed section seems never to have been written, but the general nature of the argument Darwin had in mind seems clear enough from his annotations of the books in his library, several of them bearing annotations specifically labeled for use in Chapter 6. These annotations show beyond question that he intended to prove that the same agencies of population pressure, struggle for existence, migration, encroachment and extinction of races and tribes, differential susceptibility to disease, and so forth, that played a central role in his theory of evolution by natural selection had shaped the early development of mankind. They also show his tendency to focus on human races as the biological equivalent in the human sphere of the varieties of plants and animals which formed the materials of evolution in the organic world generally.

The centrality of race formation in Darwin's concept of human evolution comes out in the title – "Theory Applied to the Races of Man" – of the projected section of Chapter 6. It is also apparent in his letter to Charles Lyell dated October 11, 1859, in which Darwin wrote:

I suppose that you do not doubt that the intellectural powers are as important for the welfare of each being as corporeal structure; if so, I can see no difficulty in the most intellectual individuals of a species being continually selected and the intellect of the new species thus improved, aided probably by effects of inherited mental exercise. I look

at this process as now going on with the races of man; the less intellectual races being exterminated.<sup>6</sup>

He had expressed the same idea twenty years earlier in Notebook E of the transmutation notebooks he kept after his return from the voyage of the *Beagle*: "When two races of men meet, they act precisely like two species of animals – they fight, eat each other, bring diseases to each other, etc. but then comes the more deadly struggle, namely which have the best fitted organisation, or instinct (i.e. intellect in man) to gain the day."<sup>7</sup>

Darwin's reference to the probable effects of "inherited mental exercise" in his letter to Lyell is interesting in the light of his annotations of Herbert Spencer's *Principles of Psychology* (1855), sent to Darwin "With the Author's Compliments." On pages 547–548 of this work Spencer argued:

Let it be granted that in all creatures, as in ourselves, the law is and ever has been, that the more frequently psychical states occur in a certain order, the stronger becomes their tendency to cohere in that order, until they at last become inseparable; let it be granted that this tendency is, in however slight a degree, inherited, so that if the experiences remain the same, each successsive generation bequeathes a somewhat increased tendency; and it follows, that . . . there must inevitably be established an automatic connection of nervous actions, corresponding to the external relations perpetually experienced.

Beside Spencer's statement of the law of psychical states, Darwin wrote: ". . . is this not true for what he calls physical"? On the flyleaf Darwin commented on Spencer's derivation of the Kantian categories of pure reason from the inherited effects of the daily experience of the human race as follows: "577–583 good discussion on necessity of evolution Hypothesis to unite experience & transcendental hypothesis." Darwin was to return to the idea of the "effects of inherited mental exercise" in *The Descent of Man.* 

Before leaving Darwin's pre-1859 annotations, we should note the absence in them of an idea that was to become prominent in his later writ-

7. As transcribed from Darwin's Notebook E in Gruber and Barrett, Darwin on Man, p. 459.

<sup>6.</sup> Letter from Darwin to Charles Lyell, Ilkley, Yorkshire, October 11, 1859, quoted in *The Life and Letters of Charles Darwin*, ed. Francis Darwin, 3 vols. (London: John Murray, 1888), II, 211. See also in the same volume, p. 334, Darwin's comment in a letter to Lyell (September 23, 1860): "The white man is 'improving off the face of the earth" even races nearly his equals."

ings, namely, the importance of genetically based psychological and moral differences between individuals, tribes, nations, and races in the struggle for existence. Although the books he read before 1859, especially those of William Lawrence, Spencer, and the American polygenists Nott and Gliddon, were full of passages expatiating on the supposed psychological and moral differences between tribes, nations, and races, Darwin left these passages unmarked. If he believed in the reality of genetic differences of this kind (the evidence is not clear on this point), he did not then conceive that these differences were an important factor in human evolution. In any case, he had decided not to discuss man in his *Origin of Species*. Concerning the bearing of his theory of evolution by natural selection on human evolution, he ventured only to predict that "light will be thrown on the origin of man and his history."

But if Darwin was not yet ready to expound the implications of his theory of natural selection for social evolution, the same cannot be said of his fellow countrymen. Although Darwin wrote little or nothing about man in the 1860's, his *Origin of Species* inspired innumerable books and articles in which his theory was applied to the past, present, and future development of the human race. Darwin read and annotated many of these, receiving some of them as complimentary copies and purchasing others for his own use. Among the British writers on social evolution whose works he read and annotated were Alfred Russel Wallace, Francis Galton, Walter Bagehot, John Lubbock, Herbert Spencer, William Lecky, Edward Tylor, J. F. McLennan, W. R. Greg, and David Page. Their writings stimulated Darwin enormously, introducing new perspectives and challenging him to formulate his own views on human evolution more clearly.

In Darwin's annotations of these books and articles we see a continuation of his interest in applying the theory of natural selection to human history, but with some new emphases and problems. The first new theme occurred in his annotations of Alfred Russel Wallace's article in the Anthropological Review for May 1864, entitled "The Origin of Human Races and the Antiquity of Man Deduced from the Theory of 'Natural Selection'," which seems to have impressed Darwin greatly and to have led him to consider seriously the idea that natural selection acts on man's "moral faculties" as well as on his physical and intellectural capacities. Darwin marked heavily a passage in which Wallace argued that such mental and moral qualities as sympathy, capacity for acting in concert, intelligent foresight, and the like would be acted on by natural selection. "Tribes in which such mental and moral qualities were predominant," Wallace wrote, "would therefore have an advantage in the struggle for existence over

other tribes in which they were less developed, would live and maintain their numbers, while the others would decrease and finally succumb." Darwin drew a double line alongside this passage and wrote in the margin: "Use of moral qualities."

More generally, Darwin appears to have resonated sympathetically to Wallace's conception of intellectual and moral progress resulting from the action of natural selection on the physical, mental, and moral capacity of individuals, tribes, nations, and races. He marked heavily Wallace's speculation that races subject to "the harsh discipline of a sterile soil and inclement seasons" would develop greater hardihood, foresight, and ingenuity than those in tropical regions and his declaration that the great law of the preservation of favored races in the struggle for life "leads to the inevitable extinction of all those low and mentally undeveloped populations with which Europeans come in contact." "The red Indian in North America, and in Brasil; the Tasmanian, Australian and New Zealander in the southern hemisphere, die out, not from any one special cause, but from the inevitable effects of an unequal mental and physical struggle." Darwin drew a double line beside this passage and wrote at the top of the page: "natural selection is now acting on the inferior races when put into competition with the New Zealanders – high [?] New Zelander [sic] say the race dying out like their own native rat."<sup>8</sup>

Darwin also underlined Wallace's statement that, owing to natural selection of even the slightest variations in man's mental and moral nature, "the better and higher specimens of our race would therefore increase and spread, the lower and more brutal would give way and successively die out, and that rapid advancement of mental organisation would occur, which has raised the very lowest races of man so far above the brutes, (although differing so little from some of them in physical structure), and, in conjunction with scarcely perceptible modifications of form, has developed the wonderful intellect of the Germanic races." Darwin seems to have intended quoting this passage in a work of his own, but he crossed out the final reference to the development of the "wonderful intellect of the Germanic races." Wallace, when he reprinted this essay in 1870, changed the word "Germanic" to "European," presumably because Bismarck's uni-

8. For some reason Darwin drew a line through "New Zealanders" in this annotation. He also underlined the words "the weeds" in Wallace's account of how the superior physical, moral, and intellectual qualities of the European enabled him to increase at the expense of savage man, "just as the weeds of Europe overrun North America and Australia, extinguishing native productions by the inherent vigour of their organisation, and by their greater capacity for existence and multiplication." See A. R. Wallace, "The Origin of Human Races and the Antiquity of Man Deduced from the Theory of 'Natural Selection'," *Anthropol. Rev.*, 2 (1864), clxv. fication of Germany by blood and iron had made the Germanic intellect seem less wonderful than it had in 1864.

From Darwin's correspondence with Wallace we know that Darwin had a very high opinion of his friend's essay of 1864. "The great leading idea is quite new to me, viz. that during late ages the mind will have been modified more than the body," Darwin wrote to Wallace on May 28, 1864; "yet I had got as far as to see with you that the struggle between the races of man depended entirely on intellectual and moral qualities. The latter part of the paper I can designate only as grand and most eloquently done. I have shown your paper to two or three persons who have been here, and they have been equally struck with it."<sup>9</sup> In another letter to Wallace on January 26, 1870, Darwin called the essay of 1864 "the best paper that ever appeared in the Anthropological Review!" As for the latter part of the paper, in which Wallace predicted the triumph of "the more intellectual and moral" races over the "lower and more degraded" ones and which seemed to Darwin "grand and most eloquently done," it is worth noting that Wallace's footnote gave credit for the ideas expounded there to his reading of Herbert Spencer's Social Statics.

If Darwin had any doubt about the heritability of mental and moral capacities and dispositions, it was effectively removed when he read Francis Galton's articles on "Hereditary Talent and Character" in Macmillan's Magazine in June and August 1865. As examples of hereditary moral dispositions Galton listed "craving for drink, or for gambling, strong sexual passion, a proclivity to pauperism, to crimes of violence, and to crimes of fraud." But Darwin seems to have been especially impressed by Galton's comparison of the psychological and moral characteristics of various races. According to Galton, the American Indian is cold, melancholic, patient, and taciturn, with a strong sense of personal dignity. Negroes, on the contrary, are warm-hearted, gregarious, domestic, prolific, impulsive, and vociferous, but lacking in patience, reticence, and dignity. Darwin marked this comparison and wrote in the margin of the page: "This is strong [?] evidence of inheritance of all sorts of mental dispositions." Later on, in his Variation of Animals and Plants under Domestication, Darwin wrote: "Some writers have doubted whether those complex mental attributes, on which genius and talent depend, are inherited ... But he

<sup>9.</sup> Letter from Darwin to A. R. Wallace, Down, Bromley, Kent, May 28, 1864, quoted in *Alfred Russel Wallace: Letters and Reminiscences*, ed. James Marchant, 2 vols. (New York: Harper and Brothers, 1916), II, 127. See also Darwin's letter to Wallace, January 26, 1870, *ibid.*, pp. 205-206.

who will read Mr. Galton's able paper on hereditary talent will have his doubts allayed."<sup>10</sup>

Galton also reinforced Wallace's idea that natural selection favors tribes in which the affections (sexual, parental, filial, and social) are strongest. "Those who possessed all of them, in the strongest measure, would, speaking generally, have an advantage in the struggle for existence," Galton wrote. In particular, Darwin marked for quotation in Chapter 3 or 4 of *The Descent of Man* Galton's observation that disinterested feelings were more necessary to man than to any other animal because of the length of his dependency in childhood, his great social needs, and his physical helplessness. "Darwin's law of natural selection would therefore be expected to develop these sentiments among men, even among the lowest barbarians, to a greater degree than among animals," Galton concluded.

Darwin also drew from Galton a historical example of natural selection of psychological and moral traits: the case of English emigrants to America. These emigrants, said Galton, were "bred from the most restless and combative class of Europe." "Every head of an emigrant family brought with him a restless character, and a spirit apt to rebel . . . They [the Americans] are enterprising, defiant, touchy, impatient of authority; furious politicians; very tolerant of fraud and violence; possessing much high and general spirit, and some true religious feeling, but strongly addicted to cant." Darwin was to express related views in *The Descent of Man* (see below).

A second theme which caught Darwin's attention in these articles was Galton's concern with negative selection – the survival of the "unfit" – in civilized societies. Darwin had certainly been aware of this aspect of social evolution before he read Galton – he had marked a passage dealing with this problem in William Lawrence's *Lectures on Physiology, Zoology, and the Natural History of Man* many years earlier – but he seems not to have felt the full force of the problem until it was given a central place by Galton, W. R. Greg, and others in the 1860's. An early eugenicist, Galton was convinced that only some kind of eugenic control could counteract the tendency of civilization to weaken society by preventing natural selection from eliminating its weak and intellectually inferior members.

If a twentieth part of the cost and pains were spent in measures for the improvement of the human race that is spent on the improvement of the breed of horses and cattle [Galton wrote], what a galaxy of genius might we not create! ...

10. Charles Darwin, The Variation of Animals and Plants under Domestication, 2 vols. (London: John Murray, 1868), 11, 7.

The feeble nations of the world are necessarily giving way before the nobler varieties of mankind; and even the best of these, so far as we know them, seem unequal to their work. The average culture of mankind is become so much higher than it was, and the branches of knowledge and history so various and extended, that few are capable even of comprehending the exigencies of our modern civilization; much less fulfilling them. We are living in a sort of intellectual anarchy, for the want of master minds. The general intellectual capacity of our leaders requires to be raised, and also to be differentiated.<sup>11</sup>

Darwin seems to have been impressed by Galton's discussion of the deleterious effects of negative selection in civilized nations, for he marked a passage of this kind in Galton's second article and made a note to himself to refer to it in Chapter 4 of *The Descent of Man*, where, in fact, he cites Galton and echoes some of his views:

the weak members of civilised 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. It is surprising how soon a want of care, or care wrongly directed, leads to the degeneration of a domestic race; but excepting in the case of man himself, hardly any one is so ignorant as to allow his worst animals to breed.<sup>12</sup>

Thus Galton's essay, coming hard on the heels of Wallace's article of 1864, seems to have strengthened Darwin's belief that mental and moral capacities and dispositions were heritable and that natural selection had acted on them throughout history in the competition of individuals, tribes, nations, and races. On the one hand, natural selection had operated to strengthen the social and sympathetic feelings among men. On the other, these feelings had acted to inhibit the operation of natural selection in civilized societies, thereby posing a threat to the continued progress of mankind. Here was a dilemma Darwin was to wrestle with in *The Descent of Man* without achieving a resolution.

In September 1868 the problem of the survival of the "unfit" in civilized societies was posed again for Darwin by an anonymous article in *Fraser's Magazine* entitled "On the Failure of 'Natural Selection' in the Case of Man." The author, as Darwin later discovered, was a Scotsman named William R. Greg, an essayist and frequent contributor to the British quar-

<sup>11.</sup> Francis Galton, "Hereditary Talent and Character," part 1, Macmillan's Magazine, 12 (June 1865), 166.

<sup>12.</sup> Darwin, Descent of Man, 134.

terlies. Like Wallace, Galton, and other British writers, Greg was concerned with the implications of Darwin's theory of natural selection for the progress of civilization. In passages heavily lined by Darwin, Greg paraphrased Wallace's description of the process by which natural selection had slowly perfected man's body, mind, and moral faculties in the course of human evolution, dilating on "the great wise, righteous, and beneficent principle which in all other animals, and in man himself, up to a certain stage of his progress, tends to the improvement and perfection of the race."

But what had happened to the operation of this principle as man became civilized? According to Greg, the "righteous and salutary law of 'natural selection'" was still operative in the competition between the races of man:

Here the abler, the stronger, the more advanced, the finer in short, are still the favoured ones, succeed in the competition; exterminate, govern, supersede, fight, eat, or work the inferior tribes out of existence. The process is quite as certain, and nearly as rapid, whether we are just or unjust; whether we use carefulness or cruelty. Everywhere the savage tribes of mankind die out at the contact of the civilised ones.<sup>13</sup>

So, too, in most cases, in the struggle for existence among nations. "In the dawn of history the more cultivated and energetic races conquered the weaker and less advanced, reduced them to slavery, or taught them civilisation." True, the Romans conquered the intellectually superior Greeks, but the Greeks by this time had become "enervated and corrupt to the very cores" and so fell victim to "the robuster will and unequalled political genius of their Roman conquerors," who were "morally and *volitionally* more vigorous." The Romans, in their turn, succumbed to rude Northern warriors who "brought with them a renovating irruption of that hard energy and redundant vitality which luxury and success had nearly extinguished among those they conquered."

Darwin's pencil, which had been busy underlining these passages and making brief notes in the margins, continued active as Greg explained the rise and fall of various European peoples – Italians, Spaniards, Frenchmen, Englishmen – in terms of their supposed intellectual and moral endowments. France had won her vast influence by "her wonderful military spirit and the peculiarity of her singularly clear, keen, restless, but not rich intelligence." England owed her worldwide dominion to "a *daring and persistent energy* [Darwin's underlining] with which no other variety of

13. William R. Greg, "On the Failure of 'Natural Selection' in the Case of Man," *Fraser's Magazine for Town and Country*, September 1868, p. 356.

mankind is largely dowered." And if, in these struggles, might seemed sometimes to have triumphed over right, it was "because in the counsels of the Most High, energy is seen to be more needed than culture to carry on the advancement of humanity, and a commanding will, at least in this stage of our progress, a more essential endowment than an amiable temper or a good heart." In any case, Greg concluded, "it is those who in some sense are the strongest and fittest who most prevail, multiply, and spread, and become in the largest measure the progenitors of future nations."

Having proved to his own satisfaction the beneficent action of natural selection in the competition of nations and races, Greg turned to the main theme of his essay, namely, the failure of natural selection at the level of individuals and classes in a community. Darwin followed closely, pencil in hand. Greg's main argument in this section was that the middle classes -"those who form the energetic, reliable, improving element of the population, those who wish to rise and do not choose to sink, those in a word who are the true strength and wealth and dignity of nations" - tend to have fewer children than the rich and the poor, both of whom "marry as early as they please and have as many children as they please, - the rich because it is in their power, the poor because they have no motive for abstinence." Darwin seems to have had reservations about this argument, for his annotation reads: ". . . do these extremes exceed so much in number the marrying middle classes [?]." But he was sufficiently impressed by Greg's comparison of "the careless, squalid, unaspiring Irishman, fed on potatoes, living in a pig-stye, doting on a superstition, [who] multiplies like rabbits or ephemera" with "the frugal, foreseeing, self -respecting, ambitious Scot, stern in his morality, spiritual in his faith, sagacious and disciplined in his intelligence, [who] passes his best years in struggle and celibacy, marries late, and leaves few behind him" to clip out this passage and quote it verbatim in The Descent of Man as an example of negative selection in civilized societies.

Clearly, Darwin was stimulated by Greg's article. He marked it "Keep" and followed the controversy which it evoked in the British press, annotating some of the replies. He appears to have written Galton about it, for on January 28, 1870, Galton wrote him: "Greg did write the article in Fraser, and has no objection at all, – but the contrary, – in being publickly spoken of as the author. He is highly gratified at your appreciation of the article."<sup>14</sup> Yet Darwin was not entirely convinced by Greg's arguments. Beside the statement of the main thesis – "that the indisputable effect of the state of social progress and culture we have reached ... is to counter-

14. Letter from Francis Galton to Charles Darwin, 42 Nutland Gate S.W., January 28, 1870 (item 160, vol. 80, Darwin Correspondence, Cambridge University Library.

act and suspend the operation of that righteous and salutary law of 'natural selection' in virtue of which the best specimens of the race . . . succeed . . . and propagate an ever improving and perfecting type of humanity" – Darwin wrote: "We only *counteract* it. But is there any compensation[?]". At the end of the essay, where Greg concludes that "a race is being run between moral and mental enlightenment and the deterioration of the physical constitution through the defeasance of the law of natural selection," Darwin gave no clear indication of his own position. "Humanity and good feeling encouraged," he wrote at the bottom of the page, but the reference of this cryptic remark is not clear.

Shortly before he read Greg's article, Darwin read and annotated two essays by Walter Bagehot on "Physics and Politics," published in *The Fortnightly Review* for November 1, 1867, and April 1, 1868. In these essays Bagehot combined Spencer's concept of the inherited effects of daily activities on the nervous system, Darwin's theory of natural selection, and some theories of his own to explain social evolution. Progress, he insisted in a passage marked by Darwin, was neither necessary or normal in human history. Among primitive men the "cake of custom," subjecting individuals to group norms and instilling the habit of implicit obedience, had to be formed before political organization was possible.

what makes one tribe – one incipient tribe, one bit of a tribe – to differ from another is *their relative faculty* [Darwin's underlining] of coherence. The slightest symptom of legal development, the least indication of a military bond, is then enough to turn the scale. The compact tribes win, and the compact tribes are the tamest. Civilisation begins, because the beginning of civilisation is a military advantage.<sup>15</sup>

Darwin seems to have liked this argument, for he made a note - "457 coherence" – on the last page of the article. Perhaps he was reminded of Galton's emphasis on the selective importance of affections making for social solidarity. He also underlined Bagehot's quotation from "Captain Galton" to the effect that the wild members of every flock tend to be lost or slaughtered, leaving the tame animals to "bequeath their domestic aptitudes to the future herd."

But if rigid conformity and adherence to tradition were prerequisite for the achievement of a civilized state, how was social progress possible? It came about primarily, said Bagehot, through conflict between tribes, na-

<sup>15.</sup> Walter Bagehot, "Physics and Politics," The Fortnightly Rev. April 1, 1868, p. 456.

tions, and races, resulting in racial mixtures some of which produced "beneficial variability."

In the early world many mixtures must have wrought many ruins; they must have destroyed what they could not replace, — an inbred principle of discipline and order. But if these unions of races did not work thus; if, for example, the two races were so near akin that their morals united as well as their breeds, if one race by its great numbers and prepotent organisation so presided over the other as to take it up and assimilate it, and leave no separate remains of it, *then* [Darwin's underlining] the admixture was invaluable. It added to the probability of variability, and therefore of improvement; and if that improvement even in part took the military line, it might give the mixed and ameliorated state a steady advantage in the battle of nations, and a greater chance of lasting in the world.<sup>16</sup>

Darwin was interested in this argument, as his underlining of the words "beneficial variability" in a similar passage shows. The subject of racial mixtures was very much on his mind at this time in connection with his work on *The Variation of Animals and Plants under Domestication*. In that work he speculated on the possible deleterious effects of racial mixtures as follows:

When two races, both low in the scale, are crossed, the progeny seems to be eminently bad. Thus the noble-hearted Humboldt, who felt none of that prejudice against the inferior races now so current in England, speaks in strong terms of the bad and savage disposition of Zambos, or half-castes between Indians and Negroes; and this conclusion has been arrived at by various observers. From these facts we may perhaps infer that the degraded state of so many half-castes is in part due to reversion to a primitive and savage condition, induced by the act of crossing, as well as to the unfavorable moral conditions under which they generally exist.<sup>17</sup>

What Darwin thought of Bagehot's notion that racial mixtures might occasionally produce beneficial variations capable of counteracting the inertial tendency of stable societies is not clear, but he underscored Bagehot's exposition of the "terrible sanctions" which, in arrested civilizations like those of the Orient, "killed out of the whole society the propen-

<sup>16.</sup> Ibid., p. 467.17. Darwin, Variation of Animals and Plants, pp. 46-47.

sities to variation which were the principle of progress," and wrote in the margin: "nations which wander & cross would be most likely to vary."

Darwin also showed great interest in Bagehot's discussion of the positive and negative effects of selection by war and military conquest. On the whole, Bagehot was inclined to stress the positive effects. Conceding that war did not nourish humanitarian sentiments and respect for human rights, he nevertheless concluded that the "preliminary virtues" – valor, veracity, the spirit of obedience, the habit of discipline – had been essential to the progress of the human race, especially in the early stages of civilization. "Any of these, and of others like them, when possessed by a nation, and no matter how generated, will give them a military advantage, and make them more likely to *stay* in the race of nations." Darwin was to return to this question in *The Descent of Man*.

All in all, Darwin seems to have found much food for thought in Bagehot's essays. "If you had time," he wrote to Joseph Dalton Hooker, "you ought to read an article by W. Bagehot in the April number of the Fortnightly, applying Natural Selection to early or prehistoric politics, and, indeed, to late politics, - this you know is your view."<sup>18</sup> Though he attributed the idea to Hooker, Darwin himself was interested in applying the theory of natural selection to history. He underlined, no doubt with some satisfaction, Bagehot's observation that "as every great scientific conception tends to advance its boundaries and to be of use in solving problems not thought of when it was started, so here, what was put forward for mere animal history may, with a change of form, but an identical essence, be applied to human history." In The Descent of Man Darwin would echo several of Bagehot's assertions: that progress is not inevitable or even usual in human societies, that any form of polity is better than none, that military conflict has negative as well as positive effects on human progress. He may also have drawn unconsciously on Bagehot's theory of social imitation in developing his own concept of the role of "standards of excellence" in the progress of civilization. Bagehot applied this theory primarily in explaining the origins of national character: "At first a sort of 'chance predominance' made a model, and then invincible attraction, the necessity which rules all but the strongest men to imitate what is before their eyes, and to be what they are expected to be, moulded men to that model." Finally, Bagehot echoed Galton in speculating that the "eager restlessness" and "highly-strung nervous organizations" of the Anglo-Americans were "useful in continual struggle, and also ... promoted by it." Here again Darwin concurred.

18. Charles Darwin, *More Letters of Charles Darwin*, ed. Francis Darwin, 2 vols. (London: John Murray, 1903), I, 298.

Still further light is thrown on the development of Darwin's views on social evolution by his annotations of a little-known work entitled *Man: Where, Whence, and Whither. Being a Glance at Man in His Natural-History Relations,* published in Edinburgh in 1867. The author, David Page, was a Fellow of the Royal Society of Edinburgh and of the Geological Society and author of several books on geology and paleontology. Apparently, Darwin once planned to quote various parts of this book, for several page references are listed on the inside of the back cover with a large "Q" beside them, but he subsequently changed his mind and drew a large X through the whole.

Page's main thesis was that the progress of civilization had been brought about by the successive emergence of new and higher races in the struggle for existence, "the later from the earlier, the higher from the lower, and the lower from those next beneath them." First came the Negro, then the Malay, the American Indian, and the Mongol, and finally the Caucasian. "The higher and advancing has ever passed over the inferior and stationary; the older and effete must ever make way for the recent and vigorous. The whole history of mankind is but a record of aggression and subjugation, of progress and extinction."<sup>19</sup> The progressive improvement of the human race through the competition of nations and races would continue into the future, Page predicted. "In virtue of the great law of cosmical progression, the white will be superseded by higher varieties, and the man of the future will excel the man of the present, even more than the most exalted European philosopher excels the wretched Bushman or Andamaner."

One suspects that Darwin responded sympathetically to passages like these. Had he not written Lyell several years earlier that "the white man is 'improving off the face of the earth' even races nearly his equal" and confessed that it would give him "infinite satisfaction" to believe that his generation would be regarded as "mere Barbarians" in a remotely distant future? <sup>20</sup> Whatever the case, Darwin marked the passage in which Page recited the catalogue of peoples – Chaldeans, Phoenicians, Hebrews, Pelasgians, Greeks, Romans, Moors, Celts, Franks, and Anglo-Saxons – who had successively made their mark upon history, jotting a reminder to himself – "171 Extinction of old civilizations" – in the back of the book.

<sup>19.</sup> David Page, Man: Where, Whence and Whither. Being a Glance at Man in His Natural-History Relations (Edinburgh: Edmonston and Douglas, 1867), p. 91.

<sup>20.</sup> Letter from Charles Darwin to Charles Lyell, Down, April 27, 1860, quoted in *More Letters*, II, 30: "I cannot explain why, but to me it would be an infinite satisfaction to believe that mankind will progress to such a pitch that we should [look] back at [ourselves] as mere Barbarians." See also the quo<sup>a</sup>tion in n. 3 and Darwin's letter to Lyell dated January 4, 1860 *Life and Letters*, II, 262.

He also drew a line and wrote "refer to" in the margin beside the following passage, which concluded Page's account of the successive triumphs of ever nobler races in the march of human progress:

Bound by the obligations of enlightened humanity, the white man may and must endeavour to civilise and ameliorate the condition of his less enlightened and coloured brethren; but no humanising scheme, however anxious or earnest, can ever arrest that law which has destined the progression of the human race – the extinction of the inferior, and the rise and spread of the higher varieties. Humanly speaking, it is only in this way that the progressive advancement of mankind can ever by attained; rationally, it is the only method the human mind can comprehend and appreciate.<sup>21</sup>

So far as I know, Darwin never referred to this passage in his writings, but it may well have been in the back of his mind when, in writing *The Descent of Man*, he struggled to reconcile his conviction that competition between individuals, tribes, nations, and races was essential to the progress of mankind with his equally strong sense of "the obligations of enlightened humanity" toward peoples "lower in the scale" of human existence.

In Chapters 4 and 5 of *The Descent of Man* the results of Darwin's reflection on these and other books and articles he had read and annotated were set forth at considerable length. Ever since the publication of the *Origin of Species*, speculation had been rife concerning the bearing of Darwin's theory of natural selection on the evolution of man and society. "Light will be thrown on the origin of man and his history," Darwin had predicted. Now it was time for Darwin himself to shed light on this all-absorbing question.

In general, Darwin recognized three kinds of influences in human evolution: (1) the action of natural selection on man's physical, intellectual, and moral faculties; (2) the inherited effects of mental and moral exercise; and (3) the influence of social institutions, public opinion, and other cultural factors. In the case of precivilized societies, he assigned predominant influence to natural selection, aided by the inherited effects of mental and moral training and activity. As to the "intellectual faculties," he wrote:

We can see, that in the rudest state of society, the individuals who were the most sagacious, who invented and used the best weapons or traps,

21. Page, Man: Where, Whence and Whither, p. 92.

18

and who were best able to defend themselves, would rear the greatest number of offspring . . . The stature and strength of the men of a tribe are likewise of some importance for its success, and these depend in part on the nature and amount of the food which can be obtained. In Europe the men of the Bronze period were supplanted by a race more powerful, and, judging from their sword-handles, with larger hands; but their success was probably still more due to superiority in the arts . . . At the present day civilised nations are everywhere supplanting barbarous nations, excepting where the climate opposes a deadly barrier; and they succeed mainly, though not exclusively, through their arts, which are the products of the intellect. It is, therefore, highly probable that with mankind the intellectual faculties have been mainly and gradually perfected through natural selection; and this conclusion is sufficient for our purpose.<sup>2</sup>

Darwin here appears to interpret superiority in "the arts" (technology) as evidence of innate intellectual superiority, which, in turn, is viewed as the product of natural selection. This is in keeping with the view expressed in his letter to Lyell in 1859: "I can see no difficulty in the most intellectual individuals of a species being continually selected and the intellect of the new species thus improved, aided probably by effects of inherited mental exercise. I look at this process as now going on with the races of man; the less intellectual races being exterminated."

Darwin noted, however, that, "as the progenitors of man became social," the intellectual powers would be increased and modified through imitation and the inherited effects of mental activity as well as by natural selection. The interplay of these various influences is described as follows:

Now, if some one man in a tribe, more sagacious than the others, invented a new snare or weapon, or other means of attack or defence, the plainest self-interest . . . would prompt the other members to imitate him; and all would thus profit. The habitual practice of each new art must likewise in some slight degree strengthen the intellect. If the new invention were an important one, the tribe would increase in number, spread, and supplant other tribes. In a tribe thus rendered more numerous there would always be a rather greater chance of the birth of other superior and inventive members. If such men left children to inherit their mental superiority, the chance of the birth of still more ingenious members would be somewhat better, and in a small tribe

22. Darwin, Descent of Man, p. 128.

decidedly better. Even if they left no children, the tribe would still include their blood-relations; and it has been ascertained by agriculturists that by preserving and breeding from the family of an animal, which when slaughtered was found to be valuable, the desired character has been obtained.<sup>23</sup>

Here again, the emphasis is on natural selection of the most intelligent individuals, the multiplication of the tribe through its superiority in technology, and the consequent increase in the chances of producing "other superior and inventive members." The habitual practice of the newly invented arts provides an auxiliary source of intellectual improvement.

As for man's "social and moral faculties," such as sympathy, fidelity, and courage, these too, Darwin conjectured, "were no doubt acquired ... through natural selection, aided by inherited habit."

Obedience, as Mr. Bagehot has well shewn, is of the highest value, for any form of government is better than none. Selfish and contentious people will not cohere, and without coherence nothing can be effected. A tribe rich in the above qualities would spread and be victorious over other tribes. But in the course of time it would, judging from all past history, be in its turn overcome by some other tribe still more highly endowed. Thus the social and moral qualities would tend slowly to advance and be diffused throughout the world.<sup>24</sup>

Darwin even tried to envisage the steps by which the number of morally well-endowed men might increase in certain tribes. The habit of aiding one's fellow tribesmen, he reasoned, might originate from an expectation of receiving their aid in return. This habit, practiced through many generations, would tend to be inherited. More important still, public opinion within the tribe would strongly reinforce socially desirable modes of behavior and discourage nonsocial ones. In the long run, the increase in the number of well-endowed men and the steady advance in the standard of morality would give the tribes undergoing these changes victory over other tribes, "and this would be natural selection." "At all times throughout the world tribes have supplanted other tribes; and as morality is one important element in their success, the standard of morality and the number of well-endowed men will thus everywhere tend to rise and increase."<sup>25</sup>

23. Ibid., p. 129.24. Ibid., p. 130.25. Ibid., p. 132.

That "moral faculties", like intellectual abilities, were heritable Darwin had no doubt, but whether the effects of moral training were also heritable was a question on which he was less sure. In *The Descent of Man* he quoted the dictum of "our great philosopher" Herbert Spencer that "the experiences of the human race, have been producing corresponding modifications, which, by continued transmission and accumulation, have become in us certain faculties of moral intuition," and commented as follows:

There is not the least inherent improbability, as it seems to me, in virtuous tendencies being more or less strongly inherited; for, not to mention the various dispositions and habits transmitted by many of our domestic animals to their offspring, I have heard of authentic cases in which a desire to steal and a tendency to lie appeared to run in families of the upper ranks ... Except through the principle of the transmission of moral tendencies, we cannot understand the differences believed to exist in this respect between the various of mankind.<sup>26</sup>

Darwin was cautious on this point. He wrote "believed to exist" rather than "existing" and noted that the strong moral aversion to "unclean" food in certain religious sects was not inherited. He concluded, however, that virtuous tendencies, at least in some cases, were probably heritable and that "they become first impressed on the mental organization through habit, instruction and example, continued during several generations in the same family, and in a quite subordinate degree, or not at all, by the individuals possessing such virtues having succeeded best in the struggle for life." This discussion, strongly reminiscent of similar passages in Galton's essays on "Hereditary Talent and Character," ends on a strongly optimistic note. The social instincts, established by natural selection and strengthened by reason, habit, instruction and example, will gradually become more tender and widely diffused, "extending to men of all races, to the imbecile, maimed, and other useless members of society, and finally to the lower animals," as the standard of morality rises higher and higher.

Looking to future generations, there is no cause to fear that the social instincts will grow weaker, and we may expect that virtuous habits will grow stronger, becoming perhaps fixed by inheritance. In this case the struggle between our higher and lower impulses will be less severe, and virtue will be triumphant.<sup>27</sup>

26. Ibid., pp. 123–124. 27. Ibid., p. 124.

In Chapter 5 Darwin made the transition from precivilized to civilized societies and discussed the causes of progress and retrogression in recorded history. Progress, he observed on the authority of Bagehot and Sir Henry Maine, is not normal in human society. In primeval times it came about chiefly through the action of natural selection on man's intellectual and moral faculties in the struggle for existence. (Here Darwin cites Wallace's "admirable paper" of 1864.) In civilized societies, however, the action of natural selection is greatly diminished by the spread of humanitarian sentiments which tend to prevent the speedy elimination of the weak, the sick, the malformed, the incompetent, and other "useless" members of society. Here Darwin plunged into a discussion of negative selection in civilized society, explicitly acknowledging his debt to Wallace, Galton, and Greg. Declaring his own conviction that the humanitarian impulses of civilized man cannot be curbed without injuring "the noblest part of our nature," he went on to argue that natural selection was still operative to some degree in civilized societies and that progress or retrogression in a given society depended to a great extent on the balance between the "downward tendency" of negative selection and the positive factors counteracting it.

If the various checks [on this downward tendency]...do not prevent the reckless, the vicious and otherwise inferior members of society from increasing at a quicker rate than the better class of men, the nation will retrograde, as has too often occurred in the history of the world. It is very difficult to say why one civilised nation rises, becomes more powerful, and spreads more widely, than another. We can only say that it depends on an increase in the actual number of the men endowed with high intellectual and moral faculties, as well as on their standard of excellence. Corporeal structure appears to have little influence, except so far as vigour of body leads to vigour of mind.<sup>28</sup>

In the ensuing paragraphs Darwin applied this general thesis to the development of Western civilization, citing the arguments of Galton, Lyell, Greg, and others in his footnotes. With Galton and Lyell he maintained that the practice of celibacy in the Middle Ages had had "a deteriorating influence on each successive generation" and that the Inquisition had retarded progress by removing from the reproductive pool the freest and boldest men – "those who doubted and questioned, and without doubting there can be no progress." Like Galton, Bagehot, and Page, he attributed the "wonderful progress" of the United States and the character of its

28. Ibid., p. 140.

22

people to the operation of natural selection, endorsing the view of the Rev. Foster Zincke that: "All other series of events – as that which resulted in the culture of mind in Greece, and that which resulted in the empire of Rome – only appear to have purpose and value when viewed in connection with, or rather as subsidiary to . . . the great stream of Anglo-Saxon emigration to the west."

Darwin recognized, however, that natural selection was not the sole and sufficient explanation of progress and retrogression in civilized societies. If that were the case, the Greeks, "who stood some grades higher in intellect than any race that has ever existed," would have conquered their neighbors and spread throughout Europe. Their failure to do so Darwin interpreted as evidence that natural selection was but one of several factors at work. "The Greeks may have retrograded from a want of coherence between the many small states, from the size of their whole country, from the practice of slavery, or from extreme sensuality; for they did not succumb until 'they were enervated and corrupt to the very core'".

Thus Darwin attempted to balance the influence of purely cultural factors in social evolution against the long-run effects of natural selection in the struggle for existence. During most of human history, he was convinced, natural selection had played the dominant role: "Had he [man] not been subjected during primeval times to natural selection, assuredly he would never have attained to his present rank." In civilized societies, however, natural selection played a smaller role, "for such nations do not supplant and exterminate one another as do savage tribes." "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 nations, and enforced by public opinion."<sup>29</sup> But natural selection was still at work, even in civilized nations. The more intelligent members of such nations would be more successful than the inferior members and leave a more numerous progeny. In the long run, Darwin concluded, "a nation which produced during a lengthened period the greatest number of highly intellectual, energetic, brave, patriotic, and benevolent men, would generally prevail over less favored nations." And those peoples, like the Spainards in South America, who had ceased to be subject to a severe struggle for existence would tend to become indolent and retrograde.

So it was in Darwin's "General Summary" at the end of *The Descent of Man.* On the one hand, he stressed the predominant influence of "habit, the reasoning powers, instruction, religion, &c.," in improving the "moral

29. Ibid., p. 143.

qualities" which constituted "the highest part of man's nature." On the other, he insisted on the necessity of a "severe struggle" if mankind was to advance still further instead of sinking into indolence: "our natural rate of increase, though leading to many and obvious evils, must not be greatly diminished by any means. There should be open competition for all men; and the most able should not be prevented by laws or customs from succeeding best and rearing the largest number of offspring."<sup>30</sup> British belief in the beneficent effects of competitive struggle had not yet succumbed to the ethos of the welfare state.

It should be apparent from the foregoing discussion that there was nothing original in Darwin's views on social evolution except the general perspective provided by his theory of evolution by natural selection, and that had been anticipated to a considerable degree in the matter of social evolution by Herbert Spencer's writings in the 1850's. Darwin did little, if any, original research on social evolution, but he read widely in search of information that would illustrate the applicability of his theory of natural selection to the case of man. Before 1859, as we have seen, his attention was focused on the struggle for existence among tribes and races in early human history, with special emphasis on races as the human equivalent of the varieties produced by natural selection among animals generally. But he decided to omit this aspect of his theory from the Origin of Species in order not to distract attention from the main theme.

The publication of Darwin's Origin of Species led inevitably to attempts, especially in Britain, to apply the theory of natural selection to the favorite problem of nineteenth-century social theorists: the causes of progress and retrogression in human history. Building on the tradition of British political economy, Spencer had already stressed the importance of competitive struggle and survival of the fittest, aided by the inherited effects of mental and moral exercise, in social evolution; and Bagehot, Galton, and others soon followed suit in the wake of Darwin's Origin of Species. In less than a decade the idea of progress through competitive struggle was elevated from the status of a principle of political economy to that of a law governing biological and social evolution. The "Lamarckian" principle of the inheritance of acquired characters, far from constituting a rival principle of explanation, was viewed as cooperating with the law of natural selection in bringing about the gradual improvement of the human race. Finally, the sense of Western, and more especially British or Anglo-Saxon, superiority over other nations and races seemed confirmed by the findings of science as well as by the progress of history.

30. Ibid., p. 618.

24

There can be little doubt that Darwin shared these ebullient beliefs in the upward progress of mankind through the competition of individuals, tribes, nations, and races and the inherited effects of mental and moral exercise, in the peculiar excellence of the Anglo-Saxon people, and in the gradual triumph of superior races over those "lower in the scale." In November 1878, he confided to G. A. Gaskell his reservations about artificial checks on human procreation:

Suppose that such checks had been in action during the last two or three centuries, or even for a shorter time in Britain, what a difference it would have made in the world, when we consider America, Australia, New Zealand, and S. Africa. No words can exaggerate the importance, in my opinion, of our colonisation for the future history of the world. If it were universally known that the birth of children could be prevented, and this were not thought immoral by married persons, would there not be great danger of extreme profligacy amongst unmarried women, and might we not become like the "arreoi" societies in the Pacific? In the course of a century France will tell us the result in many ways, and we can already see that the French nation does not spread or increase much.<sup>31</sup>

Again, in 1881, less than a year before his death, Darwin reaffirmed his faith in the efficacy of natural selection in human history in a letter to William Graham:

I could show fight on natural selection having done and doing more for the progress of civilization than you seem inclined to admit. Remember what risk the nations of Europe ran, not so many centuries ago, of being overwhelmed by the Turks, and how ridiculous such an idea now is! 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, what an endless number of the lower races will have been eliminated by the higher civilized races throughout the world.<sup>32</sup>

This view of history would find few supporters today, but we should not therefore rush to brand Darwin a "racist" or dismiss him as a bourgeois exponent of British imperialism. If, as seems clear, he shared the belief of

<sup>31.</sup> Letter from Darwin to G. A. Gaskell, Down, November 15, 1878, quoted in More Letters, 11, 50.

<sup>32.</sup> Letter from Darwin to William Graham, Down, July 3, 1881, quoted in Life and Letters, I, 316.

most of his contemporaries in the existence of racial differences in intellectual ability and moral disposition, he did so because he thought the evidence seemed to require it, and he qualified his statements in cases where the evidence seemed contradictory, as in the case of the moral differences "believed to exist" between human races. Ever the cautious scientist, Darwin was much more reserved and open-minded in his judgments on the heritability of acquired characters, the superior talents of the Anglo-Saxon peoples, and the role of natural selection in history than were most of the writers whose works he read and annotated. Above all, he was careful to recognize "the obligations of enlightened humanity" toward the peoples of every nation and race and to make it clear that, whatever the deleterious genetic effects of preserving the sick, the weak, and the imbecile, people must obey the promptings of their sympathetic impulses, for these, too, were products of the evolutionary process. But even with respect to these impulses of our "nobler nature," Darwin could not resist hoping that they, too, would eventually become part of man's genetic endowment, "fixed by inheritance." Only if nurture could be transformed into nature by natural selection and the inherited effects of habit and moral training could Darwin enjoy the high satisfaction of believing that he and Lyell and Huxley – yes, even Shakespeare and Newton – would some day be looked back on as mere savages by a remote posterity shaped to a higher destiny by the patient processes of nature-history.

From the foregoing account of the development of Darwin's ideas about social evolution it seems fair to conclude that what we call "social Darwinism" - the belief that competition between individuals, tribes, nations, and races has been an important, if not the chief, engine of progress in human history - was endemic in much of British thought in the midnineteenth century, that Darwin's Origin of Species gave a powerful boost to this kind of thinking, and that Darwin himself was deeply influenced by this current of thought. We should not jump to the conclusion that all British social thought was of this character, however. As John W. Burrow has shown in his excellent book Evolution and Society: A Study in Victorian Social Theory, Sir Henry Maine, J. F. McLennan, Edward Tylor, John Stuart Mill, and others made important contributions to social theory without benefit of Spencerian or Darwinian ideas.<sup>3 3</sup> Nevertheless, it is clear that more attention should be paid to the intellectual milieu in which Darwin worked. The idea that Darwin, unlike Spencer and other contemporaries, was a pure scientist confronting nature unhampered by

33. John W. Burrow, Evolution and Society: A Study in Victorian Social Theory (Cambridge: Cambridge University Press, 1966).

preconceived ideas about nature, society, man, and God must be abandoned. Like every other scientist, Darwin approached nature, human nature, and society with ideas derived from his culture, however much his scientific researches may have changed those ideas in the long run. This essay has given some idea of the assumptions about man and society he imbibed from British culture along with Spencer, Wallace, Bagehot, Galton, and Greg. A future essay will attempt to delineate a more general Spencerian-Darwinian world view on which Spencer, Darwin, Wallace, and Huxley converged about 1860, only to diverge again before the century had run its course.

# Acknowledgements

I wish to express my gratitude to Mr. Peter Gautrey and Dr. Sidney Smith for assistance in deciphering Darwin's marginal notes, to the National Endowment for the Humanities for a Senior Fellowship that made these researches possible, and to the Master and Fellows of Corpus Christi College for extending the privileges of the college to me during my term as Senior Visiting Scholar.