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Social Darwinism

by

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Social Darwinism

Naomi Beck

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"In the distant future I see open fields for far more important researches. . . . Light will be thrown on the origin of man and his history" (Darwin [1859] 2003, p. 488). This statement, which appears in the concluding chapter to the *Origin of Species*, was Darwin's only mention of human evolution in the entire book. He was well aware of the difficulties his biological propositions would encounter from believers in special creation and therefore thought it wise to leave the delicate question of human evolution aside for the time being. Darwin was nonetheless fully conscious that his theory *would* lead to important insights in this domain and would probably revolutionize the way we think about ourselves and our cultures. Enter social Darwinism.

The term social Darwinism, which came into fashion after 1940 (Hodgson 2004), has been used mainly to decry doctrines that justify some form of individual, social, or racial superiority through evolutionary principles with which Darwin's theory is identified, such as the struggle for existence and natural selection. It has also been employed in reference to teleological explanations of the causes of human progress that often carry with them value judgments concerning the degree of civilization attained by various peoples. Yet many of the positions typically attached to social Darwinism do not correspond to this stereotypical description. Even among the main proponents of evolutionary theory in the nineteenth century – Darwin, Wallace, Huxley, and Spencer – there were important disagreements concerning the process of evolution in humans and its results. This article offers an examination of their claims, as well as some related and antagonistic viewpoints, in an effort to tease out the various and complex meanings of social Darwinism. By tuning the microscope to grasp the finer details, a surprisingly different picture from the one usually conveyed by this blanket term will emerge.

The context of our story is composed of two related elements: on the one hand, the debate over wealth distribution and landownership, and on the other, the question of the relationship between evolution and ethics. I intentionally leave aside other subjects associated with social Darwinism, for example, racism and imperialism, for the sake of a more focused analysis. Another reason for concentrating on the relationship between evolution, economics, and ethics resides in the predominance of this issue in the public debate from the 19th century up to the present day.

Survival of the Fittest, Progress, and Capitalist Competition

The most appropriate thinker with which to begin our examination is not Darwin but rather his contemporary Herbert Spencer. Nowadays, Spencer is an almost forgotten figure, yet his reputation during the second half of the nineteenth century rivalled that of Darwin. More importantly, while Darwin was first and foremost a naturalist, Spencer was a philosopher, and his main interest lay from the outset in politics and social progress, or more generally human evolution. Spencer wrote on these subjects close to a decade before the publication of the *Origin of Species*. His first book, *Social Statics* (1851), was an attempt to develop a science-based morality and uncover the conditions essential to human happiness. According to Spencer, the most important of these conditions was liberty, because, without the liberty to exercise the faculties, any living organism would suffer or, in the extreme case, die. This "physiological truth" led Spencer to declare the law of equal freedom as the principal moral rule: "Every man may claim the fullest liberty to exercise his faculties provided always he does not trench upon the similar liberty of any other (Spencer [1892] 2009, p. 39)." From this first law, Spencer derived all other forms of individual liberty, such as the right of free speech and the right of property, and specified their political applications.

Spencer ([1892] 2009, p. 151) argued that when a government tries to alleviate social suffering, for instance with poor laws destined to help the underprivileged, the result would be greater misery: "Blind to the fact, that under the natural order of things society is constantly excreting its unhealthy, imbecile, slow, vacillating, faithless members . . . unthinking, though well-meaning, men advocate an interference which not only stops the purifying process, but even increases the vitiation – absolutely encourages the multiplication of the reckless and incompetent by offering them an unfailing provision, and discourages the multiplication of the competent and provident by heightening the prospective difficulty of maintaining a family." This is the principle

known as "survival of the fittest," an expression coined by Spencer in an article published a year after *Social Statics*. He used it to describe the mechanism employed by nature to assure the survival of the only part of the population able to adapt to conditions of existence.

Darwin adopted Spencer's expression in later editions of the Origin of Species, in conjunction with "natural selection," as a way to clarify his original metaphor. The two thinkers however had very distinct views on evolution, especially its relationship to progress. For Spencer, evolution and progress were synonymous. In 1857 he published an article with the telling title "Progress, Its Law and Cause," in which he claimed that a universal law of evolution is accountable for all change in nature, human beings, and society. Shortly afterward, Spencer announced his intention to publish a full-fledged System of Synthetic Philosophy, which promised to demonstrate in multiple volumes the workings of the universal law of evolution in biology, psychology, sociology, and ethics. The enterprise won him worldwide reputation as the thinker who provided a link between biological and social development. Spencer established this biosocial connection through an organic analogy between living organisms and social "superorganisms." He maintained that the same principles govern the progress of both types of organisms: growth leads to increasing division of labour, which in turn engenders greater complexity of structure. He added however an important caveat to this description in order to accommodate his political position in favour of individualism and restricted government intervention.

According to Spencer, in biological organisms, the emergence of a nervous system and the development of a brain, which functions as a central regulating organ of the body, are the signs of a highly evolved animal. In the social organism, the presence of a central coercive authority is instead the sign of a low phase of evolution, a transitory state that Spencer termed the *militant* type. As societies grow in dimension, and the division of labour becomes more important, the *industrial* type emerges, in which economic competition replaces the violent struggle for existence as the motor of further progress. In Spencer's openly teleological account of social development, evolution has a goal, defined as a society governed by the law of equal freedom and regulated through its economic systems of production and distribution, without any need for government intervention other than for the maintenance of justice and protection against outside aggressions. In the name of this view of social development, Spencer condemned most social reforms as measures that either hinder natural progress or vainly attempt to accelerate it.

Proponents of free-market competition, such as American magnate and philanthropist Andrew Carnegie, held Spencer's views in great esteem. In *The Gospel of Wealth*, Carnegie (2009, p. 186) attempted to justify the great social inequalities of modern industrial society as necessary for the progress of humanity, claiming that, "while the law [of competition] may be sometimes hard for the individual, it is best for the race, because it insures the survival of the fittest in every department. We accept and welcome, therefore, as conditions to which we must accommodate ourselves, great inequality of environment; the concentration of business, industrial and commercial, in the hands of a few; and the law of competition between these, as being not only beneficial, but essential for future progress of the race." Carnegie proposed to alleviate the severity of crude capitalism through increased inheritance taxes and large-scale philanthropy (Bannister 2006) Spencer himself, however, did not feel entirely comfortable with this use of evolutionary theory to endorse cutthroat competition.

In a little known speech, delivered on the occasion of a visit to the United States in 1882, Spencer beseeched the audience to promote the "gospel of relaxation" instead of the "gospel of work." Lamenting the harsh consequences of a merciless struggle for wealth, Spencer warned his listeners of the ill effects an intense race for riches would have on their physical and mental constitutions: "Nature quietly suppresses those who treat thus disrespectfully one of her highest products, and leaves the world to be peopled by the descendents of those who are not so foolish." Observing his fellow Americans, prematurely aged, and often suffering from depression, Spencer was distressed by the toll that material development took on American civilization. In his eyes, "Americans have diverged too widely from savages," and their "high-pressure life" has reached an extreme that risked leading to degeneration instead of further progress (Youmans 2008, pp. 29-31, 35). Despite this criticism, Spencer remained faithful to free-market competition throughout his life. Many of his admirers, however, changed their position radically when faced with the great inequalities in wealth distribution. This was the case of Spencer's good friend and the co-discoverer of the theory of evolution by natural selection, Alfred Russel Wallace.

The Perfect Social State and Human Selection in Industrialized Societies

In a report on research conducted in the Malay Archipelago, Wallace (1869, pp. 456-57, italics in the original) wrote: "We most of us believe that we, the higher races, have progressed and are progressing . . . [but] if we continue to devote our chief energies to the utilizing of our knowledge of the laws of nature with the view of still further extending our commerce and our wealth, the evils which necessarily accompany these when too eagerly pursued, may increase to such gigantic dimensions as to be beyond our power to alleviate. We should now clearly recognise the fact, that the wealth and knowledge and culture of the few, do not constitute civilisation, and do not of themselves advance us towards the 'perfect social state."" The notion of a "perfect social state" came from Spencer's philosophy, which had considerable influence on Wallace. The latter concluded his famous discourse on "The Origin of human races and the antiquity of man" (1864) with a reflection on the future of humanity that predicted a society governed by the law of equal freedom and composed of "a single homogeneous race, no individual of which will be inferior to the noblest specimens of existing humanity." However, in the same lecture, Wallace (1864) clxviii–clxix) also maintained that natural selection stopped modifying humans' bodily structures at some point in the past while continuing to act on their intellectual and mental faculties. This meant that, when applied to humans, the survival of the fittest was in fact the survival of those who were more fit for the "social state." In other words, natural selection in humans leads to the displacement of the less morally advanced individuals by those with superior "sympathetic feelings," who readily help the sick and less fortunate members of society.

Faithful to this view, Wallace was greatly impressed by American socialist Henry George's treatise on *Progress and Poverty*. George ([1879] 2005, pp. 265-66) argued that the great advances in material development did not deliver their awaited benefits. In fact, he claimed: "Progress simply widens the gulf between rich and poor." George denounced the "prevailing belief" that society moves forward through a struggle for existence that spurs people to new efforts and inventions, in which the more capable and industrious prosper and propagate their kind. This misconception, he contended, puts a scientific cachet on opinions popular among capitalists and leads to a sort of "hopeful fatalism: progress is the result of slow, steady, remorseless forces. War, slavery, tyranny, superstition, famine, and poverty are the impelling

causes that drive humans on. They work by eliminating poor types and extending the higher." As counterevidence to this view, George called on the voice of history, with its many examples of civilizations that have advanced and then regressed. Progress, he concluded, was not an inevitable necessity. Moreover, the obstacles that bring it to a halt are caused by the course of progress itself. George ended his essay with a warning: unless the evils arising from unequal and unjust distribution of wealth were removed, they would expand until they swept us back to barbarism. His practical suggestion was to make land a common property by appropriating rent revenues through taxation. He predicted that a single tax on land would make all other taxes unnecessary, thereby reducing the gap between workers who earn wages and landowners who would no longer be able to charge rent and would have to find alternative ways to make a living.

George's ideas struck a chord with Wallace, who was already a member of the land reform movement, which led a campaign to transfer landownership to the state. In 1881 Wallace became president of the Land Nationalisation Society, and a year later published an essay that endorsed George's position. This brought Wallace into direct conflict with Spencer, who at this point turned his back on claims made in *Social Statics*. In that early treatise, highly praised by George and Wallace, Spencer argued that the right of all to use the earth, a right limited only by the equal rights of fellow individuals, forbids private property in land. However in the polemical collection of essays *Man versus the State*, Spencer ([1884] 1981, p. 39) criticized the land nationalization movement for disregarding the just claims of existing landowners, who have the right to enjoy the fruits of their, and their ancestors', past efforts. The proposed reform, Spencer retained, "goes more than half-way to State-socialism," and in so doing enslaves individuals to society.

Spencer attempted to justify his volte-face in part by stressing that the views advanced in *Social Statics* pertained to the "perfect social state," in which humans' intellectual and moral advancement would achieve its highest point as a natural result of prolonged existence in a free-market society. In Spencer's opinion, we were still far removed from this ideal, for otherwise it would have realized itself naturally, without any need for the external inducement of a reform movement. The argument is weak, and indeed it left many of Spencer's erstwhile followers, including Wallace, unconvinced. Wallace did not only go halfway to state socialism but went the whole way. In 1890, he published an article on "Human Selection," which, as he tells in his

autobiography ([1905] 2008, 2:209), he regarded as his most important contribution to the science of sociology and to the study of the causes of human progress. His aim was to show that by following a rational social organization, which recognizes the equal rights of all members of society to land and to an equal share of the wealth produced, human evolution would naturally progress in accordance with our most cherished ideals.

Wallace began his essay by quoting Francis F. Galton's studies on eugenics and August Weismann's research as conclusive evidence against the principle of heredity of acquired characteristics. It was clear, he asserted, that the beneficial influences of education, hygiene, and social refinement, which an individual may enjoy during his or her lifetime, did not have a cumulative effect, and therefore only selection could improve the stock of humanity. Wallace (1890, pp. 328–31, italics in the original) was critical of Galton's proposed scheme for "human betterment" through selective breeding not on ideological grounds but because he believed that it was an indirect and inefficient method to achieve the desired result: "What we want is not a higher standard of perfection in the few but a higher average, and this can be best produced by the elimination of the lowest of all and a free intermingling of the rest." Prima facie, this view seems to resonate with a hardhearted interpretation of the survival-of-the-fittest principle, but Wallace stipulated that for selection to take a beneficial course direct intervention of a specific kind was necessary: "It is my firm conviction . . . that when we have cleansed the Augean table of our existing social organisation, and have made such arrangements that all shall contribute their share of their physical or mental labour, and that all workers shall reap the *full* reward of their work . . . we shall find that a system of selection will come spontaneously into action, which will steadily tend to eliminate the lower and more degraded types of man, and thus continuously raise the average standard of the race."

Women held a special place in Wallace's system of selection. Thanks to better education, extended to both sexes until the age of twenty-one, and followed by three years in the "industrial army" before entering into the public service, the marriage age would be pushed back. This would put a check on the rapid increase of population and thereby reduce the severity of the struggle for existence. Furthermore, under the new social conditions, which would render every woman independent and provide her with proper intellectual preparation, female choice of partners would be more exacting. Young women would reject the idle, selfish, diseased, and "all

men who in any way fail in their duty to society," leaving the unfit unable to reproduce. Wallace (1890, pp. 332-37) insisted that this "weeding-out system," the social equivalent to natural selection, was in tune with the noblest attributes of humankind, such as the propensity to save the lives of the suffering and those who are maimed in body or mind.

Wallace explained that in "hitherto imperfect civilisation," the development of our moral character has been to some extent antagonistic to the process of extinction of the unfit. In the society of the future, this defect would be remedied through conditions that would encourage reproduction among the more capable men and women. Rather than a diminution in our humanity, the number of the less fortunate would diminish from generation to generation. If we leave aside the question of the validity of Wallace's rather optimistic analysis, one thing remains clear. In his eyes, natural selection was a "wholesome process," responsible not only for the elimination of the unfit but also for the development of the moral characteristics of our species and the pronounced expression of emotions such as compassion and sympathy. This was his position already in 1864, when he claimed that natural selection favoured in humans the sense of justice, cooperative behaviour for the sake of protection and assistance, and other traits that benefit the community. "For it is evident," Wallace then declared, "that such qualities would be for the well-being of man; . . . Tribes in which such mental and moral qualities were predominant, 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" (Berry 2002, p. 182). This idea would become the essence of Darwin's theory of community selection in humans. We now return to the thorny question of the origins and evolution of human morality, which posed a potential threat to Darwin's theory of natural selection.

Cooperation, Struggle, and Moral Behaviour

In the *Descent of* Man, Darwin was faced with the following dilemma. On the one hand, it seemed that the principle of survival of the fittest could not favour the rise of prosocial behaviour. Imagine, as Darwin did, a society made of selfish people. The individual willing to sacrifice herself or himself would die and not leave any offspring behind. Thus, on average, altruistic individuals would parish more often than the others, and there would be a natural

selection against altruism. On the other hand, Darwin ([1871] 1981, p. 162) thought, like Wallace, that "when two tribes of primeval man, living in the same country, came into competition, if the one tribe included (other circumstances being equal) a greater number of courageous, sympathetic and faithful members, who were always ready to warn each other of danger, to aid and defend each other, this tribe would without doubt succeed best and conquer the other." Thus, what appeared to be a winning strategy in the struggle for existence on the individual level, namely selfish behaviour, was a losing strategy on the group level.

In order to solve this conundrum, Darwin advanced the hypothesis that as humans' reasoning powers evolved, combined with accumulated experience, individuals learned that helping others increases the chances of getting help in return. From this "low motive" (p. 163) humans acquired the habit to help, which in turn strengthened pre-existing feelings such as sympathy. Throw into the mix the development of communication skills - especially the language of praise and blame – and the set-up was right, thought Darwin, for selection to favour pro-social behaviour within the group. Because groups possessing social and moral qualities in the highest degree would spread and be victorious over other groups in ongoing tribal wars, these qualities would tend to become more pronounced and diffused. As Darwin put it, "At all times throughout the world tribes have supplanted other tribes, and as morality is one element in their success, the standard of morality and the number of well-endowed men will thus everywhere tend to rise and increase" (p. 166). By preserving the groups that exhibit cooperative behaviour, natural selection could act indirectly on the individual and promote altruistic traits. Darwin's comments on the extermination and replacement of the "savage races" by the "civilised races" (p. 201), often used to point a blaming finger at his improper views, should be understood in the context of his theory of community selection and its central role in his account of the evolution of morality.

Darwin prophesized that as civilization developed and small tribes, which predominantly consisted of related members, were united into larger communities, the social instincts and sympathies of humans would extend, as reason and learning advanced, to include a widening circle of humanity and perhaps other sentient beings. In light of this belief, it may seem that Darwin, like Spencer, perceived evolution to be synonymous with progress. Yet Darwin's cautionary attitude made him hesitate to assign a specific direction to the evolutionary process.

"We must remember," he admonished, "that progress is no invariable rule. It is most difficult to say why one civilised nation rises, becomes more powerful, and spreads more and more widely, than another, or why the same nation progresses more at one time than at another." Darwin pointed to history's examples, namely the ancient Greeks, which given their high intellectual powers and great empire should have, according to the principle of natural selection, increased in number and stocked the whole of Europe. "Here we have a tacit assumption," Darwin remarked, "so often made with respect to corporeal structures, that there is some innate tendency towards continued development in mind and body. But development of all kinds depends on many concurrent favourable circumstances. Natural selection acts only in a tentative manner. Individuals and races may have acquired certain indisputable advantages and yet have perished from failing in other characters" (pp. 177–78). Darwin conceded, nevertheless, that it is "a truer and more cheerful view" to regard progress as general and "that man has arisen, though by slow and interrupted steps, from a lowly condition to the highest standard as yet attained by him in knowledge, morals and religion" (p. 184).

Darwin furthermore suggested that the "obscure . . . problem of the advance of civilisation" depended on an increase in population and the portion within it of benevolent members with high intellectual and moral faculties. Notice that population pressure, a condition that follows from increase in numbers and which leads to the struggle for existence, was for Darwin an indispensable factor in moral progress. He maintained that had humans not been subjected to the struggle for existence, and to the natural selection that follows from it, they would never have attained to "the rank of manhood" (p. 180). This opinion was not shared by his faithful "bulldog" Thomas Henry Huxley. Famously, Huxley exclaimed in an essay on The Struggle for Existence in Human Society: "From the point of view of the moralist the animal world is on about the same level as a gladiator's show." Similarly to Darwin Huxley (1894, pp. 199-200) did not think that evolution signified a constant tendency to increased perfection or progress and declared that "retrogressive is as practicable as progressive metamorphosis." However Huxley also argued that while society is undoubtedly part of nature, it is desirable and even necessary to consider it apart "since society differs from nature in having a definite moral object; whence it comes about that the course shaped by the ethical man – the member of society or citizen – necessarily runs counter to that which the non-ethical man – the primitive savage, or man as a mere member of the animal kingdom – tends to adopt. The latter fights out the struggle

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for existence to the bitter end, like any other animal; the former devotes his best energies to the object of setting limits to the struggle" (p. 203). Huxley believed that the origin of the problem lay in unlimited multiplication, which by exacerbating the struggle for existence tends to destroy society from within. The only solution to this predicament was to control the continual free fight by deliberately opposing nature.

Huxley reiterated this conclusion with greater conviction in a famous lecture on evolution and ethics: "Let us understand, once for all, that the ethical progress of society depends, not on imitating the cosmic process, still less in running away from it, but in combating it." According to Huxley, in the course of our development, the idea of justice underwent a gradual sublimation from punishment and reward according to acts, to punishment and reward according to desert. As a result, the conscience of humans began to revolt against the moral indifference of nature. Huxley denounced "fanatical individualism" for misunderstanding the nonmoral character of natural evolution and deplored the fallacy that arose from the "unfortunate ambiguity" of the phrase "the survival of the fittest"; whereby "fittest" received the connotation of "best" or "good" in a moral sense. He then continued to claim that laws and moral precepts should be directed to the end of curbing nature and to reminding the individual of his or her duty to the community in making peaceful and protected existence possible. Social organization should aim "not so much to the survival of the fittest, as to the fitting of as many as possible to survive" (Ruse 2009, pp. 80-83).

Huxley was undoubtedly one of the most critical voices against attempts to draw a connection between biological and cultural evolution. He saw nature as a formidable power, red in tooth and claw, yet believed, somewhat contradictorily, that humans' intelligence would provide enough stamina to counter this cosmic force. In the meantime, an alternative understanding of the nature of the evolutionary process emerged, carrying with it a very different message. It is most commonly associated with the view of Russian zoologist and anarchist Peter Kropotkin, though he was by no means the only one, or even the first, to enounce it. Kropotkin argued that mutual aid and support were as much a law of nature as the struggle for existence. He distinguished between two different aspects of the struggle for existence: the exterior war of the species against the harsh environment and other species, and the intraspecies war for means of subsistence. The latter, Kropotkin claimed, was often greatly exaggerated. He brought forth as

evidence his own observations made in Siberia of many adaptations for struggling in common against the adverse circumstances of the climate or against various enemies. Kropotkin ([1902] 2008, pp. 5, 12, 137) concluded that the animals which acquired habits of mutual aid were "undoubtedly the fittest" and the most highly developed. These findings applied also to human beings, whose history Kropotkin reviewed, asserting "the ethical progress of our race, viewed in its broad lines, appears as a gradual extension of the mutual aid principles from the tribe to always larger and larger agglomerations." Huxley's gladiatorial view was simply a "very incorrect representation of the facts of Nature."

Faced with the grim reality of the 1914 hostilities, Kropotkin wrote a preface to a reprint of Mutual Aid: A Factor in Evolution in which he condemned the use of the struggle for existence as an explanation for the war horrors. Though clearly the evidence for his theory was at this point far from convincing, Kropotkin did not lose faith. This might prompt us to ask whether some of the other viewpoints surveyed above relied on stronger foundations, and to ponder the essence of social Darwinism. Our survey shows that under the auspices of the theory of evolution the most disparate conceptions of progress, and diametrically opposed political positions, were heralded. Today there is still great disagreement as to how evolutionary principles apply to the human domain and what practical conclusions we can gain from understanding them. We know more about biology, and we have better tools to study the particularities of our species. Yet Darwin's prediction seems to hold: "light will be thrown," and we have still much to learn from further research into the history, psychology, and social behaviour of our species. Evolution is too complex a theory to yield quick or simple answers, and this complexity is at the core of many partial interpretations and abuses of it. It is also what makes the theory of evolution so fascinating: we know that it must provide invaluable insights if only for the reason that we are part of the living world.

References

Bannister R C. 2006. http://www.swarthmore.edu/SocSci/rbannis1/SD.htm

Berry A. (ed). 2002. Infinite Tropics: An Alfred Russel Wallace Anthology. London, Brooklyn, NY: Verso

Carnegie A. 2009. *The Autobiography of Andrew Carnegie & The Gospel of Wealth*. Digireads Publishing.

Darwin C. [1859] 2003. On the Origin of Species. Harvard University Press.

Darwin C. [1871] 1981. *The Descent of Man and Selection in Relation to Sex*. Princeton University Press.

George H. [1879] 2005. *Progress and Poverty* (edited and abridged by Robert Drake). NYC: Robert Schalkenbach Foundation.

Hodgson G M. 2004. "Social Darwinism in Anglophone Academic Journals: A Contribution to the History of the Term." *Journal of Historical Sociology* Vol. 17 No. 4: 428-463.

Huxley T H. 1894. *Collected Essays*. Vol. 9: *Evolution and Ethics and Other Essays*. London: Macmillan.

Kropotkin P [1902] 2008. Mutual Aid: A Factor of Evolution. Charleston, SC: Forgotten Books.

Ruse M (ed.) 2009. Evolution and Ethics. Princeton University Press.

Spencer H. [1892] 2009. Social Statics Abridged and Revised Together with the Man versus the State. Charleston, SC: BiblioLife.

Spencer [1884] 1981. The Man versus the State, with Six Essays on Government, Society and Freedom (ed. Eric Mack) Indianapolis: LibertyClassics.

Spencer H. [1904] 2005. Autobiography: Part One. Kessinger Publishing.

Wallace A R. 1864. "The origin of human races and the antiquity of man deduced from the theory of 'natural selection'". *Transactions of the Anthropological Society of London* 1: clviii– clxxxvii.

Wallace A R. 1869. The Malay Archipelago. London: Macmillan.

Wallace A R. 1890. "Human Selection." Fortnightly Review, 48: 325-337.

Wallace A R. [1905] 2008. *My Life: A Record of Events and Opinions*. Charleston, SC: BiblioLife.

Youmans E D L. 2008. Herbert Spencer on the Americans and the Americans on Herbert Spencer. Gadow Press.

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