

E. RAY LANKESTER, ECOLOGICAL MATERIALIST

An Introduction to Lankester's "The Effacement of Nature by Man"

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E Ray Lankester (1847 to 1929) is largely forgotten today—his importance is only just now being rediscovered. Yet, at the end of the 19th and the beginning of the 20th century, Lankester was at the very pinnacle of the British scientific establishment and a well-known, even larger-than-life, public figure. In Arthur Conan Doyle's (1993) *The Lost World*, the central protagonist is a brilliant but bellicose evolutionary biologist and comparative anatomist, Professor Challenger, who was most certainly modeled after Lankester, with whom Doyle was well acquainted. That Doyle had Lankester in mind at the time that he was writing *The Lost World* cannot be doubted because in introducing the question of vanished dinosaurs, Challenger refers to "an excellent monograph [*Extinct Animals*] by my gifted friend Ray Lankester" (Doyle, 1993, p. 35).

A member of the Royal Society, Lankester was the most famed Darwinian evolutionist in the generation following Darwin and Huxley, and from 1898 to 1907, he was the director of the British Museum of Natural History—a position that stood at the apex of his profession. Lankester had been Thomas Huxley's protégé, trained to carry on the evolutionary cause. Later, he became a close friend of Karl Marx in the last few years of Marx's life and was to be one of the mourners at Marx's funeral. He was also a close friend of H.G. Wells, an admirer of William Morris, and a mentor to J.B.S. Haldane, one of the great scientists of the next generation, central to the development of the neo-Darwinian synthesis. Lankester was to gain considerable public fame as an essayist on natural history, in a tradition established by such great scientists as Huxley and Tyndall. It was in this context that he wrote some of the most powerful essays on ecological degradation ever authored—the most important of which is "The Effacement of Nature by Man" (Lankester, 1913, pp. 365-372), reprinted in this issue.

Ray Lankester's father, Edwin, was a noted biologist. He was a founder and for 25 years the president of the biological section of the British Association for the Advancement of Science, a fellow of the Royal Society, and the president of the Royal Microscopical Society. He is also considered one of the founders of the aquarium, principally through his book *The Aquavivarium* (1856), which had a great influence. Edwin Lankester was also a political radical. As a young man, he had been influenced by the great utopian socialist Robert Owen. He was a proponent of the extension of suffrage with strong Chartist sympathies, and a staunch supporter of the North in the U.S. Civil War.

The Lankester home was a meeting place for many of Britain's most noted biological scientists. Darwin thrilled young Ray with stories, such as how he had ridden on the back of a giant tortoise. Huxley carried Ray on his back. Ray learned the delights of fossil hunting as a boy from J. S. Henslow, Darwin's friend and mentor. Lankester modeled himself after Huxley from the very beginning and was to become Huxley's protégé. After studying at Cambridge and Oxford, Lankester toured Germany, attended Haeckel's lectures at Jena University in 1871, and became acquainted with German philosophy. In 1874, Lankester was at the British Association for the Advancement of Science meetings in Belfast with Huxley and Tyndall when they delivered their famous materialist lectures that created shock waves throughout the British scientific establishment. In 1875, Lankester was appointed professor of zoology at University College, London. During the time that Lankester occupied the chair in the School of Zoology, and under his leadership, University College emerged as the most dynamic zoology school in Britain.

It was during this period that Lankester became close friends with Karl Marx. Lankester met Marx in 1880, and a firm friendship seems to have developed between the two men during the final 3 years of Marx's life. It is not known how Lankester and Marx were introduced, but they had a number of friends and acquaintances in common, including Lankester's colleague at University College, professor of history E. S. Beesly, who had been for many years a close friend of the Marx family. We do know that Marx approached Lankester in September 1880 for medical help for his wife, Jenny, who was dying of breast cancer. Lankester recommended his close friend, the physician H. B. Donkin. Donkin treated Jenny Marx and eventually Marx himself in their final illnesses. Lankester subsequently became a fairly regular visitor at the Marx home, and both Marx and his daughter Eleanor were invited to visit Lankester at his residence. When Marx died in 1883, Lankester was one of the small group of mourners at his funeral. Because Marx, during the time when he knew Lankester, was hard at work at his *Ethnological Notebooks*, which addressed issues of human antiquity and delved into the work of figures whose ethnological studies had overlapped with Darwin's speculations in *The Descent of Man*—namely, Lubbock, Morgan, and Maine—it is fairly certain that Lankester and Marx discussed some of these issues, as well as more general issues of materialism and evolution. Marx made inquiries on Lankester's behalf as to whether the latter's short Darwinian tract on degeneration had been translated into Russian.

Although primarily a scientist, Lankester, like his father, was something of a nonconformist politically, revealing himself as an intellectual aristocrat with progressive sympathies during the most active part of his life (becoming more conservative in his old age). Thus, Lankester exhibited socialist sympathies at times and counted numerous radicals among his friends, including Marx, and later, H.G. Wells and J.B.S. Haldane—he also knew and revered William Morris. Fluent in German, he read Marx's *Capital* in 1880 with enthusiasm, writing in a letter to Marx that he was studying “your great work on *Capital* . . . with the greatest pleasure and profit.” Decades later, after the Titanic disaster, Lankester wrote to the *Times* that business organizations were “necessarily by their nature, devoid of conscience” and were impersonal mechanisms “driven by laws of supply and demand.” In the notes of his prominent “Nature and Man” talks of 1905, he declared that “the capitalist wants cheap labour, and he would rather see the English people poor and ready to do his work for him, than better off.” Lankester believed that socialism would eventually triumph, even writing to the *Times* of “that socialism which is to conquer” (Lester, 1995, pp. 51-52, 183-92; Foster, 2000, p. 222). He greeted the

February 1917 revolution in Russia with enthusiasm—although the October revolution that followed left him bewildered. Eventually, like his good friend Wells, he became very anti-Bolshevik. As something of an intellectual aristocrat, Lankester was often elitist, even conservative in his views (especially in his later years), particularly in the cultural domain. In the words of his biographer, “he did not believe that women should have the vote, and indeed that the fewer people who could vote the better” (Lester, 1995, p. 191; see also Gould, 1999). Still, Lankester’s general commitment to a militant humanism is evident throughout his published writings—especially in his more active years. What Marx and Lankester had most in common was their materialism—their opposition to all teleology in the interpretation of the world.

Among the scientists of his day, Lankester was particularly notable for his protests against the human ecological degradation of the earth—although what he said in that regard has long been forgotten because it was, in many ways, far ahead of his time. In his popular essay “The Effacement of Nature by Man,” written before the First World War and published in his collection *Science From an Easy Chair: A Second Series* (1913), he presented one of the most powerful ecological critiques of his (or any) time, pointing to “a vast destruction and defacement of the living world by the uncalculating reckless procedure of both savage and civilised man.” Given its recognition of the mass extinction of species, the destruction of habitat, desertification, the poisoning of lakes and rivers, and other ecological problems that have been rediscovered in our time, it is difficult to grasp the fact that this essay was written before the First World War. The strength of Lankester’s critique—his perception of ecological problems—is attributable, arguably, to his materialism and his rejection of teleology, vitalism, and spiritualism in the analysis of nature. If his analysis has a weakness, it is that in focusing in particular on the tendency toward desertification resulting from the destruction of forests, he fell into the trap—at the very end of his essay—of envisioning dams and irrigation as a solution. Nowadays, with the history of the 20th century behind us, we know that that too can lead to the “the effacement of nature by man.”

REFERENCES

- Doyle, A. C. (1993). *The lost world*. New York: Tom Doherty Associates.
- Foster, J. B. (2000). *Marx's ecology: Materialism and nature*. New York: Monthly Review Press.
- Gould, S. J. (1999, September). A Darwinian gentleman at Marx’s funeral. *Natural History*, 108(7), (pp. 32-33, 55-56).
- Lankester, E. R. (1913). *Science from an easy chair: A second series*. New York: Henry Holt and Company.
- Lester, J. (1995). *E. Ray Lankester and the making of modern British biology*. Oxford, UK: British Society for the History of Science.