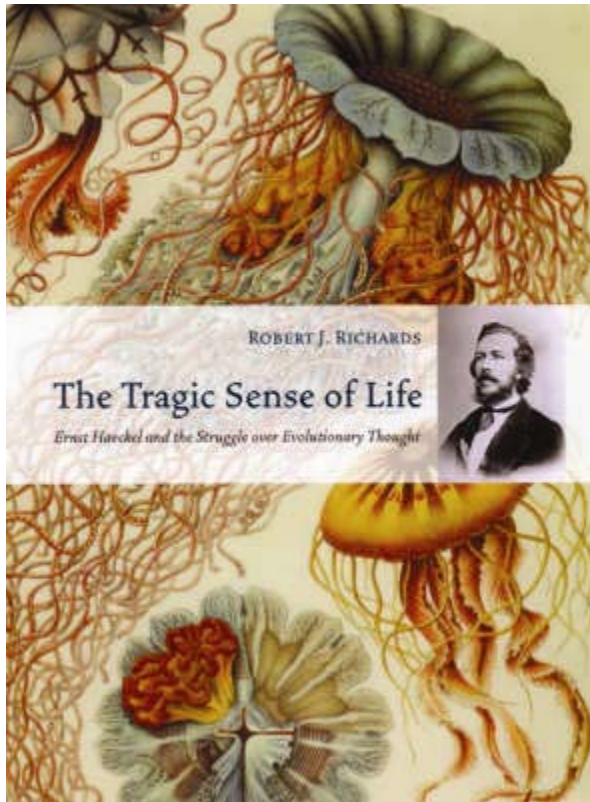


The Tragic Sense of Life

Gregory Radick reviews a title on the German Darwinian biologist and scientific artist



The Tragic Sense of Life

Ernst Haeckel and the Struggle over Evolutionary Thought

Robert J. Richards

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As an artist known for stylised paintings of nature's diversity, Ernst Haeckel (1834-1919) is still much admired. As a Darwinian biologist, he is not. The technical and popular writings that made the German naturalist's name are today little read. Even so, he is notorious: for scientific fraud, 'improving' images of embryos in different species to make them look more similar (to support the theory of common ancestry); and for racism, including the view – taken up by Nazi thinkers – that the Germans were at the pinnacle of evolutionary progress.

In this absorbing biography, Robert Richards sets out to rehabilitate Haeckel's science. Contrary to reputation, Haeckel was, Richards shows, a tough-minded and hardworking researcher who made enduring contributions to evolutionary biology ('You are one of the few who clearly understands Natural

Selection,' Darwin wrote to Haeckel), as well as more established branches of biology. The word 'ecology' and the idea of an ape-human 'missing link' are among his many taken-for-granted legacies.

Attention to Haeckel's emotional life enlivens this study, nowhere more compellingly than in connection with his groundbreaking general treatise on biological form in evolutionary perspective, finished two years after the death of his wife Anna in 1864. 'I toil at it with so great an enthusiasm,' Haeckel wrote to Darwin that year, 'as if my Anna herself drove me to its completion and had left this task as a memorial'. Out of grief for Anna, Richards suggests, came a newly uncompromising zeal for the Darwinian programme and a new, controversial metaphysics of 'monism', which recognised no distinction between God and nature and understood mind and matter as alike properties of a single, underlying reality.

Concerned to publicise the treatise's results, Haeckel produced a popular version; it was here that he published the illustrations that elicited charges of fraud. Vehement in his own time, the attacks continue into the present. Richards inclines to lenience, noting that Haeckel never aimed to deceive. Besides, the better-equipped biology of our day has vindicated what he had believed, on theoretical grounds, to be true.

Obviously nothing like that can be said of Haeckel's racialism. Still, Richards finds mitigating factors.

Notions of race hierarchy were commonplace; Haeckel ranked Jews alongside Germans; and though certain Nazis claimed Haeckel's sanction, his monism was officially repudiated. As ever, Richards's handling of the defence is deft. But what impresses even more is an appended essay on why questions of historical responsibility, including Haeckel's for Nazi genocide, need to be confronted. It should become a set text wherever historians learn their craft.

Gregory Radick teaches history and philosophy of science at the University of Leeds and is the author of *The Simian Tongue* (Chicago, 2007).