

Who Speaks in the Parliament of Things? On the idea of non-human agency

Abstract of PhD thesis by Hajo Greif, M.A.

hajo.greif@gmx.net

This thesis in the philosophy of science undertakes a critical reconstruction of popular theories in the natural and social sciences that propose a revision of conventional notions of agency.

Within the field of science and technology studies, Actor-Network Theory (as most prominently advocated by Bruno Latour) claims that non-human agents, from technical apparatus to science's would-be passive objects, are sharing and shaping human life-worlds. In evolutionary biology, Selfish Gene Theory (as introduced by Richard Dawkins) subsumes the explanation of the evolution, structure and behaviour of organisms under the laws of genetic replication, where genes appear as optimising economic agents.

In Part I, the two theories are compared in order to identify methodological aims, structural properties and motifs common to them despite all apparent differences: Firstly, both theories, with regard to new evidence in their fields, aim at metaphorical redescrptions of their explananda for the sake of improving on established theories in the sociology of science and in evolutionary biology respectively. Secondly, in redescrbing the behaviour of genes, microbes and other things as actions, categories of agency are not simply ascribed more liberally. Instead, the behaviours of agents in general, both human and non-human, are explained in terms of functions—as non-intentionally selected effects. Thirdly, those functions are analysed in a broadly semantic sense. The analyses amount to postulating the existence of meaningful relations in the world that do not presuppose speaker intentions in any way, while themselves forming necessary preconditions for the latter. Finally and consequently, both theories imply that there is no *a priori* possibility of distinguishing between intentional action and causal efficacy. Instead, the gradual emergence of intentional phenomena from non-intentional processes is proposed.

In Part II, the above set of propositions distilled from Dawkins' and Latour's theories is matched against an explication adopted from the programme of teleosemantics. This programme in the philosophy of mind and language (as brought forward by Ruth Millikan and Fred Dretske) seeks to explain intentionality in terms of evolutionary history. On the basis of findings in biology and developmental psychology, it is firstly argued that naturally occurring representational functions, established by variation and natural selection, are historically and systematically prior to forms of linguistic behaviour. According to the observation that such functions occur at evolutionary stages where no conscious goal-directed behaviour obtains it is maintained that, secondly, intentionality as meaning is independent of intentionality as purpose. Thirdly, the rules and norms of linguistic representation, too, are held to be subject to (quasi-) evolutionary processes in speakers' life-worlds. Instead of being based on speakers' intentions and explicit conventions, the meaning of a word or sentence is fixed by repeated successful uses in the speakers' environment. In consequence, an evolutionary account of intentionality will not only provide a finely graded scale of intentional phenomena; it will also amount to reversing the standard philosophical order of intentionality, thus depriving the conscious mind of its alleged privilege on meaning.

Given this naturalistic, anti-rationalist account of intentionality, theories of the Dawkins / Latour kind, while not being able to prove the existence of non-human agency, may be understood as attempts at conceptually adapting to scientific and technological developments which are transforming human life-worlds in unanticipated ways. When the conditions of meaningful speaking thus change, such attempts may prove to be viable cognitive strategies.

Note: This PhD thesis, written in German under the title *Wer spricht im Parlament der Dinge? Über die Idee einer nicht-menschlichen Handlungsfähigkeit*, was prepared at the Graduiertenkolleg "Technisierung und Gesellschaft" (post-graduate school "Technology and Society"), TU Darmstadt, Germany, where Hajo Greif was a doctoral fellow from 2000 to 2003. It will be published by mentis, Paderborn, in autumn 2005.