tion of Austro-Polish philosophy from Bolzano to Tarski, and, more generally, analytic philosophy and its history.

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**Paul Sheldon Davies**
*Norms of Nature: Naturalism and the Nature of Functions.*
Cambridge, MA: MIT Press 2001. Pp. xiv + 234.
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There are two major contemporary approaches to understanding function attributions in biology. The Etiological Theory (ET) holds that the function of any given sort of trait is the effect of the trait that brought about its selective success. The Systemic Capacity Theory (SCT) construes a function as an effect of a trait where that effect contributes to the operation of a capacity of the larger system to which the trait belongs. Recently, several philosophers have advocated pluralism regarding these views: each may be correct in a different domain, or perhaps both are unified within a more general concept. Paul Davies's *Norms of Nature* takes a sharp turn away from this trend. Davies argues that the ET should be abandoned, outright and completely, and that the SCT is the only defensible view of functions.

Davies articulates the latter claim by defending and developing the SCT in three ways. First, in chapter four, he defends it against counterexamples purporting to show the theory positing functions for traits where they have none. Davies deflects the objection by outlining constraints on the sorts of systems to which the theory may be applied. He then reviews each of the counterexamples, demonstrating how the constraints eliminate them. Second, in chapter six, Davies celebrates the SCT's success in naturalizing function attributions. He does this by arguing that systemic functions are an integral tool in scientific inquiry, providing tentative 'top-down' taxonomies for complex systems that 'provide a preliminary map with which to parse the system and study its functional parts' (159-60). Here Davies nicely dovetails the SCT with recent work on the research strategies of decomposition and localization.

Third, in chapters five through seven, Davies tackles the charge that the SCT is unable to accommodate our intuition that there are malfunctional traits. Davies accepts the charge, but thinks our intuitions mislead us here. He offers a deflationary 'Humean' account of these intuitions, on which we

judge traits to be malfunctional 'because we have acquired the expectation that components situated in systems of this type perform the stated task' (176-7). Davies does not develop this view in any detail, emphasizing instead that 'the essential point is the plausibility of the Humean strategy generally' (179). This is somewhat disappointing, for, as well-known criticisms of Hume's theory of causation demonstrate, such strategies often need substantial development to be plausible.

Although Davies' defense of the SCT is lucid and insightful, in the present pluralist climate it is his attack on the ET that will raise eyebrows. He claims that it is (i) redundant (ii) non-naturalistic and (iii) unable to accommodate malfunctions. In chapter three, Davies argues for (i) by showing that etiological functions can be construed as a certain sort of systemic function. The idea is to treat a population as a system having a capacity to evolve. The SCT can then assign functions to traits that bring about selective success, on the grounds that they contribute to this capacity. Claim (i), however, is compatible with a pluralist view, and so Davies' case for extirpating the ET rests on his arguments for (ii) and (iii).

Claim (ii) is of especial interest, because the ET itself has been used as the basis for attempts at naturalizing philosophy of mind, language and epistemology. If (ii) is true, this entire program is not only doomed but is rotten in its very foundations. Davies sees the ET as committed to an ontology he calls 'minimalism': 'possession of a systemic function is equivalent to possession of a certain kind of history — a history of selective success' (137). He thinks that minimalism violates naturalism, because naturalists will insist on knowing 'what causal-mechanical properties of our history have the power to produce norms' (141) (i.e., functions), and no such account is forthcoming on the ET. But this objection appears to be a non sequitur: if an etiological function is *equivalent to* a certain kind of history then surely it makes no sense to ask how it is *produced by* that history.

Davies' argument for (iii) is also problematic. Davies argues, rightly, that in order to malfunction, a trait must have a function in the first place. The ET holds that if a type of trait T has an etiological function F, then T was selected for Fing. But 'selected for' trait types are 'individuated in terms of the property selected for' (200). So, for instance, a defective heart could be malfunctioning only if it has a function of pumping blood. It has such a function only insofar as it belongs to a type of trait selected for pumping blood. But such types are individuated by the property selected for, viz., pumping blood. This means that hearts that cannot pump blood do not belong to this type. Hence damaged hearts have no function and thus cannot malfunction.

This argument turns on the criteria for inclusion in a 'selected for' type. Davies claims that (A) such types are individuated in terms of property selected for and that it follows that (B) no thing lacking that property belongs to the type. Though (A) is plausible enough, it is left unclear why we should accept the inference to (B). A theory might individuate a type based on possession of a certain property, but it does not follow straightforwardly from this that possession of the property is essential for membership in that type.

The ET individuates a 'selected for' trait type as a sort of trait that caused survival by Fing. For this to be coherent, it surely must be true that many things of the type caused survival by Fing, but it hardly seems necessary that all of them did, or even that all of them were capable of Fing.

Despite these difficulties with Davies' case for (ii) and (iii), *Norms of Nature* is a well-written, rigorous and provocative book. Its attempt to illuminate the ontology of selected functions under the stark light of an uncompromising brand of naturalism will surely shake up the pluralist orthodoxy. It is deserving of study by all interested in the truth about functional ascriptions.

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**Jeffrey Dudiak**
*The Intrigue of Ethics: a Reading of the Idea of Discourse in the Thought of Emmanuel Levinas.*
New York: Fordham University Press 2001.
Pp. xvii + 438.
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US$25.00 (paper: ISBN 0-8232-1966-6).

'From the macro-cosmic levels of international relations, through national democratic politics, down through labor-management negotiations, to the micro-levels of marital and even personal therapies, twentieth century humanity places a great deal of faith and hope in dialogue as a way of peacefully settling conflicts and resolving tensions that threaten to devolve, or have already devolved, into violence. There would, moreover, appear to be some warrant for this faith ... (b)ut dialogue also, sometimes, fails — either in breaking down or in failing to get underway at all' (Dudiak xi). The opening to Dudiak's *The Intrigue of Ethics* immediately introduces the reader to the problem at hand: violence and/as the breakdown of dialogue. Whether or not Dudiak implies by this that all violence is the result of failing dialogue, a claim that is not explicit but seems plausible given Dudiak's analyses, the intuitive appeal of this initial comment seems more than likely widespread: we are all too familiar with the kinds of violence at stake here. In particular, Dudiak concerns himself with 'the problem of interparadigmatic dialogue,' dialogue that lacks a common point of appeal, where the status of the *logos* grounding the *dia-logos* is strained and put into question. This too seems quite recognizable, perhaps more now than ever.