from the statement 'The sun is supposed to shine', which is not a function statement? Price argues that what is normative about function statements is that the device must meet certain standards. Intentional norms, though, are not a feature of biological items, whose relations are just objective causal relations. Intentional norms are a feature of function statements, that is, of the way in which we conceive the teleological notion of normality, of what it is normal for a device to do. When we say that the heart is required to (or supposed to) pump blood, because that is its function, we are talking metaphorically. We view the relation between the 'designers' of the device, the device and its biological function in terms of social obligation. The heart is obliged to meet the standards set by its ancestors. What is the literal meaning of function statements, then? When we say that the heart is supposed to pump blood, what we are conveying is that hearts were produced by some other mechanism because earlier hearts pumped blood.

Price explains that, while it is literally true that devices have functions, it is only metaphorically true that there are functional norms. It is not literally true that devices have obligations. According to Price, the metaphor of social obligation is a dead metaphor. Dead metaphors are those that have acquired in the language a conventional meaning. Consider Price's example: 'Alice is a warm person'. Being warm means, in one of its once metaphorical meanings, being sympathetic and demonstrative. The statement 'Alice is a warm person', if Alice indeed is a warm person, is true, even if it is not literally true. The metaphor has expired and now it is part of the conventional meaning of 'warm' that, when 'warm' is applied to persons, it can stand for 'sympathetic and demonstrative'. The metaphor has not disappeared; it has just ossified (page 46).

Price tries to have it both ways. She claims that it is not literally true that the heart is supposed to pump blood, and insists that normativity is not a feature of biological functions, but of the statements themselves. However, she is not an eliminativist about normativity. By saying that function statements are metaphorically true, in virtue of the dead metaphor of obligation, she also wants to claim that function statements are authentically normative.

The account of the normativity of function statements is the aspect of Price's otherwise persuasive picture that leaves me more perplexed. For a book whose explicit purpose is to explain how intentionality is at the same time naturalistically acceptable and normative, the conclusion that normativity is the side effect of a metaphorical way of speaking is at least disappointing. Moreover, it leaves an important question unanswered. If the normativity of intentional explanations is due to the metaphor of social obligation, why is it that social obligation has lent its normative flavour to function statements?

To sum up, Price's book offers a very interesting account of the minimal conditions for intentionality and is well argued throughout. What the reader should not expect to find in it, though, is a satisfactory explanation of why function statements are normative.

Lisa Bortolotti

The Australian National University

Grice, Paul, Aspects of Reason (Oxford: Clarendon Press, 2001), pp. xxxviii + 136, US\$29.95 (cloth).

Aspects of Reason is the development of Paul Grice's John Locke lectures in 1979. Although it was not finished before his death, the resulting work is straightforwardly Gricean in both its methodology and overall goals. The book contains numerous discussions of the subtle distinctions and details about natural language and its logic. These discussions are centred around Grice's 'sneaking hope' that 'vitally important philosophical consequences can be reached by derivation from the idea of a rational being' (4). Each of the book's five chapters concern this theme, although it is sometimes unclear how they are connected to one another. But in both the details and his grander visions, Grice presents us with many original ideas which will be of substantial interest independently of the use to which he puts them (e.g. the discussion of the three different kinds of reason (37–43)).

The book is driven by Grice's conviction that the concept of rationality is centrally important to philosophy. This conviction manifests itself as an attempt to unify practical and 'alethic' reason. Practical reason concerns the explanation of purposive action, as in the example (I): 'That Sue's father is sick is a reason for her to move to his city'. Alethic reason concerns the explanation of how the world is, as in (II): 'That dandelions get their energy from photosynthesis is a reason for them to have leaves' (43). Grice's attempt to unify the accounts of practical and alethic reason amounts to a theory of what it is about a given claim—whether practical or alethic—that enables it to figure into explanations. More concretely, consider how we might answer the following question. If we gave a complete account of why (I) can be an explanation of Sue's moving (even though (I) does not imply

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Sue actually moves), and we did likewise for (II), what commonalities would there be in the two accounts? Grice argues that they will have a lot in common: his 'Equivocality Thesis' states that (I) and (II) are able to be explanatory for the same reasons. The thesis is so-called because Grice exposes numerous kinds of practical and alethic explanations. So a unified theory of practical and alethic reason will show that ultimately there is a one-one correspondence between the various kinds of practical and alethic explanations.

Grice supports the Equivocality Thesis by appealing to the inferential similarity between practical and alethic reasoning. He argues that there is a structural similarity between practical and alethic claims: 'Probably, given H, P' is importantly similar to 'It is best that, given H, P' (46–9). Such structures are not merely analogues of one another, but, he claims, they can each 'be replaced by more complex structures containing a common constant' (49). Although he develops some formalism to represent this commonality (cf. p. 52), the discussion is a piece of philosophy of mind and ordinary language as much as it is a piece of logic. E.g., it is a premise that from 'Probably, given H, P' and 'H' either 'Probably P' or 'P' legitimately follows. The legitimacy of these conclusions goes unquestioned, because in ordinary circumstances we might reasonably assert either one. Grice defends the Equivocality Thesis by showing that the corresponding practical inferences can be drawn. (Although 'It is best that, given H, P' and 'H' easily yield 'It is best that P', he also argues that it yields 'P', where the latter expresses one's intention or decision (48).)

The theoretical base just described is established in chapter two. In chapters two through four, Grice expands the theory to include other expressions, particularly modal ones. Modal terms often have practical and alethic senses, as in the ambiguity of 'After a boy cleans his room, he may play'. In the end, Grice's unification of practical and alethic modal terms involves rationality as much as it does language, although the thread of the argument is often opaque.

Details aside, something is right about Grice's Equivocality Thesis. In many languages besides English, the same words express both practical and alethic modality. So whatever the true nature of the phenomenon, this dual nature of modal terms is not an accident of English. Of course, the fact that modal terms in various languages can express both modalities does not alone establish Grice's Kantian claims about rationality. Nor does his attempt to provide a unifying theory obviously close this gap. According to him, practical and alethic modalities are unified because both assertions have the structure: 'it is acceptable that P(r)...', where 'P' is an operator that varies with the modality expressed, and 'r' expresses the contentful core of the sentence (e.g., 'the boy go outside' in 'the boy may go outside'). But Grice does not clarify the exact semantic content of 'it is acceptable that'; without such an account, it is unclear whether this operator is univocal in both practical and alethic cases. Such worries engender a number of questions: is there some single notion of acceptability with a useful and legitimate place in the analyses of practical and alethic claims? (Alternatively, for each notion of acceptability that is used to analyse a practical or alethic case, does this notion also fit into an analysis of the other case?) Will this notion play a 'structurally' similar role in both analyses, as Grice suggests? More importantly, we can raise question about the whole project: why should we treat the difference between practical and alethic claims as Grice does? Grice often speaks as if the structure in question is the logical or semantic structure of sentences (e.g., 50, 53, 73). But even if we can construct a consistent, coherent theory that practical and alethic claims have the form above, this by itself will not justify the further claim that we have uncovered the true structure of sentences. In general, such a justification requires showing not merely that certain claims can be formalized in the way some theory suggests; one must also show that these claims should be reconstructed this way. We could, e.g., augment a semantic theory with the property good. We might suppose that words like 'nice' and 'friendly' have the property good, whereas 'lousy' and 'naughty' do not. We might also posit two new linguistic kinds of adjectives: the good ones and the others. Perhaps then we could claim it is part of the 'logic' of English that being nice is good and being lousy is not. But constructing such a theory does not justify treating such properties as linguistic kinds of words. Even if it's right that being nice is good and being lousy isn't, it does not follow without further argument that this truth is due to the structure of language. (Whatever truth there is to the claim that being nice is good may be due to our reasoning abilities or to the structure of our concepts; but neither of these possibilities by themselves motivates positing further structure in our language to reflect this fact.)

Like a logic based on good, Grice's theory may not succeed as a theory of the structure of language. Thus, the question arises what exactly the reconstruction is for. In the book's introduction, Richard Warner discusses how Grice took himself to be exploring how people could explicitly justify the adoption of a particular attitude or action (x). So understood, the thesis that modal claims have the structure Grice suggests needn't be taken as a theory about linguistic structure; it may instead be a rational reconstruction of what we intend to express by using the sentences in question. I.e., perhaps Grice's theory doesn't concern the linguistic structure of sentences (contrary to what he suggests), but

instead concerns a kind of idealized (possibly normative) epistemology of language use. Although such an interpretation of Grice's project doesn't answer the question why we should treat sentences as having the structure attributed to them, it nevertheless helps narrow the logical space where we may look for answers.

In sum, Aspects of Reason is a complex and difficult book that raises more questions than it answers. The issues it addresses are foundational to the philosophy of language and mind, and Grice's brilliance with ordinary language makes substantial advances towards the problems therein.

Kent Johnson

University of California, Irvine

Griffin, David Ray, Reenchantment without Supernaturalism: A Process Philosophy of Religion (Ithaca: Cornell University Press, 2001), pp. viii + 426, US\$55.00 (cloth), US\$24.95 (paper).

In this important work David Ray Griffin provides an admirably lucid exposition of the central theses of Process Philosophy, and argues for its superiority both over materialist naturalism and supernaturalist theism.

Process Philosophy is far more than four-dimensionalism, of which Whitehead was a pioneer. And in the introduction (pp. 5-7) Griffin lists ten core doctrines of Process Philosophy which he develops in this book. All these are important but there is a group of three which are likely to be most controversial. The third doctrine is that sensory perception is derived from a more fundamental nonsensory awareness, 'prehension', of which body-awareness as well as sense of the presence of something external are paradigms. This is combined with the panexperientialism, according to which anything which is not a mere aggregate has this minimal awareness, and also is capable of 'selfdetermination', that is behaviour explained by final causes. Panexperientialism is a carefully formulated version of panpsychism, avoiding the 'protons are people too?' jibe. For what we call consciousness and freedom are taken to be composed out of the more primitive prehension and selfdetermination that even atoms have. This is clarified by the fifth doctrine which states that persisting entities have a 'subjective mode' in which their action is explained by final causes as well as an 'objective mode' in which they themselves act as efficient causes. These modes do not both occur at once, and the persisting individuals are said to be composed of events some of which are in the 'subjective' and some in the 'objective' mode. In the subjective mode there is prehension of God and this provides the initial subjective aim (p. 145), but self-determination can modify this aim.

It is the last of these theses that I consider the hardest to justify. For a start the oscillation between modes is rather peculiar. Is this a sudden change or are there intermediary states? And how often does the change occur? What governs it? And why is the initial subjective aim based on the prehension of God only? Doesn't it make more sense to think of there being competing final causes based on prehensions of different systems? Consider, for instance, a cell in the immune system in someone planning a murder. If the cell's initial subjective aim is based on a prehension of God wouldn't it malfunction so as to lessen the chance of the murder? Instead as a good immune system cell its initial aim would for the most part be to do its job in the immune system. To make sense of God's capacity 'to persuade but not coerce' we need to think of the prehension of the divine as contributing to the overall prehension of the external world, making a subtle difference only.

The aim of the book is not, however, to expound the central doctrines of Process Philosophy but to oppose both materialistic naturalism and supernaturalist theism in favour of a process account of religion. Process Philosophy has much of the explanatory power of traditional theism, but because on it God is the world as a whole and acts by persuasion not coercion, the length of time taken by evolution and the excess of suffering do not conflict with the divine goodness. In addition Process Philosophy provides the rationale for a comparative philosophy of religion according to which God and creative experience are both ultimates (p. 264) and there are two basic types of religious experience, thus taking seriously at least some differences between religions.

Reenchantment without Supernaturalism is a splendid exposition of Process Philosophy of religion, and Griffin's criticisms both of materialistic naturalism and of traditional supernaturalist theism are to be taken seriously. Especially welcome is his clear presentation of the case for believing in some sort of God. But how does it compare with other positions? First consider Leslie's Extreme Axiarchism according to which the ultimate explanation of the way things are is that it is good they are that way. Panexperientialism has one clear advantage over Leslie's position: it is less mysterious that things are aware of the good and act accordingly than that they simply behave a certain way because it is good. But why not therefore take values and creative experience as the two ultimates?