events with the sort of authority over human affairs that moral taboos and commands have' (p. 165). We only need wonder whether this is always the case: is it necessarily so? A recent variant on social constructivism has been feminist philosophy of science, which comes under attack in chapter nine. The versions by Harding, Longino and Nelson are scrutinized, the latter being deemed the most promising. Most versions of feminist philosophy of science are blighted by naïve relativism though some make claims of epistemological privilege; namely, that 'feminists, simply in virtue of being feminists, have cognitive access to substantive general truths denied all non-feminists' (p. 199). Even though we may find laudable ethical motives behind feminist philosophies of science, we ought not be led to some of the simplistic forms of relativism and anti-realism it has thrown up.

The final chapter brings a direct discussion of the theme that has been implicit throughout: realism *or the way things really are*. The various possible positions are set out and some of the arguments and counter-arguments discussed. Klee reveals himself to be a holistic realist: a minority form of realism, he tells us (p. 232). The realism is modest in that it is a denial 'that the facts of nature are constituted by what our theories say about things' (p. 210). Anti-realist arguments of Bas van Fraassen are discussed in some detail as are the hard to classify views of Larry Laudan and Arthur Fine. At all times the evaluation is fair and Klee admits that at points there is no decisive blow either way. Instrumentalism, surprisingly, receives only the merest direct mention (p. 214) and does not even appear in the glossary or index. This must be quite unusual for a modern introduction to the subject.

Overall, however, the idiosyncrasies of this book are its virtues. It stands out as something different and quirky in a genre, the introduction, which produces so much dry and uninspiring material. Klee does a good job of defending a brand of realism against all attacks and he has produced a book which is a pleasure to read, even for someone already familiar with the area.

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Questions of Time and Tense, edited by Robin Le Poidevin. Oxford: Clarendon Press, 1998. Pp. xii + 293. H/b £35.00.

One of the most important issues in the philosophy of time concerns the question of whether tense—pastness, presentness, and futureness—are distinctive aspects of reality, or whether these notions have no ontological bite at all. The collection of essays edited by Le Poidevin centres around this issue, aiming to make explicit the connections between it and other areas of philosophy (p. 2). In this, it succeeds admirably. The essays are by excellent philosophers (many of

whom have already made substantial contributions to debates about time); and all—with the exception of that by Butterfield—appear here for the first time. There is a short introduction by Le Poidevin locating the papers in the collection, and an index of names (but sadly no index of topics). The editorial work is of a professional quality.

The collection proper starts with a helpful and clearly written essay by Le Poidevin himself, describing debates about time, both AM and PM (ante McTaggart and post McTaggart). Surprisingly, there is no mention of the crucial issues of the flow and direction of time. Nor do either of these issues figure greatly in any of the other essays in the volume. Perhaps it is now hard to say anything new about these topics. Le Poidevin's essay leads up to what he calls the 'new tenseless theory' of time, which also plays a central role in many of the other essays in the collection. This is a theory to the effect that adequate truth conditions of tensed sentences can be given in non-tensed language. Since, then, all truths about tense may be accounted for in non-tensed language, tense is not an essential feature of reality. The idea about truth conditions can be cashed out in variously different ways. A typical example:

> The (token) sentence 'The sun will shine tomorrow' is true at time *t* iff the sun shines (tenselessly) the day after *t*.

Now, such simple formulations cannot be right. As Oaklander points out in his essay in the collection, there is an important distinction between tense as something grammatical, and tense as something ontological. And the two most certainly do not line up. It is possible to make a statement about any ontological tense with virtually any grammatical tense. Writers, for example, often use the present (grammatical) tense to describe events in the past or future. Or consider: 'Jones waited for the bus. He caught it that day, as he had done every working day for the last 20 years. It would be for the last time. But today, all this was to come: Jones was still a child'. Though the passage is littered with grammatical past tenses, the events referred to are all present or future. (Le Poidevin, p. 39ff., notes that there are problems with compound tenses; but the problem arises even for simple tenses, as we have just seen).

The other essays in the collection deal with many and varied issues. A defence of the tensed account of time, from various angles, is provided by E.J. Lowe and Quentin Smith. Lowe ('Tense and Persistence') rejects any significant notion of temporal parts (as required by a tenseless view) in favour of an account of the endurance of objects through time. Smith ('Absolute Simultaneity and the Infinity of Time') takes up the themes of his book *Language and Time*, and, in an essay of scholastic proportions, defends the legitimacy of an absolute notion of simultaneity (against Special Relativity and all other comers).

On the other side of the fence, and again from various directions, a defence of the tenseless view of time is taken up by Jeremy Butterfield, Graham Nerlich, Nathan Oaklander, and Heather Dyke. A tensed view of time certainly has a strong intuitive appeal, and Butterfield ('Seeing the Present') sets out to

explain some of this from a tenseless perspective, by appealing to the relative speed of information-transmission. Nerlich ('Time as Spacetime') attacks the 'presentism' of Smith's *Language and Time*, on grounds semantic, physical, and psychological. Oaklander ('Freedom and the New Theory of Time') takes on the question of whether the tenseless view is committed, as it might well be thought to be, to a counter-intuitive fatalism, and argues convincingly that it is not. Finally, there is a prima facie analogy between the tenseless view of time and David Lewis's modal realism about possible worlds. (Now=actual; past/future=non-actual). Many find Lewis's position implausible. Dyke ('Real Times and Possible Worlds') criticises the analogy and argues that the tenseless view is not implausible for the same reasons.

Though they do not explicitly defend a tensed view of time, the theological essays in the collection by William Lane Craig and Paul Helm also belong on this side of the fence. Craig ('The Tensed vs. Tenseless Theory of Time: A Watershed for the Concept of Divine Eternity') argues, contra Aquinas, Stump and Kretzmann, and other notables, that a view of God as timeless can be made sense of only on a tenseless view of time. And Helm ('Time and Trinity') argues against Swinburne's attempt to reconcile the doctrine of the Trinity with a tensed view of time, whilst attempting to makes sense of it on a tenseless view.

Fence-sitting on the tense/tenseless issue are essays by David Cockburn and Piers Benn. As Prior pointed out long ago, the tenseless view would seem to have a problem with our emotional responses to events ('Thank goodness that's over'). Cockburn ('Tense and Emotion') explores issues of this kind in a sensitive but ultimately inconclusive essay. It might also be thought that the issue concerning time has significant implications for moral questions. I noted the possible connection between the tenseless view and fatalism—with its moral consequences—before. Another example: if the future is not ontologically real, how can we have a moral obligation to future generations? In his essay ('Morality, the Unborn, and the Open Future'), Benn takes up such moral questions and argues that, in the end, one's view of time doesn't have much bearing either way. Finally in the neutral corner—~~o~~r perhaps in a different ring altogether—~~i~~s the essay by Greg Currie ('Tense and Egocentricity in Fiction'). How do we relate the time within a work of fiction to actual time? Currie argues that tensing fictional events appropriately is quite kosher in general, but is normally at odds with the way we engage with the work imaginatively.

It is clearly impossible to say anything of substance about these issues here. I will comment briefly on two. (Not because they are the most important issues the book raises; but simply because they cut across different contributions). The first concerns a metaphysical assumption about existence that is at the back of some of the issues in the book. In discussing whether, on a tensed view, time can be viewed as a dimension of reality, Lowe argues that it cannot (p. 57ff.), on the ground that if e', e and e'' are three successive events, e cannot lie

in the relation of betweenness to e' and e'', since when e exists e' and e'' do not. On a different topic, Benn moots the argument that, on a tensed view of time, we cannot have responsibilities to the dead or the unborn since they do not exist (p. 209ff.). The unargued assumption made by both Lowe and Benn is that non-existent objects cannot enter into ordinary relations. (Benn, it is true, criticises the argument just described, but not for that reason). This assumption was dubbed by Routley the 'Reference Theory', and it is not at all as obvious as might be thought, orthodox though it may be. (See R. Routley, *Exploring Meinong's Jungle and Beyond*, Canberra, ACT: Philosophy Departmental Monograph #3, Research School of Social Sciences, 1980. For its connection with time, see especially ch. 2). In problems as hard as those posed by time, one should certainly not take such whopping great metaphysical assumptions for granted.

The second issue is very different. A major factor that speaks in favour of a tensed view of time is that space and time are phenomenologically very different. In particular, we perceive things as happening in a single 'now', but we do not perceive things as happening at a single 'here'. Both Butterfield (p. 72f.) and Nerlich (p. 130f.) point out that this must be accounted for on a tenseless view of time, and both attempt to do so by appealing to a similar idea, namely that things (at least medium sized dry goods) tend to change much more slowly than the speed at which information in perception and verbal communication is transmitted, so that that information is largely reliable, and actions based on it are largely successful. I shall not go into the details of their arguments here. (Indeed, I am not sure that I entirely understand them in Nerlich's case). But I suspect the explanation. In a well-known psychological experiment subjects put on glasses that invert their visual input. After a period of time, the subjects adjust to the new visual inputs. Now, suppose that, instead, subjects put on glasses that simply *delayed* the receipt of the visual input, and did similar things for their other sensory modalities as well. The input data would then become very unreliable. Of course, a person in this unfortunate state is not likely to last long; but let us suppose that some guardian angel were there to look after them. What would happen to that person's phenomenological experience of time? The experiment is a bizarre one, so it is difficult to be certain about this. (Perhaps in future years it will actually be possible to perform this experiment, by putting delaying relays at appropriate places in someone's central nervous system). But for what it is worth, my intuitions say that this would have absolutely no effect on the phenomenological experience of time and space at all. In particular, the person would continue to experience everything in the same 'now', in a way that they do not experience it in the same 'here'. If this is right, tenseless theorists will have to look elsewhere for an explanation of these phenomenological differences.

Were there but world enough and time, there would be much more to be said about the content of the book. It is a rich and provoking collection. The

issues it raises, and others like them, will keep us philosophizing about the subject for a long time, be that tensed or otherwise.

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Music in the Moment, by Jerrold Levinson. Ithaca and London: Cornell University Press, 1998. Pp. xii + 184. H/b £19.95.

Nobody will deny that the last two decades have been astonishingly rich in work on the aesthetics of music and to this Professor Levinson has been a principal contributor. This lucid book owes much to Edmund Gurney who, with Hanslick, was the only earlier thinker worth reading by anyone trained in the discipline of analytic philosophy. Jerrold Levinson's thesis can be succinctly put. It is a mistake to imagine that explicit knowledge of large-scale musical architecture is essential or even important to musical understanding. His view, which he describes as 'concatenationism', is that the value of a piece of music is a matter of 'the cogency of sequence exhibited at transitions between bits' (p. 2). He says 'we miss nothing crucial by staying, as it were, in the moment' (p. 29). The moment is not just what is audibly present to us in the split second before it gives way to another tone. We 'quasi-hear' a maximum of 20–30 bars at a time (p. 86). (Quasi-hearing seems to be a sort of perception of the specious present.) This, then, is a thesis about what constitutes 'good listening'.

It is surprising. As Levinson is well aware, much musical education and what has been called 'the appreciation industry' sets out to equip the listener with a basic grasp of musical structure and design on the larger scale. If Levinson persuades people, he undermines all those who try to show listeners how sonata form and fugue work. He acknowledges an ally from the musical world in Nicholas Cook whose book, *Music, Imagination and Culture* (1990), is similarly sceptical though Cook's recent publications suggest that he is less sure of the thesis than he once was. Austin once divided philosophical papers into two parts, the bit where you say it and the bit where you take it back. Levinson does modify his thesis a little and describes it (p. 158) as a 'modified concatenationism' but he does not take back very much and it is not much modified. He is prepared to acknowledge only a small role for a fusing of the awareness of structure with aural apprehension (p. 106).

Two things worry me about all this. Firstly Levinson does not pay much attention to the fact that music is a performing art. (There is a brief mention on p. 171 where he takes performance as being the presentation of the music to an audience.) Now much music over much of its history was intended for a performer to play by himself or with others. It was not only intended for an audience. In addition, the greater the music the more the interpreter has to