Tim Button *The Limits of Realism.* Oxford: Oxford University Press 2013. 288 pages \$62.00 (Hardcover ISBN 9780199672172)

The Limits of Realism is a book that proudly wears its major influence on its sleeve—that of Putnam. The book, however, is not merely an overview of Putnam's thought. Instead, Button reconstructs various themes in Putnam in light of more recent developments within the debates concerning external realism. The work is not historical in nature; Carnap's influences on Putnam are discussed, but historical elements are short beyond this. (See also Thomasson's forthcoming work for an alternative view wherein 'Easy Ontology', not Putnam's brand of attacks on the substantivity of metaphysics, is the true heir to Carnap.) The reconstruction is extensive and valuable as a modern reworking of a major argument against the plausibility of external realism and internal realism, as well as an investigation of what 'realism' should go in its place.

In section A, Button devotes himself to providing a detailed base of Putnam exegesis upon which the rest of the work may rest, through a strong statement of support for Putnam's arguments against external realism. External realism is taken to be the acceptance of three principles: the independence principle, wherein 'the world is (largely) made up objects that are mind-, language-, and theory-independent' (8); the correspondence principle, wherein 'truth involves some sort of correspondence relation between words or thought-signs and external things and sets of things' (8); and the Cartesianism principle, wherein 'even an ideal theory might be radically false' (10). The major achievement of this section is to illustrate Putnam's model-theoretical argument (MTA), and the just-more-theory manoeuvre (JMT) expertly, clearly, and with few overbearing technicalities (though Button's grasp of these technicalities is not in any doubt—students of all stages who might struggle with the opaqueness of some of Putnam's finer details would be well-served by using this as a guidebook).

The MTA and JMT are shown to lead to various consequences, most importantly that any reference relation of the sort typically appealed to by the external realist will lack empirical content. The external realist must then appeal to 'magic'; no other constraint except a magical one can do the work the external realist requires the constraint to do. The combination of the MTA and the JMT thus convert 'Cartesian angst'—the concern of how it is that we know that 'things are as they seem'—into 'Kantian angst'—the concern over how things can 'so much as *seem* to be a certain way' (56; taken in part from Conant 2004). The external realist is thus left at the end of the first section in the position Putnam drew for them, with no method (only a 'something one-knows-not-what' form of magic) suitable to fix reference, and thus the MTA is vindicated.

There might be times where those who take a stance against Putnam feel that some nuances of their positions have been overlooked. It is not altogether clear, for example, that the external realist does always support the three principles as stated. Truthmaking as a route to avoid correspondence is mentioned, but only briefly; while the independence and Cartesianism principles require more to fully show that they are necessary aspects of an external realist positions. These issues, though, are small, and to dwell on them would be unfair; the section serves to prepare the ground for Button's real aims in this work—not a reconstruction of Putnam or a negative thesis per se (though aspects of this certainly are present), but a more ambitious positive proposal for how to reconceive realism.

Section B begins from the position of a complete rejection of external realism, and seeks to consider some first attempts to refute the problems posed by the MTA and JMT. Given that we cannot appeal to notions from an external perspective to secure against the issues, then what can we appeal to *internally* that can ensure that those positions do not fall into the same traps as the external realist? The independence and correspondence Principles are both shown to be 'innocent bystanders', so 'the guilty party must therefore be the Cartesianism Principle' (65). Without this, 'anti-realism, when properly followed through, coincides with pure realism' (70). Whether this is quite the case is not altogether clear. The independence principle is shown to be acceptable to all through the 'mass-extinction scenario': the thought experiment of whether, if there were a complete destruction of all life on Earth (and assuming none other in the universe), along with all minds, languages, and theories, the stars would still go on in their courses. Button rightly notes that the anti-realist should be happy to state that this is both physically possible, and that the stars would be left unaffected by our demise. Realism might thus be thought to come cheaply as through the simple vindication of such a thought experiment; through, as Button terms (following Putnam), a 'Leninist' argument for realism. But realism clearly should not be that simple, and so the 'decent anti-realist' will gave an interpretation of the claim that the stars are unaffected 'which-whatever it is—is not the same as the realist's interpretation' (66). Certainly such a move would mean that the anti-realist and realist can coincide in which statements are true, but it is unclear how the independence principle for the anti-realist, conceived of internally, could ever be satisfied. The anti-realist interpretation of the mass-extinction scenario will be internal to our best physical theory and thus be theory-dependent in some significant way. Theory-independence is thus lost. This is, though, in a sense, quibbling about the details. The aim of the section is to illustrate how three possible internal solutions fail to avoid the seeping in of Cartesian angst-those of nonrealism, natural realism, and justificationism—and in this, Button is highly effective.

Section C continues from this. Harnessing various brain-in-vat (BIV) arguments, Button seeks to show that scepticism, occurring in the form of Cartesian angst, is 'pathological', not some serious philosophical concern. The aim is thus to discredit the appeal to not just any Cartesian angst, but '*nightmarish* Cartesian' scepticism, wherein a situation counts as 'nightmarish' if 'it renders false all my contingent beliefs about the "external" world. It may leave intact my beliefs about my "inner" mental states... But almost everything that I believe about the specifics of my situation is false' (117). BIV arguments are therefore put to use in two ways. The first, and more important for Button, is to show that the arguments defeat BIV scepticism, itself a form of internal skepticism. The second is to show that the external realist cannot claim a solid foundation for their claim on the basis of the 'obvious unanswerability' of BIV skepticism. External realism is thus not some neutral starting point (unless we accept the already discredited 'magic' theory of reference). It is crucial to note that this does not mean that we never will encounter someone with lingering Cartesian angst. Rather, those with lingering Cartesian issues may be safely ignored.

To be clear, Button's claim is not just that such versions of nightmarish Cartesian angst can be refuted; it is that such extreme angst is unrepresentable. For example, 'bubble scepticism', where we are limited to being able to 'refer-in-my-phenomenal-bubble to objects-in-myphenomenal-bubble, and never to things-in-themselves' (144-145), is shown through BIV considerations to be unrepresentable. It is simply not possible to refer to the objects that we need to refer to in order to motivate such a version of nightmarish Cartesian angst in much the same way as in the simplest form of BIV, the brain-in-a-vat cannot refer to vats, only to 'vats', or to brains, only to 'brains'. Button's work here is extensive and impressive—BIV arguments are shown to be highly effective against BIV scepticism. There are some lingering concerns though over the treatment of 'metaphysical scepticism'. Button claims that the 'metaphysical sceptical hypothesis amounts to nothing more than a *bare formal possibility*', and that the metaphysician has not 'even tried to say something about how the *physical* world might be' (148). This seems too strong, and based on a very hubristic conception of metaphysics. Metaphysics conceived as able to incorporate findings from the sciences (which many metaphysical theories engage with today) avoids these issues. This is not to say that Button has no claims against the metaphysical sceptic—the requirement of magical theories of reference being only one—but a more nuanced metaphysical position would seem suited to avoid some of the concerns raised in this section.

For Button, then, the debate between the external realist and the internal realist comes down to a conflict of intuitions. At one end of the spectrum, we have strong *metaphysical* intuitions, or perhaps *epistemic* intuitions, to motivate external realism. At the other, we have *semantic* intuitions against magical theories of reference. Behind this comes a warning: that no set of intuitions can be claimed to be 'good' in contrast to the 'bad', in part due to the invidious effects of framing problems, and no position can claim to be free from intuitions. We might seek to work through BIV scenarios until we find some position between the two extremes, but Button seems correct to say that this method would be highly unsatisfying, and would unlikely lead to firm conclusions as to how much scepticism we should take seriously. This lack of firm positions and sharp lines on the realist spectrum is thus the overall message of sections A-C, with the internal-external dichotomy branded a 'metametaphysical bogey' and added to 'Putnam's bonfire of dichotomies' (178). Button's negative dialectic here offers a sensible message. Neither extreme is a safe position, and where external becomes internal is not at all clear. The call to reject sharp dividing boundary lines in favour of a more case-by-case method is persuasive, suggesting that we should give up trying to place ourselves in a particular place upon the spectrum.

The rejection of our ability to place ourselves precisely upon this external-internal spectrum is illustrated through an analysis of two debates in section D. The first concerns semantic externalism; the second, conceptual relativity.

On the first, Putnam's twin earth scenario is used (albeit in a slightly modified form) to show that all realists (internal, external, and in between) should be semantic externalists, but that semantic externalism is 'messy', incorporating a mixture of influences on reference (intentions; powers of discrimination; what 'better-informed' people would do). The weighting of these factors is left open. On the second, a radical Goodmanesque conceptual relativism is rejected, in favour of a more moderate version. This 'conceptual cosmopolitanism' rejects the idea that objects are relativized to conceptual schemes, but retains the ideas that no single way to approach the world is 'best', and that certain metaphysical debates should be 'liquidated'. Conceptual the cosmopolitanism seems to leave open more debate than semantic externalism (though this may in part be due to the reviewer's agreement with Button's analysis of semantic externalism). To be clear, Button's aim is not to reject all of metaphysics. It is only the 'hardcore realist' that is under threat: one who wishes to defend the notion of Ontologese. It is not clear that Button's arguments can do this, though. All metaphysicians should be open to the idea that some debates are to be liquidated. Button focuses on showing that we can coherently hold the position that there is no 'best' language (alongside the rejection of relativizing to conceptual schemes), rather than directly

persuading the metaphysician that they are wrong to hold that there is a best language. Button is effective in showing that there is a large conceptual space between the external and internal realist, while declining to step into hardcore metaphysical realism. Supporters of such hardcore realism, however, are unlikely to be moved by his arguments.

This caveat, along with others raised here, is minor, and might be asking one book to do too much. *The Limits of Realism* is a superb book in indicating a large amount of conceptual space that is normally unnoticed, and in showing that we can coherently sit within it. Asking more than this might seem churlish. The work, therefore, can be highly recommended, as an insightful analysis of major strands of Putnam's thought, which sheds new light on the external/internal realist debate, and which shows the limitations of trying to place ourselves precisely upon that spectrum.

J.T.M. Miller University of Durham