

Benjamin Morison, *On Location: Aristotle's Concept of Place*, Oxford University Press, 2002, 202pp, \$45.00, ISBN 0199247919.

Aristotle's account of place is one of the most puzzling chapters in Aristotle's *Physics*. Almost no one has taken it seriously, let alone endorsed it, but almost everybody has felt the need to refute it when providing a different theory. In *On Location*—the first book in English entirely devoted to this topic—Benjamin Morison sets out to change the map by offering both a comprehensive exposition of Aristotle's conception and, equally importantly, a rehabilitation of that conception as a piece of philosophy of enduring interest and value. The exposition is clear, the scholarship meticulous. The philosophical rehabilitation is incisive and well-argued, often dwelling on intricate issues that occupy a prominent position in recent metaphysical debates (such as the nature of material constitution or the possibility of spatial co-location). So the outcome is an enticing piece of work that will be of interest not only to Aristotelian scholars, but to anybody interested in the metaphysical question of what it is for something to be somewhere.

To be sure, Morison insists from the beginning on the necessity to understand Aristotle's conception of place within the context of Aristotle's *Physics*, whose aim is to provide an articulation of the basic concepts that scientists must use in systematizing our knowledge about the natural world. But Aristotle's scientists are not, of course, our scientists, and the *Physics* does not rank itself with physics in our sense of the term. It is, rather, part and parcel of Aristotle's overall metaphysical picture, so much so that Aristotle feels the need to argue for the *existence* of places and to account for their peculiar ontological status. (Places are not, for Aristotle, among the primary furniture of the world. They are parasitic entities, epiphenomena.) Still, one cannot understand Aristotle's reasons for taking places seriously without looking at his specific aims in the *Physics*. And Morison does an excellent job at explaining these reasons before looking into their broader metaphysical ramifications.

There are two main such reasons, according to Morison. The first is simply that the concept of place plays a central role in the formulation of any general theory about the natural world. This is obvious enough if one considers that Aristotle required any such theory to obey certain general principles to the effect that, for example, "No body can be in two places at once", and "No

two bodies can be in the same place at once”. But, more importantly, it is Aristotle’s characterization of natural bodies as those entities which have in them “a principle of change and rest” (*Phys.* II 1, 192<sup>b</sup>14) that calls for an elucidation and an articulation of the concept of place. For Aristotle thought that the most common sort of change—that which is so properly called—is change of place, i.e., movement. Indeed, Aristotle took pains at arguing that *all* changes involve change of place (*Phys.* VIII 7, 260<sup>a</sup>26–261<sup>a</sup>26). For instance, a change in quality of something ultimately amounts to a condensation or rarefaction of the thing’s parts. Thus, since the student of nature cannot do without such concepts as movement and quality change, the study of places becomes a crucial ingredient of Aristotle’s physics. (Besides, Aristotle held that the elements are partly individuated by where they *go*. The place to which fire tends, for instance, defines at least in part what fire is. This is more controversial, but it shows that for Aristotle places also have “power”, i.e., causal significance, and must therefore be included in any account of why the world is as it is.) The second reason for giving serious thought to places is more general. Aristotle holds, following common sense, that all those things that are are somewhere (*Phys.* IV 1, 208<sup>a</sup>29), i.e., to put it crudely, that something *x* exists if and only if there is somewhere where *x* is. Of course, the nature of this somewhere may be variously qualified, depending on the nature of *x*. If *x* is a property, for instance, then the relevant somewhere is neither more nor less than the object or objects in which *x* resides. (A property is somewhere in so far as there are things *in which* it is.) But if *x* is a material body, then the relevant somewhere is not another object (except in a derivative sense, as when we say that Coriscus is in the Lyceum). It is, rather, a place—*x*’s place. Hence, if *x* is a body, a proper understanding of *x* requires a direct characterization of *x*’s place *as such*—along with a justification of the very thought that there are such things as places.

Morison gives a thorough reconstruction of this twofold line of reasoning, and a thorough (though somewhat repetitive) analysis of the many arguments that Aristotle felt it necessary to provide in order to defend his ontological seriousness about places *vis à vis* certain puzzles that would seem to undermine it. In particular, Chapter 3 contains a detailed discussion of Aristotle’s treatment of Zeno’s puzzle: if everything that exists is in a place, and if places exist, then it would seem that places must be somewhere, too, and so on *ad infinitum*. Morison persuasively argues that Aristotle’s response lies in the distinction between different senses in which something can be said to be somewhere.

Just as properties are somewhere not in virtue of having a place, but in virtue of residing in things that have a place, so places can be somewhere not in virtue of having a place, but in some other sense. In what sense, exactly? Unfortunately, Aristotle never actually gives an explicit answer to this question, but it follows from his overall characterization that the sense in which a place is somewhere is the mereological sense: a place is related to its surroundings as a part is related to its whole. And this suffices to block the paradox.

So, now, what exactly are places, and how exactly do they relate as parts to their surrounding wholes? The one-sentence answer is that, for Aristotle, the place of something  $x$  is the (inner) boundary of the thing that contains, or surrounds,  $x$  (*Phys.* IV 4, 212<sup>a</sup>20-21). Aristotle arrives at this characterization after dismissing three other possibilities, including Plato's view in the *Timaeus* (48E–53C) that the place of a thing is its receptacle. We leave it to the reader to follow Morison's careful reconstruction of Aristotle's reasons for such dismissals, and of his reasons for taking the only remaining option to be his (Chapter 4). But let us look more closely at Morison's interpretation of this option, i.e., of Aristotle's account of place as given above (Chapter 5). What exactly is *the* thing that surrounds  $x$ ? And why should the place of  $x$  coincide with the *boundary* of that thing?

Aristotle is perfectly aware that, in general, more than one thing can be said to surround a given body  $x$ , depending on quite how much we take in. Consider a fish off the coast of Athens. It is surrounded by the water in the Piraeus, but also by the waters in the whole Saronic gulf, or in the Ionian sea, or in the entire Mediterranean sea. It is also surrounded by the mereological fusion of the Mediterranean sea and the atmosphere. Indeed, there is no reason to stop anywhere except at the upper limit. For Aristotle this upper limit is the universe (which is finite), and since everything is in the universe he does not hesitate to call the universe the "common place of all things" (*Phys.* IV 2, 209<sup>a</sup>32). Thus—Morison concludes—when Aristotle talks of *the* thing that surrounds a body  $x$ , he must be referring to this maximal surrounder, the whole universe, which is uniquely defined and, since there is no void, precisely "fitted" to  $x$ . This answers the first question. As for the second—why should the place of  $x$  coincide with the *boundary* of its surrounder, thus construed?—consider again the fish. The fish is in the universe, but the universe is not *the* place of the fish. (Otherwise everything would be exactly in the same place.) Rather, when Aristotle speaks of *the* place of something  $x$  he means to talk of a specific place of  $x$ , one that is proper to  $x$  and is included in, but does not coin-

cide with, its maximal surrounder. Indeed, the proper place of  $x$  is to be thought of as the *smallest* surrounder of  $x$ , that which is included in the universe as well as in any other “intermediate” surrounder of  $x$ . It is here that boundaries enter the picture. For the obvious way to pick out such a minimal surrounder is to construe it as the inner boundary of the maximal surrounder, which coincides with the limit (in the mathematical sense of the word) of the sequence of all the nested, intermediate surrounders of  $x$ . In Morison’s words, “the inner limit of  $x$ ’s maximal surrounder just is the inner limit of  $x$ ’s surroundings” (p. 148). And this answers the second question. *The surrounder* of  $x$  is, mereologically, the sum or fusion of all the surrounders of  $x$ ; but *the place* of  $x$ —its proper place—is the product or intersection of all those surrounders. It is the inner limit at which the universe is in contact with  $x$ .

Does this reconstruction vindicate Aristotle’s account? Morison is happy with it, and devotes the final part of the book to its defense. For example, he discusses the objection (due to Wiggins) to the effect that the proper place of a stationary fish in a river cannot be the limit of the surrounding water, for this limit is changing all the time (pp. 154f). The response, interestingly enough, builds on Wiggins’s distinction between identity and constitution: the surrounder of the fish is not the water of the river, but the river itself. Actually, *the* surrounder is the whole universe, as we have seen, and the inner limit of the universe does remain the same as the water moves. But even if we consider that “intermediate surrounder” which is the river, the relevant inner limit still remains the same. It is only the limit of the water that changes, yet that cannot be identified with the limit of the surrounder—hence with the place of the fish—“because the water (only) *composes* the river” (p. 155). In a similar vein, Morison disposes of the dual objection (due to Sorabji) to the effect that the proper place of a moving fish in a river cannot be the limit of the surrounding water, for this limit can be the same all the time. Thus, to the extent that Aristotle is prone to distinguish between constitution and identity, such objections do not appear to undermine the account (though it is somewhat disappointing that the account should turn out to depend on that controversial distinction).

Another difficulty that has often surfaced in connection with Aristotle’s account concerns the location of the universe itself. In so far as it is something, the universe must be somewhere; but since there is nothing that surrounds it, the universe cannot have a proper place. Here Morison’s response is less effective. He argues that the seeming contradiction trades on the ambiguity of

‘somewhere’ (pp. 99, 166ff): the universe is not somewhere in the strict local sense but derivatively, in virtue of being in its parts. This seems to be exactly what Aristotle had in mind (*Phis.* IV 2, 212<sup>b</sup>11–12), but one is left wondering why the universe should enjoy such a special status—why the where-question should suddenly acquire a different meaning as we move from the parts to the whole. Besides, a host of complications crop up as soon as we begin to follow through this line of thought. First, not *all* parts of the universe can have a place in the strict sense. (Think of the celestial sphere: there is nothing that surrounds it, either.) Thus one should rather define the location of the universe with reference to a *partition* of it all members of which have a place. But even this is problematic: no part of the universe that extends all the way up to the celestial sphere can be *totally* surrounded by something, so no partition is available to do the job. Thus one should further refine the location of the universe by redefining location in terms of *partial* surrounders. Morison acknowledges all this, and his discussion is full of original insights. However, his remarks are also rather sketchy, so the light they shed is only enough to make one wish he had gone on and said more. (On the other hand, Morison gives compelling reasons for taking this to be the only way to go when it comes to other objections that could be raised in this connection. See, for instance, the discussion on pp. 166ff of the question: How can Aristotle maintain that the heavens rotate, and that rotation is a case of local motion, if the location of the heavens is merely derivative?)

So much for issues directly addressed in the book. Regardless of whether one finds Morison’s defense of Aristotle fully satisfactory, it is certainly to his credit that he does not eschew such puzzles, showing their connections and intricate conceptual ramifications. After all, nowhere in the book is it claimed that Aristotle’s account *is* fully satisfactory. There are, however, a number of other important questions—both concerning the basic notion of a maximal surrounder and the notion of its inner limit—that cry out for an answer and that Morison does not fully address. Let us conclude by mentioning three of them.

First, concerning the first notion, it is just not clear whether the maximal surrounder of a body *x* should be identified with (i) the universe as a whole, or with (ii) the *rest* of the universe—i.e., with the universe minus *x*. On the face of it, option (i) is supported by Aristotle’s claim that the universe is the “common place” of all things. But option (ii) accords better with his claim that a body must “fit” this surrounder, and be “in contact” with it. Now, Morison

(p. 147) goes for (i), arguing that (ii) would have the unacceptable consequence that nothing other than  $x$  could ever take  $x$ 's place. (Indeed: (ii) would have the further consequence that it would be impossible to say of two bodies that they share some place, broadly speaking, i.e., that there is some broad place that includes them both. Yet Aristotle is surely willing to say such things.) The argument, however, is only briefly sketched and the basic conceptual tension is left unresolved. And it is sometimes difficult to follow Morison's discussion and defense of Aristotle's theory on such shaky grounds.

Concerning the second basic notion—that of an inner limit, or boundary—the trouble is deeper. There is no question about what Aristotle had in mind, as he provides an explicit definition: the boundary of a thing  $x$  is “the first thing outside of which no part [of  $x$ ] is to be found, and the first thing inside of which every part [of  $x$ ] is to be found” (*Meta.* Δ 17, 1022<sup>a</sup>). And Morison is right in defending this “idealized” definition against certain *prima facie* objections familiar from ordinary language philosophy (pp. 140f). (Recall Austin: where and what exactly is the boundary, i.e., the surface, of a cat? The answer is simply that because it is not infinitely extended, every cat has a boundary in Aristotle's sense, difficult as it may be to pin it down with precision. Here Morison does not elaborate, but Aristotle's account seems to be perfectly compatible with standard treatments of vagueness as a linguistic phenomenon, perhaps even as an epistemic phenomenon—surely not an ontological one.) However, Aristotle's notion of a boundary, precisely in so far as it involves an idealization of the common-sense notion of a surface, is also problematic when it comes to explaining the notion of *contact*. And here no quick dismissal is available. Imagine yourself travelling from the inside of a body  $x$  to the outside. What happens as you cross the boundary? Do you pass through a last point  $p$  of  $x$  and a first point  $q$  of its exterior? Clearly not, given the density of the continuum. But, equally clearly, we can hardly acknowledge the existence of just one of  $p$  and  $q$ , as is dictated by the standard mathematical treatment of the continuum, for either choice would appear to be arbitrary. And we cannot identify  $p$  with  $q$ , either, for we are speaking of two adjacent bodies. So how can  $x$  and its exterior be separate, and yet in contact? Morison does not address this question, yet it is crucial for a proper understanding of the theory of places that he defends. He eventually suggests that two things are in contact when their boundaries *coincide* (p. 142). But how is coincidence to be understood here? If it amounts to identity, or overlap, then we must give up the intuition that a body and its exterior have no parts in common. If, on the other hand,

coincidence is construed as mere co-location (as Brentano suggested), then the intuition is save but we cannot use it to back up Aristotle's theory of places on pain of circularity.

Perhaps the answer to such worries lies in the fact that places (hence boundaries) are not to be included among the primary furniture of the world. As already mentioned, Aristotle thinks that they are "parasitic" entities, an "epiphenomenon" of the way the world is (p. 4). They are parasitic entities because they—like all boundaries—depend ontologically on their hosts (p. 142). This is not only explicit in Aristotle's texts, but it also follows from what Morison says at various places in the book, e.g., in his replies to the Wiggins objection mentioned above. The place of a body is an immaterial entity, an entity that can be constituted by matter but which is not identical with any amount of matter. However, then the question becomes: How can places, construed as immaterial epiphenomena, have the "powers" that Aristotle attributes to them? True, the problem arises also with regard to a river, if this is construed as something over and above any amount of water that may constitute it at different times; and in that case a familiar line of response is that the river is causally active *in virtue of* the causal power of the water that constitutes it at different times. None the less, it is not altogether obvious that that line of response can be carried over automatically to account for the causal efficacy of places (especially if this efficacy is to play a role in the ontological arguments *for* the existence of places), and it would have been good to see what Morison has to say on this important issue.

So there are some weak points, or at least some issues that call for further work. But this is not to say that the book is disappointing. On the contrary, the accomplishments of *On Location* vastly outnumber its limits, and these, too, are only indicative of Morison's ability to put the issues under a refreshingly new perspective. Whether or not the book succeeds at silencing all misgivings about Aristotle's views on the topic, it certainly achieves the goal of showing that those views—and the topic itself—are of much greater philosophical interest than many have been inclined to think.

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