

Gunk in the Third Deduction of Plato's *Parmenides*

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In the third deduction of the *Parmenides* (157b5-59b1),¹ Plato has Parmenides investigate “what the Others undergo if the One is” (156d5-6). In the course of that investigation, we are offered an account of how the Others are one or unified: They are unified because they “partake” of the One (157c2). Even though Parmenides goes on in the fourth deduction to undermine the account from the third deduction (because, roughly, the One would no longer be One if the Others partook of it), the third deduction has been called the “most constructive” of the deductions in the *Parmenides*,² and some have taken it to express part of Plato's own account of mereology.³ There is, then, a tendency in the literature to think of the third deduction as providing a promising account of the relation between the Others and the One which, moreover, Plato himself may have been inclined to accept.⁴

However, I am going to argue that there is a hitch in the third deduction which threatens to undermine Parmenides' proposal. Roughly, even if the Others partake of the One, the account of the third deduction leads to an ontology of gunk, that is, an ontology on which there are no mereological atoms (except for the One). Hence, it is unclear whether the participation relation between the Others and the One is sufficient to impose the sort of structure on the Others which, in the context of this deduction, Parmenides (or Plato) seems to hope for. Instead of the constructive reading of the third deduction, I will therefore offer an *aporetic*

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¹ Following Cornford 1939: 194, I count 155a4-57b5 as an appendix to the second deduction, taking there to be eight deductions in the second half of the *Parmenides*.

² As Gill 1996: 86 puts it.

³ See in particular Harte's discussion of the passage (2002, ch. 3: 123-29). See also Gill 1996: 87-91; 2012, ch.2.

⁴ Of course, if one takes all deductions to be constructive, as e.g. Cornford 1939 and Meinwald 1991 do, the third deduction will be constructive, too. Cornford takes the positive conclusion of the third deduction to be that there are more objects than one (1939: 205). Meinwald takes the third deduction to establish positive conclusions about the Others “pros to allo”, that is, relative to the One (1991, ch.7: 133-34).

reading on which the third deduction raises further difficulties for the participation relation at the heart of young Socrates' theory of Forms.

1. The One and the Others

“The Others” (τὰ ἄλλα) with which Parmenides is concerned in the third deduction are characterized as “other than the One” (157c1) and presumably include all the things distinct from the One.⁵ Unlike the One, the Others are not completely one because they have parts (157c3-4). Since they have parts, the Others are wholes or perhaps even one whole (157c5-9). They are not bare pluralities, nor one bare plurality, as Parmenides argues in a complex section (157c9-e2).⁶ Each whole is “one *complete* thing (ἓν τέλειον) having come to be from all [its parts]” (157e1), and the same is true of the parts so that “it is necessary for the whole and the part to partake of the One” (158a6-7). Let us dwell a little on that last claim.

Leading up to the conclusion that both the whole and the part partake of the One, Plato's Parmenides first states that “the things other than the One must be one complete whole which has parts” (157e4-5). Literally, we are told that all the Others together form one whole, not that each of the Others is a whole. Initially, then, there seems to be just one whole, though shortly we will see reasons to think that there are many more wholes, in fact, infinitely many. At any rate, it is here that, arguably, Plato's structural mereology makes its appearance: The whole is not simply a mereological sum but has structure and unity.⁷ But for present purposes,

⁵ See Cornford 1939: 205; Gilbert Ryle 1939: 126. Alternatively, one could take the Others to be only the Forms other than the One, or only sensible objects (Cornford *ibid.* notes both options). The latter option is defended by Kenneth Sayre 1996: 272. However, the only claim about the Others is just that they are other than the One, which does not seem to imply that they must be exclusively Forms or exclusively sensible objects. – I will return to the question what the One and the Others are, respectively, towards the end of the paper.

⁶ See Gill 1996: 87-89 and Harte 2002, ch. 3: 125-28 for a discussion.

⁷ Harte 2002, ch. 3: 131-34.

I am more interested in the status of the parts than of the whole. How exactly are we to understand the claim that the part partakes of the One?

After he has stated that the Others form a complete whole, Parmenides says about the parts of the whole: “Moreover, the same account holds for each part. For [the part], too, must partake of the One. For if every single one (ἕκαστον) of them is a part, surely ‘single one’ signifies [its] being one, delimited from the others, being by itself, if it is to be a single one” (158a1-3). Each part of the whole is delimited from the other parts in virtue of being one. We will briefly return to the claim that each part is delimited from the others (and the whole) below. But the more important, and more basic, question is what it is for a part to be one.

Since Parmenides says that “the same account” holds for the parts as for the whole, the following naturally suggests itself: Not only the whole formed by all the Others, but also each part of that whole is a complete whole. For, in virtue of partaking of the One, each part is itself a unified whole. Moreover, the same should go for each of the parts of the part, and so forth ad infinitum. Hence, Parmenides is landed with an ontology of *gunk*: There is no part of any whole which is not further divisible into further parts.

As far as I can see, that conclusion can be avoided only if we reject the assumption that all parts are themselves wholes with parts. Furthermore, in keeping with the options presented by our text, there seem to be only two ways of rejecting that assumption: Either, at some level of the part-whole structure, the parts of a whole are mereological atoms, or, at some level of the part-whole structure, the parts of a whole are bare pluralities. Neither move is promising.

On the one hand, if at some level of the part-whole structure, the parts of a whole are bare pluralities, it is even more obvious that Parmenides has to countenance an ontology of *gunk*. For, as we will see in more detail in our discussion of “bulks” below, bare pluralities are entirely unstructured and so presumably ever more divisible into further pluralities. On the other hand, as mentioned above, Parmenides rules out the possibility that anything other than the One could be a mereological atom right at the start of the third deduction: “The others are

other than the One by having parts; for if they did not have any parts, they would be completely one” (157c3-4).

If all that is right, the most plausible interpretation of the third deduction is that not only the whole, but also all the parts of the whole, insofar as they partake of the One, are wholes with parts, and so are the parts of those wholes which in turn have parts that are wholes, and so forth ad infinitum. Crucially, then, even participation in the One does not prevent an ontology of gunk. I will argue next that that outcome is hard to square with what, in the third deduction, Plato’s Parmenides takes participation in the One to achieve.

2. Gunk

In the later parts of the third deduction, Parmenides has much to say about the 'limit' (πέρας) and what is “unlimited” (ἄπειρον). In particular, he argues that the Others are “unlimited in multitude (ἄπειρον πλήθει)” (158b6) insofar as they do not partake of the One, and “whenever we examine the other nature [i.e. the nature of the Others] itself by itself, however much we ever see of its shape will be unlimited multitude” (158c5-7). For it is only insofar as the Others partake of the One that they are limited and distinguished from each other as well as from the whole (158d2-8). For only “whenever each part has become *one* part, then they already have a limit towards each other and towards the whole, and the whole towards the parts” (158c7-d2).

Hence, Parmenides seems to assume that, insofar as the parts partake of the One, they are not unlimited in multitude, and because, insofar as they partake of the One, they are not unlimited in multitude, the parts are individuated from each other and the whole. In considering the nature of the Others by themselves, we learn more about what it is for them to be “unlimited in multitude”: “Whenever (ἀεί) we examine the other nature itself by itself,

however much (ὅσον) we ever (ἀεὶ) see of its shape will be (ἔσται) unlimited in multitude” (158c5-7). Parmenides’ claim suggests that if we were to take any quantity of the Others, insofar as they do not partake of the One, we could divide it infinitely without encountering any mereological atoms. That is, insofar as they not partake of the One, the Others are ‘gunky’.

By contrast, surely the implication is that, insofar as the Others *do* partake of the One, they are not gunky. For participation in the One is precisely supposed to rule out that the Others are unlimited in multitude. Yet, if I was right earlier, participation in the One does not rule out that the Others are unlimited in multitude. For each part is a whole with further parts, and so forth ad infinitum. Thus, contrary to Parmenides’ contention, even the Others insofar as they partake of the One are unlimited in multitude, and hence gunky. The seventh deduction (164b5-e1) can help us reinforce the problem.

The seventh deduction draws out consequences for the Others not from the hypothesis that the One *is* (as the third deduction does), but from the hypothesis that the One is *not*. In the third deduction, we had to understand what the Others are by their own nature by abstracting away from their assumed participation in the One. In the seventh deduction, we can look at the nature of the Others without any such abstraction since they are not assumed to participate in the One.⁸ According to the seventh deduction, then, the Others do not have any unity or structure. Nonetheless, unlike the eighth deduction which concludes simply that “if the One is not, then nothing is” (166c1), the seventh deduction offers something like a positive ontology which is centered around the notion of a “bulk” (ὄγκος).

Absent the One, and hence absent any participation relation between the Others and the One, the Others no longer exhibit the part-whole structure which was so crucial to the third deduction. Instead, the Others form “bulks”, where “each bulk of [the Others] is unlimited in

⁸ See Sayre 1996: 287. – On abstraction in the third deduction, see Meinwald 1991, ch. 7: 135-39.

multitude (ἄπειρος πλήθει)” (164d1), and “if one grasped the seemingly smallest [piece], as a dream in sleep it would suddenly appear to be many instead of a seeming one and instead of the smallest [piece] it would be appear to be huge compared to the pieces chopped out of it (τὰ κερματιζόμενα ἐξ αὐτοῦ)” (164d1-4).

The description of a bulk as “unlimited in multitude” is of course reminiscent of the earlier claim in the third deduction that, insofar as the Others do not partake of the One, they are unlimited in multitude (158b6). Moreover, just as the Others insofar as they do not partake of the One in the third deduction, bulks are characterized in terms of an ontology of gunk: Each piece of a bulk, however small it is, is infinitely divisible, and hence appears to be both small, relative to the bulk of which it is a piece, and huge, relative to the pieces into which it is “chopped”. The terminology of “chopping” recurs later in the same deduction, where we are told that “whatever being one grasps by thought must be ground to pieces (θρύπτεσθαι), being chopped up (κερματιζόμενον); for it is a bulk which would always be grasped without the One” (165b4-6).

What goes wrong in the absence of the One is that we get an ontology of bulks, and hence an ontology of gunk, instead of an ontology of parts and wholes. Further, the implied counterfactual claim in 165b4-6 is that if the One *were*, and if the Others participated in the One, we would get neither an ontology of bulks, nor more generally an ontology of gunk. For apparently the thought is that gunky objects like bulks are gunky because they are not unified. Just like the third deduction, then, the seventh deduction suggests that participation in the One should prevent an ontology of gunk. Yet, we have seen reasons to believe that participation in the One does *not* prevent an ontology of gunk since every part of any whole is a whole with further parts.

One could object that, surely, there is good gunk and bad gunk.⁹ On an ontology of bulks, there is no part-whole structure left at all. But that is an especially bad case of gunk. By contrast, in the third deduction, the ontology of gunk is compatible with, or even presupposes, a part-whole structure. For it is only because any part of any whole has further (proper) parts that the Others, even insofar as they partake of the One, turned out to be unlimited in multitude, and hence gunky. While, in the absence of the One, the Others are gunky in a bad way because they turn out to be bulks without part-whole structure, participation in the One makes the Others gunky in a good way: The Others are unlimited in multitude, but in a way that allows them to have mereological structure.

However, while I do not want to foreclose the option that Plato's mereological picture may in the end turn out to be amenable to mereologically structured gunk, given the way in which the third deduction is set up, it seems to me that participation in the One is meant to rule out that the Others are gunky *in any way whatsoever*. For it is only by their own nature that the Others are supposed to be unlimited in multitude, not insofar as they partake of the One. But if the Others are unlimited in multitude, and hence gunky, even insofar as they partake of the One, that outcome runs contrary to the expectations in place in the third deduction, even if the Others are mereologically structured gunk and not mere bulks.

Overall, then, the connection between, on the one hand, the unity or disunity of the Others, and, on the other hand, whether one needs to accept an ontology of gunk is less straightforward than Plato's Parmenides assumes in the third deduction and beyond.

⁹ This point has emerged in discussion with Mary Louise Gill, Verity Harte, and Thomas Tuozzo.

3. The Aporetic Reading

Where does all that leave us? At the outset, I mentioned that the third deduction is often taken to provide at least part of Plato's constructive metaphysics of structure. On that reading, even though the fourth deduction will appear to do away with the positive conclusions drawn in the third, there is, by Plato's lights, something fundamentally right about the story told in the third deduction: Plato accepts that the Others are unified and structured by participation in the One. Of course, the import of that claim depends on what we take the One and the Others to be. It seems plausible, however, that the One is a Form.¹⁰ Moreover, plausibly, the range of the Others at least includes sensible objects. After all, sensible objects are other than the One. Moreover, even though the language of perception used in describing the Others is presumably partly metaphorical,¹¹ it is at least suggestive of an application of the sorts of problems discussed to sensible objects.

Now, if one assumes that the third deduction puts forward Plato's own metaphysics of structure *and* that the One is a Form *and* that the Others include sensible objects, the third deduction promises nothing less than part of a response to the puzzles raised in the first half of the dialogue. For those puzzles revolve to a large extent around the status of the participation relation between sensible objects and Forms. But in the third deduction, one instance of the participation relation is treated as unproblematic, namely, the relation obtaining between sensible objects and the Form of the One.

¹⁰ Of course, there are alternative readings. On Cornford's reading, for example, the distinction between the One and the Others is so general that the One may be a Form or simply a 'one-entity' or the universe, presumably depending on the context (Cornford 1939: 208). Even on that reading, I take it, there is an instance of the One-Others relation which can be construed as a relation between the *Form* of One and the Others, which is all that is required for the constructive reading to be sketched here to work. – On the Neoplatonist reading on which the One transcends the Forms presumably such an interpretation will not be available.

¹¹ The most notable instances of the language of perception are in the seventh deduction where Parmenides talks, for example, about "seeing [a bulk] from a far" (165b7-c1) and of bulks being "ground to pieces" (164b4).

By contrast, if my reasoning here has been along the right lines, the third deduction has to be read not constructively but *aporetically*. For the participation relation between the Others and the One remains problematic. After all, participation in the One does not do what it is supposed, that is, it does not rule out that the Others are gunky. Rather than solving the puzzle about the participation relation between the Others and the One, the third deduction raises a further puzzle, namely, that even if that participation relation obtains, and even if the Others have some sort of mereological structure, they are still unlimited in multitude and gunky, contrary to Parmenides' expectations.

If we spell out that general aporetic result in the terms of the sketch of the constructive reading above, the third deduction raises a further, more specific puzzle targeting not participation in Forms generally but participation in the Form of the One in particular. Rather than solving one crucial instance of the puzzle about the participation relation between sensible objects and Forms from the first half of the dialogue, the third deduction adds a further problem. Notably, however, the aporetic reading does not depend on a specification of what the One or the Others are: Whatever they are, the result that participation in the One does not prevent the Others from being gunky is a puzzle that needs to be resolved.

Even putting aside all the considerations offered above, the aporetic reading of the third deduction seems more in line with what we should expect from the *Parmenides*. For the apparently naïve treatment of the participation relation in the third deduction should strike us as strange, given all the difficulties raised in the first half of the dialogue. On the aporetic reading, but not on the constructive reading, that naiveté is indeed merely apparent. For on the aporetic reading, the third deduction proceeds to make trouble for the participation relation, and hence shares the critical attitude towards that relation with the earlier passages where Parmenides raised his puzzles for young Socrates' theory of Forms.

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