Justin Vlasits* The Puzzle of the Sophist

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Abstract: The many definitions of sophistry at the beginning of Plato's *Sophist* have puzzled scholars just as much as they puzzled the dialogue's main speakers: the Visitor from Elea and Theaetetus. The aim of this paper is to give an account of that puzzlement. This puzzlement, it is argued, stems not from a logical or epistemological problem, but from the metaphysical problem that, given the multiplicity of accounts, the interlocutors do not know what the sophist *essentially* is. It transpires that, in order to properly account for this puzzle, one must jettison the traditional view of Plato's method of division, on which divisions must be exclusive and mark out relations of essential predication. It is then shown on independent grounds that, although Platonic division in the Sophist must express predication relations and be transitive, it need not be dichotomous, exclusive, or express relations of essential predication. Once the requirements of exclusivity and essential predication are dropped, it is possible to make sense of the reasons that the Visitor from Elea and Theaetetus are puzzled. Moreover, with this in hand, it is possible to see Plato making an important methodological point in the dialogue: division on its own without any norms does not necessarily lead to the discovery of essences.

1 Introduction

Plato's *Sophist* begins brimming with confidence. After Socrates, Theaetetus, and Theodorus ended their discussion aporetically the day before (in the *Theaetetus*), a new character, the Visitor from Elea, enters the scene. Described as "a kind of god of refutation" (216b5–6), he promises to distinguish and define sophistry, statesmanship, and philosophy, three crafts that have hitherto been confused with one another. Moreover, he wields a powerful tool of inquiry, the method of division, with which he can, apparently, define anything whatsoever. The method of division is a procedure for creating classifications by dividing more general kinds into increasingly specific ones. The purpose of the method is to seek the nature or essence of a target natural kind. After showing off his shiny new method

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with Theaetetus by defining the craft of angling in short order, he proceeds to define sophistry, the first of the controversial trio.

But something goes horribly amiss. The Visitor sure enough obtains a definition of sophistry by division. But then he obtains another, and another, ending up with six in total. The puzzlement voiced by Theaetetus at this point in the dialogue leads to the puzzles concerning falsehood that drive the central section and only gets resolved at the very end, when we finally attain an adequate definition of the sophist (also by division). The problem of the plurality of definitions of sophistry by division has also been a major issue of contention in the secondary literature, with attempts to explain both the puzzlement of the interlocutors and the message that Plato wants us to draw from it.

My aim is to give an account of this puzzlement. Previous accounts cannot explain the puzzle of the sophist because they rely on what I call the traditional picture of division. In Section 2, I lay out the traditional view, showing that the best account of the puzzlement is inconsistent with the traditional view of division. I will then argue against the traditional view in Sections 3 and 4 by examining the examples of Platonic division in the *Sophist* and other dialogues. Instead, I will argue that the examples only support a minimal view of Platonic division. I will argue in Section 5 that the minimal view also gives a more satisfactory account of the puzzle of the sophist. In Section 6, I conclude by suggesting that the lesson from the use of division in the *Sophist* that we are supposed to draw is that division needs norms. So, while division in general does not have very much structure, it can still be useful in the hunt for definitions when those norms are observed.

On the interpretation presented here, Plato introduces in the *Sophist* a significant methodological problem with division through his use of the many definitions of sophistry. By showing both how it can sometimes lead to correct definitions, in the case of the angler and arguably also in the final definition of the sophist, but also how it can go terribly wrong, he makes an easily overlooked point about classification. He also sets up an important research program, which we can see not only carried out in other dialogues, but also in Aristotle and other members of the academy.

2 The Traditional View of Division and the Puzzle of the Sophist

The traditional view of division is a view about *what division is*. To understand this more clearly, I need to make a few distinctions. The first is between *process* and *product* of division. " Δ ιαίρεσις", like "division" in English and "*divisio*" in

Latin, is ambiguous between referring to the event of a thing being divided and the parts that are the result of the dividing of some whole. For example, "defining by division" would be talking about the process of dividing, while the pseudo-Aristotelian *Divisions* would clearly be about the product.

The traditional view is an answer to the question: what is *a division* in the product sense? The restriction to the product sense is important, as it allows us to look not at the mind of the inquirer but instead at the object of her inquiry. An outline account of the process sense would run something like: one first thinks of a general kind that the target falls under. Then one distinguishes various parts of that kind until one arrives at something necessarily coextensive with the target. I do not mean to suggest that it is easy to give this account precisely, but merely what kind of question that would be.

Moreover, I want to focus attention not on the representation created by dividing, but on the relations between things that this representation is meant to track.¹ The question that I will be discussing abstracts from how one ought to go about dividing and does not consider what are *scientific* divisions. Plato and members of the Old Academy such as Speusippus, Xenocrates, and Aristotle were primarily interested in division because they believed that this latter sort are indispensible in scientific inquiry.² I will call the broader class just *divisions* and the narrower class *scientific* divisions, for want of a better term. By a "scientific division" I simply mean one that, when one possesses it, gives one scientific knowledge of a given domain.³ Divisions that are not scientific in this sense may still be important in the broader enterprise of Platonic science, for example, as starting points from which one might better discover a division. I believe that it is very important to get clear on this narrower class of scientific divisions, but my task here is to get clear on the wider class of division as such. One cannot know the species of division, you might say, unless you know something about the genus. I will say something about scientific divisions in the final section.

¹ Peter Abelard, who gives the first definition of division that I am aware of (in contrast to the Stoic definition in Diogenes Laertius, VII.61, which makes the trivial claim that division is "cutting"), says that it is an "account through which something is shown to be divided by other things" (*Dialectica* 535.21–2, de Rijk 1970). Abelard defines the linguistic representation. One might object that this is a circular definition, but he defines division in the *product* sense in terms of the *process*.

² Diogenes Laertius lists books related to division for all three, which are unfortunately lost. For Aristotle's theory of division, see especially *Prior Analytics* I.31, *Posterior Analytics* II.5, 13, *Metaphysics* Z.12, and *Parts of Animals* I.2–4. This last text directly criticizes views of some members of the early Academy, perhaps around Speusippus, who practice dichotomous division.

³ Compare Aristotle's definition of a demonstration as a scientific syllogism in *Posterior Analytics* I.2.

Even within this question, one might be interested in understanding the metaphysics of division, for instance, whether what is divided are *classes* or Platonic forms.⁴ One might also be interested in structural features of divisions. Those who disagree on the precise metaphysics of division can still agree, for instance, that divisions are dichotomous or exclusive, or that divisions capture relations of essential predication. It is primarily these structural features that will occupy us here.

With these preliminaries aside, I can articulate the Traditional View of division. This is encapsulated in Porphyry's Tree (*Eisagoge* 4.21–32). There are two components to the Traditional View: a conception of the structure of division and a conception of the kind of relation in a division. In Porphyry's Tree, the highest kind, substance, is divided into corporeal and incorporeal substance. Corporeal substance is in turn divided into animate and inanimate corporeal substance. This procedure of exclusive and exhaustive dichotomous division is repeated until one reaches the target kind – in this case, human being.⁵ In this picture, all the lower kinds are all species of the higher kinds and this implies that all the relations described are *essential*, since the genus appears in the account of the essence of the species.

According to the Traditional View, a division is structured as a *tree*, usually with dichotomous branching.⁶ The relation pictured by a line in Porphyry's Tree is supposed to be transitive, exhaustive, and exclusive. Secondly, a division represents a relation of essential predication between kinds.

I will argue that proponents of the Traditional View have difficulty accounting for the many definitions of sophistry and the puzzlement expressed in the *Sophist* by the interlocutors themselves. After defining the angler, the Visitor gives six accounts of sophistry by division:

- 1. a hunter of rich young men (221c6–223b7),
- 2. a wholesaler of knowledge about virtue (223c1–224d3),
- 3. a retailer of knowledge (224d4–e5),
- 4. a merchant of knowledge who makes his goods (also 224d4-e5),
- 5. a money-making debater (224e6–226a5),
- 6. an educator who uses refutation to purify the soul (226a6–231b9).

6 For a description of the traditional view, see Barnes 2003. The attribution of the traditional view to Plato is widespread in commentators such as Crivelli 2012; Miller 2016; Rickless 2010.

⁴ See the debate between Cohen 1973, Moravcsik 1973b, and most recently Muniz and Rudebusch 2018.

⁵ I here bracket Porphyry's surprising division of human beings into individual humans, which is not a part of the Traditional View, and rightly so. Plato never tries to divide a kind into individuals.

The presence of all these accounts has puzzled commentators just as they puzzled the interlocutors. Theaetetus gives voice to this puzzlement:

Theaetetus: Let's say that. But the sophist has appeared in lots of different ways. So I'm confused about what expression or assertion could convey the truth about what he really is. $(231b9-c2)^7$

There are three plausible interpretations of what is puzzling about the presence of so many definitions and the reason that Theaetetus is giving for his confusion:

- His confusion is *logical*. He is confused because he does not think all of those accounts are *logically consistent*. Nothing could satisfy all of these accounts.⁸
- 2. His confusion is *epistemic*. He is confused because the plurality of accounts, especially the sixth account of sophistry that seems to apply to philosophers, makes him *unsure* which of these accounts is true, since his method seems to be unreliable.⁹
- 3. His confusion is *metaphysical*. He is confused because, even though all these accounts might be true of sophistry, he still does not know what sophistry is. Finding out the nature of sophistry will disclose which of the other accounts are merely true descriptions, but not accounts of the essence of sophistry or of what sophistry really is.¹⁰

Not all views about what it is puzzling about the many definitions are views about what puzzles the *interlocutors*. According to Brown 2010, all of the accounts are false because there is no kind "sophistry" at all. If true, this fact evidently eludes the Visitor and Theaetetus. On the other end of things, Moravcsik 1973b takes all the accounts to be definitions and denies that there must be a unique one. But the interlocutors have an evident preference for the final account (268d) over all the others that is unexplained on this view.

I will proceed here on the assumption that Theaetetus here identifies what Plato takes to be significant about the many definitions of the sophist. This is not only because of Theaetetus's character – he is consistently portrayed as a mathematical genius-in-the-making with good philosophical instincts – but also

^{7 {}ΘΕΑΙ.} Λεγέσθω μέν· ἀπορῶ δὲ ἔγωγε ἤδη διὰ τὸ πολλὰ πεφάνθαι, τί χρή ποτε ὡς ἀληθῆ λέγοντα καὶ διισχυριζόμενον εἰπεῖν ὄντως εἶναι τὸν σοφιστήν. All translations from Plato are from Cooper 1997, with occasional modifications.

⁸ Cornford 1957; Rickless 2010.

⁹ Notomi 1999. Note that he thinks that another source of confusion is metaphysical.

¹⁰ There are quite a few variations on this view, held by Notomi 1999; Sayre 2006; Gill 2010. For my purposes, it is not important whether the first definitions express *kinds* of sophistry, *aspects* of the sophistic activity, or even particular sophists.

because his confusion is not anywhere suggested to be a misunderstanding. On the contrary, the Stranger's response to his confusion drives the next moves of the dialogue. If we can give good sense to the worries explicitly expressed and see philosophical insight in them, we need not go down the path of the more esoteric readings.

It is important here to be precise about what account means on my taxonomy of interpretations. It is not here restricted to definitions. Everyone besides Moravcsik 1973a in this debate agrees that there are not seven correct definitions of the sophist. Rather, I mean to use "account" in a broad sense to include any true predication. This is the sense of account present, for instance, in the *Euthyphro*, when Socrates agrees that something might be pious just in case the gods love it, but does not take it to be a definition, only to indicate a quality. Aristotle in the *Topics* makes essentially the same move, distinguishing definitions from the predications of genera, differentiae, propria, and accidents.

Attention to Theaetetus's language suggests that 1 is not the source of the confusion. He is not saying that the multiplicity of appearances implies that at most one of them can be true. Instead, he is saying that the multiplicity shows that we do not yet know what the sophist is. These are different. A multiplicity of true appearances could be puzzling and show that one is ignorant, if one does not understand how all those appearances fit together. What the Visitor does next also seems to disconfirm 1, as he then focuses on a feature of sophistry that can account for the multiplicity of appearances:

Visitor: Well then, suppose people apply the name of a single sort of expertise to someone, but he appears to have expert knowledge of lots of things. In a case like that don't you notice that something is not sound with the way he appears? Isn't it obvious that if somebody takes him to be an expert at many things, then that observer can't be seeing clearly what it is in his expertise that all those pieces of learning focus on – which is why he calls him by many names instead of one? (232a1–6)

Although there was something "not sound" about the appearances of the sophist, the Visitor does not go on to try to assess the truth of the previous accounts. Rather, he finds "what it is in his expertise that all those pieces of learning focus on" and the reason that he is called by all these names. The truth of the previous accounts just seems to be something that he never, even implicitly, questions. Rather, what is "not sound" is precisely that he does not yet appear as he *really* is ($\delta v \tau \omega \varsigma \epsilon i v \alpha t$). Since the interlocutors want to know the nature of sophistry, any account that fails to be a definition will be "unsound." So we need not think that the appearances are false, but only that they fail to capture the essence of sophistry. The defender of 1, however, would reply that what is being explained are the *appearances*, not the accounts themselves. However, the Visitor's language

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of appearance need not suggest falsity, but instead how the sophist has "shown up" to them. The final account of the sophist as an appearance maker explains *not only* how he can appear as, say, a hunter of rich young men, but also how he *is actually able* to hunt them.

This also suggests that, unlike reading 2, the Visitor is not worried at this point¹¹ that the method was unreliable, in the sense that some of these accounts are false, since he makes use of them in the search for the final definition. If the Visitor were saying that they did not know whether the sophist was a hunter, etc., then the reasonable thing to do would be to try to sort out which of those *do* hold of the sophist using some other method, or trying to see where the method might have gone wrong in the previous discussions. But he does not do either. Instead, he seeks a kind of craft that the sophist might possess which would explain why all of those descriptions hold of him. Their being false would undermine the purpose that the Visitor puts them to. If they are false, then why would we try to explain these names by appeal to something else which the sophist is?¹² If the Visitor were trying to use the correct account of sophistry to explain why the sophist *falsely appears* to be a hunter, that would be one thing. But that is not his aim. Rather, he aims to explain how the sophist *is* a hunter.

Reading 3 has no difficulty with this passage, since the appearances are true but not revelatory of what sophistry is, but it retains an important insight of reading 2 over reading 1: the problem about the many definitions is a problem about our ignorance. Where reading 2 went wrong was in thinking that the problem with our ignorance was just concerning the *truth* of the descriptions. On that reading, it is difficult to see how we could unproblematically make use of those descriptions in what follows. For reading 3, by contrast, it is about our ignorance concerning the essence of sophistry. If that is what we are puzzled about, it might make sense to use true but accidental descriptions. Reading 3, therefore, retains the strengths of reading 2 but without its weaknesses. This should make us prefer it.

¹¹ That is not to say that this worry does not crop up in the dialogue at all, only that it is not the worry that is articulated by the Visitor and Theaetetus in this passage. See below, Section 5, for more discussion.

¹² This language leads many to follow a suggestion in Cornford 1957 that the first definitions were really a disguised collection, to think that there is here a "collection" of definitions, from which the correct definition is derived. The idea behind this tradition (which includes Notomi 1999, Sayre 2006, Gill 2010, Crivelli 2012) is that the previous definitions have some use or tell us something right about the sophist. Usually these accounts accept something along the lines of readings 1 or 2, and so have to be careful about the extent to which the first definitions get anything right.

The final definition explains "what it is in his expertise that all those pieces of learning focus on" (232a3–5) precisely by making the sophist an appearance-maker. This *vindicates* rather than undermines the other claims made about him, explaining why they are true, even if they are not the sophist's nature. For instance, it explains how the sophist could be a hunter of rich young men *because* he is able to give off the appearance of knowledge. All of the activities described in the earlier accounts: debating, selling knowledge, even purifying the city of its ignorance, are possible when someone has the skill in making appearances. The final definition describes the one kind of skill that can ground the possession of all of the others.

We see this clearly in the way that the dialogue ends. When the Visitor returns to the divisions with an account of false speech, belief, and imitation in hand, he says:

Visitor: Then let's try again to take the kind we've posited and cut it in two. Let's go ahead and always follow the righthand part of what we've cut, and hold onto things that the sophist is associated with until we strip away everything that he has in common with other things. Then when we've left his own peculiar nature, let's display it, especially to ourselves but also to people to whom this sort of procedure is naturally congenial. (264d10–265a2)

Here the interlocutors begin to say what the peculiar nature ($\tau \eta v \circ i \kappa \epsilon i \alpha v \phi \circ \sigma v \rangle$) of sophistry is. Again, there is no rejection of his previous appearances (with the possible exception of the Noble Sophist, which was not included in the summary of earlier results in 265a4–9) here.¹³ From this, we get a final definition of sophistry, after which Theaetetus says: "And now at last I see that we have to call him the person who is really and truly a sophist" (268c2–4). Theaetetus is echoing 232b9–c2, where he expressed puzzlement about what the sophist *really* was. The final definition dispelled his puzzlement. When the Visitor closes the dialogue saying "Anyone who says the sophist really is of this "blood and family" will be saying, it seems, the complete truth" (268d4), he is emphasizing that the sophist *really* is this kind of person. The repetition of ὄντως and cognates of "true" indicates that this account says something essential about sophistry, which other accounts were missing.

¹³ One could read the "but now" ($vvv \delta \dot{\varepsilon}$) at 265a10 adversatively, taking the appearance language to indicate distancing from the previous accounts. Even if it is adversative, one can understand the contrast as being between the earlier accounts, which do not give the peculiar nature of sophistry, and the new one that does. The Visitor is emphasizing that, since they have identified sophistry as productive, they should divide productive craft. That does not rule out that sophistry is accidentally acquisitive, since the interlocutors here are only interested in the essential features of sophistry.

I have argued that neither 1 nor 2 gets at what is puzzling about the sophist. The only motivation, I think, for either reading of the confusion comes from holding on to the Traditional View of division, as Rickless explicitly does. With the Traditional View, the higher kind is divided into lower kinds that exclude one another and the higher kind is essentially predicated of those lower kinds. With either of those two assumptions in place, along with the background assumption that one thing has at most one essence (*Laws* 895d1–5), the different accounts must be mutually inconsistent.

To see this, recall that, for any two accounts of sophistry given by the Visitor, there is a node in the divisional tree at which they diverge. Consider the final definition and the first. In the final definition sophistry is said to be productive, while the first it is said to be acquisitive. If divisions are exclusive, then nothing can belong to both branches of the tree, so nothing can be both a productive craft and an acquisitive one. *A fortiori*, sophistry cannot be both a kind of productive and acquisitive craft. The same will be true if divisions capture only essential relations. Then the two accounts will claim, respectively, that sophistry is *essentially acquisitive* and that it is *essentially productive*. But these essences are different. Since one craft only has one essence, sophistry cannot be both.

So here we are. The account of the puzzle that I have offered conflicts with the Traditional View. In what follows, I will argue that the Traditional View is false and, instead, argue for a Minimal View that is compatible with the most natural reading of the puzzle of the sophist. According to this Minimal View, the relation is one of predication and transitive, but not necessarily essential, dichotomous, or exclusive.¹⁴

In what follows, I will argue for the Minimal View, but before doing so, I want to address the question: why would someone care at all about division if it were correct? This is a significant worry, since it seems that, on the Minimal View, division is useless for pursuing essences, which was the whole point of introducing the method! Fortunately, the Minimal View does not have this consequence. Just because *some* divisions are useless does not mean that *all* are, just as the fact that, according to Aristotle, some syllogisms are useless in the pursuit of demonstrative knowledge does not show that all are useless. In particular, if one could divide in such a way as to secure essential connections between kinds, that would be *scientifically preferable*. So we will then have a distinction between scientific divisions and divisions that are deficient from the point of view of science, rather like Aristotle's distinction between scientific syllogisms (i.e., demonstrations)

¹⁴ In arguing for the Minimal View, I am not denying that there could be other properties of Platonic divisions.

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and non-scientific syllogisms. Then, if we could somehow make sure that our divisions were only of the latter sort, it could really be quite useful. I will pursue this point in greater detail after I have argued for the Minimal View.

3 Minimal View: Predication and Transitivity

Since at least the early Middle Ages and probably earlier, divisions have been pictured in a very obvious way:



This would be a way of representing a division of a kind *K* into *K*¹ and *K*². For example, we might divide Animal into Mortal Animal and Immortal Animal, although henceforth I will abbreviate the latter to simply "Mortal" and "Immortal" in the diagrams, although I nevertheless intend K1, etc. to be read as subordinate kinds, not differentiae. While medieval representations do not write arrows on the ends of lines, they capture directionality using relative height on the page. I prefer the arrows because they are both a more general way of depicting binary relations and easier to read when the divisions get complicated. Now we can transform our question about the structure of division into the question: what are the properties of the binary relation represented by this line? This way of asking the question is designed to build as little into the structure as possible, only assuming that there is some binary relation that holds between the divisum and the parts into which it is divided. In order to ask whether a structure is a possible division, we need to know something about how to interpret the lines. Here I will begin with the idea that the lines represent *true predication*, so that $K \rightarrow K'$ only if K is truly predicated of K'.¹⁵ Otherwise, it is unclear how this could be giving us an account of sophistry or statesmanship. It might seem to follow from these considerations alone that, for instance, divisional lines are transitive or that they need not be dichotomous. I will not, however, use this to infer directly any properties of the lines from this interpretation for two reasons. First, if we find similarities between the formal structure of the arrows and the predication relation, I want this to be evidence for interpreting the lines as the

¹⁵ Note that this view is not in competition with one saying that this relation is fundamentally grounded in something more metaphysically demanding, such as participation.

predication relation without vicious circularity. Second, there remains the possibility that the lines represent a *special kind* of predication, as the Traditional View holds.¹⁶ In that case, there is no guarantee that the structure of a division will have much in common with the structure of predication without knowing more about what kind of predication it is. This is just because, if relation *R* is a sub-relation of *R*', we cannot infer from, e.g., the transitivity of *R*' to the transitivity of *R*.

Is the binary relation that we are considering transitive? This would mean that if $K \rightarrow K' \rightarrow K''$, then $K \rightarrow K''$. Or, in words, if you divide *K* into *K'* and then *K'* into *K''*, you could have gone directly from *K* to *K''*. There are three reasons to think that Plato considered his divisions to be structured by transitive relations. I will then consider two problem cases for this view and show why they are not problems.

First of all, the language of parts and wholes pervades talk of division. Plato often thinks of what is being divided as a kind of whole and its species as parts, for instance:

This kind of hunting [of underwater things] might be divided into two main parts. (220b9–10)

So we'll call this part of hunting enclosure-hunting or something like that. (220c7-8)

The relation of parts and wholes is generally thought to be transitive when it comes to ordinary material objects, so it would be natural for Plato's reappropriation of the language for kinds to have this same structure. In *Statesman* 263a–b, this becomes quite explicit: the Visitor asserts that all *kinds* of X are *parts* of X, but not vice versa. This reason is, of course, highly defeasible. Plato might, for all we have said at this point, think that the relation between kinds is altogether different from the ordinary one and is not in general transitive.

Secondly, without transitivity, the divider is not sure that, having reached the object of definition, she can legitimately say that any higher genus is still true of the *definiendum*. Recall that we began by saying the relations here are of *predication*. A failure of transitivity would jeopardize the whole idea of constructing an account from all of the kinds between the genus and the definiendum. The Eleatic Visitor himself mentions this:

Visitor: And then from the controlling sort, we took one that was set over inanimate products, and one set over living creatures; and it's by splitting things up in just this way that we have been progressing all the time to the point where we are now. *We haven't forgotten*

¹⁶ Meinwald 1992 and Moravcsik 1973a are explicit about this.

that it's knowledge, but as for what sort of knowledge it is, we're not yet able to give a sufficiently accurate answer. (*Statesman* 292b12–c3)¹⁷

If transitivity did not hold, then it cannot be guaranteed that this controlling sort is still a sort of knowledge.

Finally, transitivity makes very good sense of the longer and shorter paths in *Statesman* 265a–267c. The idea there is that there are two ways to go from collectively rearing in herds to collectively rearing human beings. The shorter path divides into land and aquatic, divides land into two- and four-footed, and the last divides biped into winged and bare. The longer way, by contrast, divides into land and aquatic, land into winged and footed, footed into horned and hornless, hornless into non-interbreeding and interbreeding, and finally non-interbreeding into four-footed and two-footed, which is identified as humankind. What is important here is the relationship between the herds which are on dry land and humankind. In the longer road, there were three intermediate kinds, while in the shorter there was only one. Transitivity would show us why, in general, if the longer way is a division, the shorter way is as well.¹⁸

4 Against the Traditional View

I have argued for the two positive structural features of the Minimal View: transitivity and predication. Now I will show that we should reject the extra structure of the Traditional View: dichotomy, exclusivity, and essential predication. As I said

^{17 {}ΞΕ.} Κάκ τῆς ἐπιστατικῆς τὴν μὲν ἐπ' ἀψύχοις ἔργοις, τὴν δ' ἐπὶ ζώοις· καὶ κατὰ τοῦτον δὴ τὸν τρόπον μερίζοντες δεῦρ' ἀεὶ προεληλύθαμεν, ἐπιστήμης οὐκ ἐπιλανθανόμενοι, τὸ δ' ἤτις οὐχ ἱκανῶς πω δυνάμενοι διακριβώσασθαι.

¹⁸ According to Grams 2012, there are counterexamples to transitivity at *Sophist* 219–222 and 225–6. The first example is a counterexample to the conjunction of transitivity and exclusivity and will be discussed below. In the second example, skill is divided into the art of disputation and forensics (225b). The Sophist is put into the former and then, according to Grams, it is divided into, on the one hand, "random and unskillful" and on the other, "artful and eristic". Since this random and unskillful kind of disputation cannot be a kind of *skill*, by dividing *skill*, we have moved outside of the genus. However, in this passage, the Visitor actually describes the first part of the division as involving controversy "about contracts (συμβόλαια) and is managed in a random and unskillful way (εἰκῇ καὶ ἀτέχνως)" (225b12–c1). Because Plato generally prefers to distinguish crafts and powers based on their objects, the first clause seems more likely to be the important feature and the second is making an observation that currently people do not dispute about contracts skillfully. With this reading, we can say that the Visitor's division is based on a perfectly good distinction and is not a failure of transitivity.

above, this means that: not every division, according to Plato, must have these properties. I am not denying that these are important properties for divisions to have from the point of view of science.

I will proceed by developing precisely formalized conditions on divisions and by assessing whether the arguments and *examples* of divisions in the *Sophist* as well as other dialogues conform to these conditions. One might object that this would be treating the divisions in these dialogues in a dogmatic way, instead of as being presented by Plato to prompt us to think more about how to divide, perhaps making us reconsider some of these divisions. This methodology thus might strike one as backwards: would it not be better to see what Plato considers to be the important features of division in his theoretical discussions of the method, and only then decide whether the examples fit the bill? Would this not prevent us from coming to the conclusion that Plato might be making intentional mistakes in the examples in order to provoke his audience?

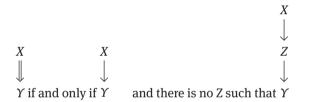
I think that the way that I go has two advantages. First, the more theoretical discussions are so condensed and obscure that they do not actually give us enough information to decide many of the questions with which we are concerned, so one would be forced to look to examples anyway. Secondly, the role of examples here is similar to how we treat Aristotle's in the Analytics. Many of Aristotle's examples make assumptions that are inconsistent with Aristotle's considered views (for example, that numbers are not substances). However, the fact that a particular counterexample uses the terms number and substance does not show that we should not take them seriously. Rather, we should only take to be important the structural features exemplified in the example. I am proposing to do the same for examples of divisions. What I take to be important is what Plato considers to be *admissible structures*. One could always debate whether his own substantive views conflict with this or that particular example, but so long as those views do not have to do with structural features of division, there could very well be a different division that has the same structure but is no longer in conflict with the substantive views. Thus, I am not assuming that Plato is dogmatically committed to the correctness of any of the divisions presented, just that he takes the structures of those divisions to be possible ones.¹⁹ In fact, it will soon be apparent that taking this logical approach to the examples helps us see precisely how Plato wants us to see the ways in which the examples themselves are not perfect.

¹⁹ The investigation of the formal features of division was hotly debated in the Academy, although the details of these debates are known mostly through Aristotelian texts. For dichotomy, see *Parts of Animals* I.2–4. For exclusivity, *Topics* 121b24–2a2.

4.1 Dichotomy

To get an idea of the sorts of a condition on divisions that Plato would not accept before moving on to the more controversial case of exclusivity, I want to discuss dichotomy. Although most commentators do not take Platonic division to be necessarily dichotomous, there is a not insignificant minority who do.²⁰ Most commentators with this view of Plato arrive at it via an examination of Aristotle's arguments against dichotomy in the *Parts of Animals* and assume that the only plausible target is Plato.²¹ Even if it is now widely accepted in the literature that Platonic division need not be dichotomous, my aim in arguing for it here is to get a sense of the kind of claim that I am arguing for as I prepare the ground for much more controversial claims about exclusivity and essential predication to be introduced later.

To state the thesis that all divisions are dichotomous, we need a notion of a *proximate* part,²² which I will picture with double lines and define them in terms of the single lines:



The basic idea is that X and Y are connected by a double line when there is no other kind between them.²³ The claim that all divisions are dichotomous, then, is to say that, for any *K* to be divided, there are exactly two *proximate* part, so, there are exactly two *X*, *Y* such that



²⁰ See Shorey 1903, Stenzel 1940, von Fragstein 1980, Pellegrin 1986, and, perhaps less explicitly, Hambruch 1904. Balme 1987 thinks Plato is a dichotomizer in a different sense. For discussion of his notion of dichotomy, see note 30.

²¹ Although we are mostly in the dark about who exactly is the target of Aristotle's criticism, it is not unlikely that it is Speusippus. For division in the Old Academy, see Dillon 2003, ch. 2.

²² Cf. Boethius, De Divisione 877c12–d6, Magee 1998; Abelard, Dialectica 538.35, de Rijk 1970.

²³ Compare the notion of the μέσον in *Philebus* 16.

Spelled out in words, this would mean that *K* is divided into *X* and *Y*, no kinds come in between these and *K*, and any other kinds *K* might be divided into *are themselves* subkinds of *X* or *Y*. Most divisions in the *Sophist* and *Statesman* are dichotomous. Is it, however, a requirement on divisions? It is relatively uncontroversial that outside of the *Sophist*, Plato explicitly allows them. In the *Statesman*, for example, the Visitor directly divides ruling into three kinds: rule by one, the few, and the majority (291d1–7).²⁴ Moreover, the *Philebus* explicitly mentions the possibility of division into three or more parts: "And once we have grasped it [the one], we must look for two, as the case would have it, or if not, three or some other number." (16d) From context, it is clear that Plato is talking about division and the number of kinds into which one must divide. Further, the *Phaedrus* has a number of non-dichotomous divisions, e. g., the four kinds of divine madness (265b). Together, these indicate that the phenomenon of non-dichotomous divisions is found in a wide range of Platonic texts.

Is division in the *Sophist* any different?²⁵ I suggest not. The first plausible one we find is in the introduction of discriminative crafts in addition to acquisitive and productive ones (226b–c). Rickless 2010 suggests discrimination is a kind of production. However, as he recognizes, this is not directly in the text, which, as it stands, does not subsume discrimination under any subkinds. A second example is the lengthwise and breadthwise divisions to be discussed in more detail below (266a–d), where we have four proximate sub-kinds of productive craft: productive by humans, productive by gods, productive of copies, and productive of originals. *Pace* Henry 2011, these are not dichotomous: none of these subsumes any of the others. So, even the *Sophist* has non-dichotomous divisions.

I have argued that Platonic divisions need not be dichotomous in general or in the *Sophist* in particular. This does not imply that dichotomous divisions are not *special* for Plato. I am sympathetic to the idea that Plato prefers division into smaller numbers when available, but will not argue for it here.

²⁴ For more examples, see Lukas 1888.

²⁵ According to Gill 2010 and, in a different way, Miller 2016, Plato uses only dichotomous division in the *Sophist* to make a particular point, and announces a change in the *Statesman*.

4.2 Exclusivity

I began with dichotomy primarily as an exercise in looking at texts to see how we can look at examples of Platonic divisions to judge a given formal condition on divisions. The more important condition for the puzzle of the sophist is exclusivity. The kind of exclusivity that I have in mind holds just in case, if there exist *X*, *Y*, and *Z* such that:

In words, this condition states that, when two distinct kinds *X* and *Y* both divide into a kind *Z*, either *X* divides into *Y* or vice versa. This sort of exclusivity has to do with kinds, as opposed to individuals. Rather than saying that two kinds are mutually exclusive just in case no individuals fall under both, this says that if any two different kinds have a common subkind, one of the initial kinds is subordinated to the other. It turns out that this condition is of the utmost importance for understanding how the many divisions of the *Sophist* relate to one another, since I will suggest that sophistry itself is a counterexample to this condition. In what follows, I will argue that Plato does not require this kind of exclusivity in other passages. This is compatible with him requiring a weaker form of exclusivity, or understanding exclusivity, like dichotomy, to be a feature of *scientific* divisions, if not of division in general.²⁶

There are two important reasons one might take this condition seriously as a condition for Platonic divisions. The first comes from how Plato talks about division. When we consider the butcher analogy of the *Phaedrus* or *Statesman*, for instance, it seems like the pieces that are the product of division are mutually exclusive in the above sense. If I cut up a chicken into thighs, legs, breasts, and wings, there will not be any part of the wing that will also be the part of the thigh. This motivates the idea of exclusivity above since, whenever a small piece

²⁶ I discuss one sort of weak exclusivity in note 34.

Z of the chicken is generated by cutting up *X* and *Y*, which are also pieces of the same chicken, it seems plausible that *X* and *Y* are the same piece, or that one is a part of another. If we carry over analogy to Plato's method, it seems unlikely that we would find ourselves making a division of a kind into two (or more) kinds which would later be found out to overlap. Secondly, there is a long tradition of taxonomy following Plato which does seem to employ some kind of exclusivity assumption. While we may be hesitant to attribute the kind of rich taxonomic structures of Linneas or even Aristotle to Plato, it is not totally implausible to think that they were drawing on features which they took to be at the very least implicit in Plato's conception.²⁷

There is, however, evidence that Plato himself did not regard divisions as necessarily being exclusive. The first reason for this is that one would expect Plato to actually tell us why, in particularly unclear cases, the kinds into which he divides *are* exclusive. For instance, why can't there be an art that is both acquisitive and productive? Let us see how he makes the division:

But expertise as a whole falls pretty much into two types. [...] There's farming, or any sort of caring for any mortal body; and there's also caring for things that are put together or fabricated, which we call equipment, and there's expertise in imitation. The right thing would be to call all those things by a single name. [...] When you bring anything into being that wasn't in being before, we say you're a producer and that the thing you've brought into being is produced. [...] And all the things we went through just now have their own capacity for that. [...] Summarizing let us call these things "productive". [...] Next, consider the whole type that has to do with learning, recognition, commerce, combat, and hunting. None of these creates anything. They take things that are or have come into being, and they take possession of some of them with words and actions, and they keep other things from being taken possession of. For that reason it would be appropriate to call all the parts of this type acquisitive. [...] If every expertise is either acquisitive or productive, Theaetetus, which one shall we put angling in? (219a8–d2, omitting Theaetetus' responses)

According to Rickless 2010, the Visitor argues that the productive and acquisitive are mutually exclusive when he says that "None of these creates anything." However, the Visitor is talking about all of the *examples* of acquisitive crafts that he had just discussed (hence the plural $\tau o \dot{\nu} \tau \omega \nu$). But *acquisitive* applies to more than just these examples. The Visitor has not given us any reason to think that

²⁷ While I do not have space to explore this more fully, I am doubtful that the tradition is in complete agreement about the issue of exclusivity. For example, in *Topics* 121b24–2a2, Aristotle alludes to a view of Xenocrates as a possible counterexample to exclusivity. See Hambruch 1904, 17 f. In *De Divisione* 885b–c, Boethius explicitly endorses non-exclusive divisions. I take it that such texts are particularly problematic for views such as Rickless 2010 and Miller 2016, who think that it is an essential property of division that it is exclusive.

one of these could not also be productive. This means that the considerations Plato gave *could not establish* exclusivity. If we can make good sense of his procedure without postulating exclusivity, this would be preferable to attributing to him exclusivity and bad arguments. Importantly, in the *Sophist* and *Statesman*, instead of stating principles which would guarantee exclusivity, the divider lists examples, says something that they all have in common, and then establishes a kind on that basis. If he establishes these kinds in this way, sophistry can be both acquisitive and productive.²⁸

The second problem text for exclusivity comes from Grams:

Exchanging (μεταβλητικός) – which the Visitor specifies is accomplished through gifts (δωρεά), wage-earning (μίσθωσις), and selling (ἀγόρασις) – is initially marked off as a kind of "mutually agreed" acquiring, in opposition to conquering (χειρωτικός) that takes by force (219d5).

However, both wage-earning (μισθαρνητικός) and gift-giving (δωροφορικός) kinds appear again as subsequent divisions of conquering (222d). (Grams 2012)

There are two ways of accepting this division as legitimate: either division is not transitive (and we have left the kind of conquering) or it is not exclusive (and the relevant kinds are overlapping in these cases). The second option seems preferable. This is because the kinds of wage-earning and gift-giving that at issue in 222d are ways of *hunting tame animals by persuasion in private*. Hunting is conquering secretly, while exchange is distinguished from taking-possession by being mutually willing. Because of the secrecy of hunting, it seems plausible that one could have a craft that is both hunting and mutually willing. In such a case, a practitioner of the art would hunt the victim partially by making that person think that they are just exchanging, and therefore enter into the relationship willingly. Thus, in one way, the interaction is not secret and mutually willing, but in another, it is secret and coercive. For instance, in a pyramid scheme the people being bamboozled think that they are entering into a fair agreement and so willingly give their money to the head of the scheme. Thus, these kinds would plausibly be taken to be both cases of exchange and conquering.

The third text, I think, is a much more direct problem for the exclusivity assumption as defined above.²⁹ Here, at the very end of the dialogue, the Visitor

²⁸ In this paragraph and the preceding quote, I have altered White's translation of -ικος adjectives as nouns (e.g. instead of ποιητική as "production", I translate "productive"). Thanks to an anonymous reviewer alerting me to this crucial point.

²⁹ However, unlike the previous two texts, this is not also a counterexample to the weaker form of exclusivity discussed in note 34.

returns to productive expertise, and makes two divisions of it, on the one hand into divine/human and on the other into production of originals/images:

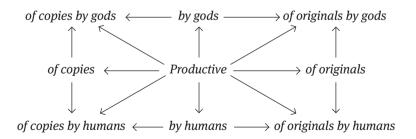
Visitor: It's as if you'd already cut production all the way along its width, and now you'll cut it along its length. [...] That way there are four parts of it all together, two human ones related to us and two divine ones related to the gods. [...] Then if we take the division we made the first way, one part of each of those parts is expertise productive of originals. Just about the best thing to call the two parts that are left might be "copy-making." That way, the productive art is divided in two again. (266a1–11)

The point of this passage is to say that we are actually making two distinct divisions of the *productive* expertise. This is not, as some commentators think, a case of dividing productive expertise into human/divine and then subdividing human productive expertise into copy-making and original-making (and repeating the process for divine productive expertise). If that were what the Visitor was describing, then we would not have cut *one thing*, productive expertise, first along its width and then along its length.

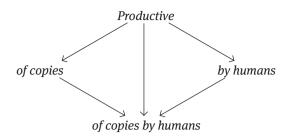
So we should think here of a total of nine kinds, pictured below. They are organized in three levels:

- 1. Productive expertise
- 2. Parts of productive expertise: by humans, by gods, of copies, of originals
- 3. Parts of parts of productive expertise: of copies by gods, of copies by humans, of originals by gods, of originals by humans

The levels here are organized by their generality, every level 2 kind is contained in the level 1 kind and every level 3 kind is contained in two level 2 kinds. However, no level 1 kind is contained in a level 2 kind, nor is a level 2 kind contained in a level 3 kind. The problem that this passage poses for the exclusivity assumption is that we have the following kind of structure:

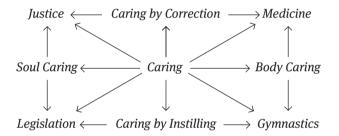


and if we just look at a small part of it and rotate, we see that:



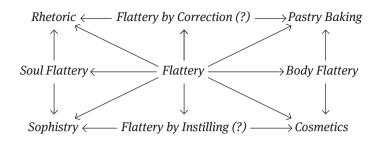
This is precisely the kind of thing that exclusivity does not allow, since we get direct argumentation for the claim that there are kinds of copy-making that are not human (dreams) and kinds of human productive expertise that are not copy-making (carpentry).³⁰

A similar cross-cutting division occurs in Gorgias (464b-6a):



Here Socrates describes four "parts" of the craft of caring (464b6) and claims that justice and legislation have in common their object: caring for the soul, and can be called the two parts of the "political craft" (464b3–4), while medicine and gymnastics have in common that they care for the body. In addition, however, Socrates claims that justice and medicine have something in common, as do legislation and gymnastics (464b7–c2). Socrates is not explicit about what that common element is. However, following Moss 2007, we might say that justice and medicine are alike in that they care by *correcting* bad states, while legislation and gymnastics aim to positively *instill* good traits, although not much hangs on the choice. This structure, Socrates claims, was "perceived" by the pseudo-craft of flattery, prompting it to divide itself in the same way:

³⁰ Note that this is also a counterexample to Balme 1987, who claims that Plato only divides by one difference at a time.



We see here the divisions patter in the *Sophist* clearly present already in the *Gorgias*.

The exclusivity assumption puts strong constraints on how groups of divisions must hang together. In particular, it requires that no two divisions cut across the distinctions of the other. And it is this very consequence of exclusivity that is shown problematic in the *Sophist*. Furthermore, this does not seem to me to be a mere slip on Plato's part; he spends more time explaining this division than practically any other in the dialogue, so we should take it that he is trying to tell us something important in it.

Non-exclusive divisional structures are also extremely common in science, so it would make Plato's view more plausible if he allows for them. To give an example close to Plato's own in the *Philebus*, the generic kind *Turkish vowel* is divided in three different ways, one might say, cut lengthwise, breadthwise, and depthwise by the following differentiae:

- 1. whether the tongue is in either the front or the back part of the mouth,
- 2. whether the lips are either rounded or unrounded,
- 3. whether the tongue is either high or low in the mouth.³¹

This series of distinctions produce a yet more complicated version of the structure described in the *Sophist*. Every combination of these three distinctions results in exactly one vowel, e.g., /i/ = front, unrounded, high. These are phonetic kinds. If the Traditional View's insistence on exclusivity were correct, then Plato's requirements on division rules out these structures *tout court*, something that does not sound very plausible.

It does not help to say here that these are merely "non-scientific" divisions, since exclusivity was taken to be a condition on *all* divisions, scientific or not. Perhaps, as I said above, all scientifically divisions are in fact exclusive. All that I

³¹ A more complex set of distinctions would allow one to divide all vowels. I am restricting my attention to the Turkish vowel only because its structure so closely resembles the by lengthwise and breathwise division of the *Sophist*.

need for now is the claim that there are divisions that do not satisfy such requirements. That is what the Traditional View claims. I have argued that Plato's texts and the practice of science are evidence against it.

4.3 Essential Predication

The final part of the Traditional View of division is that divisions capture relations of essential predication. We might think it quite plausible, since division is supposed to produce a $\lambda \acute{o} \gamma \circ \varsigma$, it makes sense that the relations are ones of what Aristotle would call predication. Moreover, since the whole point is to get at what something *really is*, the relationship should only include relations of essential predication. Otherwise, when you identify the target kind at the bottom of a division, you won't get a definition, which was what was originally sought.

While all divisions involve predication, from the mere fact that divisions are *intended* to result in definitions, it does not follow that divisions which fail to achieve that end are not divisions. All that can be concluded is that the *scientific* divisions include essential predications, not that every division does. Indeed, there are two pieces of positive textual evidence that support the claim that some divisions capture *accidental* predication relations.

The first comes from looking at the arguments that support a division. Let us return to the angler (219a8–d2). If the Traditional View is true and all divisions involve essential predication, when the Visitor divides expertise into productive and acquisitive, he should try to show two things. First, he should show that the productive and acquisitive are essentially kinds of expertise. Here, in the very first division, where the Visitor is going to great lengths to explain what he is doing, he does not argue that the acquisitive or productive are essentially kinds of expertise or even flag the assumption, but merely makes the extensional claim that every expertise is one or the other. The second thing the Visitor should show is that each of these example expertises is essentially either productive or acquisitive. But again, he does nothing of the sort. Instead, he just says that each is an expertise that produces something or acquires something. But that does not say anything about what kind of expertise it is essentially. So it seems that, on the Traditional View, Plato is guilty of some pretty sloppy argumentation. And the definition of angling is supposed to be the easy definition that is reached unproblematically. This suggests that the Traditional View is false. It would be more charitable to attribute good arguments and a weaker view to Plato than a stronger view that is not well-supported.

One might worry that the use of - $i\kappa\eta$ adjectives such as $\pi oi\eta \tau i\kappa \eta$ should be understood to implicitly include a word for craft or science and thus be rendered

"productive art". This might mean that the Visitor is in fact assuming that the kinds into which he is dividing are essentially kinds of crafts, thus undermining my argument in a significant way.³² However, when the Visitor introduces the term, he explicitly says that productive things "have their own capacity for this [i.e., producing]" (εἶχεν εἰς τοῦτο [=ποιεῖν, b5] τὴν αὑτῶν δὑναμιν, 219b8–9). This is confirmed by a back-reference later on in the dialogue: "If you remember what was said at the beginning, we said every capacity $\left[\pi\tilde{\alpha}\sigma\alpha\nu\right]$... $\delta\dot{\nu}\nu\alpha\mu\nu$ is productive [ποιητικήν], which causes the things which did not exist earlier to come to be" (265b8–10). Thus it seems that Plato is assuming that the implicit noun is "capacity", not "art". Capacity, from the very beginning of the dialogue, is considered to be a broader category than art, since there are supposedly some capacities that lack art (219a4-6).³³ So Plato's choice to use this adjective form does not bring with it any implication that what is productive is necessarily a craft, since it may be also a sort of non-craft capacity. The examples of farming and equipment that he is giving are of course of expertises, since he is dividing different kinds of expertise, but by putting them under the head "productive", he is only saying that they have the capacity to make things, not that the making involves any sort of expertise.

The *Sophist* thus suggests that charity considerations tell against the Traditional View. Once we look outside of that dialogue, however, the textual evidence is much more direct. In the *Statesman*, Young Socrates divided herd-rearing into rearing of human herds and beast herds. The Eleatic Visitor explains the problem as having "rushed the account" (*Statesman* 262b4). To illustrate the mistake, the Visitor gives two other divisions that reach the same end point but do so more quickly and more slowly and in which the fast division leads to a mistake. Here Young Socrates succeeded in making a division but evidently did not mark out essential features of animals. Indeed, the point of the passage is to distinguish two kinds of divisions. While the division of Socrates merely got "parts", a proper division should aim at "ideas" or "kinds". The Eleatic Visitor is quite emphatic about this distinction:

³² Thanks to an anonymous reviewer for emphasizing the importance of these adjectives in this passage.

³³ Plato's paraphrase also agrees with the modern grammarians, who emphasize that the -ικος adjectival endings generally denote relation, fitness, or ability (Smyth 1956, § 858, Kuehner/Gerth 1904, § 332.3). For the most thorough study of this adjective form in Plato, see Ammann 1953. His analysis broadly confirms the grammars' emphasis on the notion of potentiality or ability and further emphasizes the important classifying role that it plays in Platonic division (Ammann 1953, 262 f.).

That whenever there is a kind of something, it is necessarily also a part of whatever thing it is said to be a kind of, but it is not at all necessary that a part is a kind. You must always assert, Socrates, that this is what I say rather than the other way around. (*Statesman* 263b7–10)

This is a distinction between two kinds of things one can divide into. On the one hand, one can divide into "mere parts", such as animals into humans and beasts. On the other hand, one could divide into genuine kinds. The first kind seems to be problematic *precisely because* birds are not essentially beasts. A complete and accurate account of the essence of birds would not, according to the Visitor, mention the kind "beast". To better illustrate the sort of mistake Socrates was making, the Visitor gives two parallel cases:

Visitor: This sort of thing [was being done incorrectly]: it's as if someone tried to divide the human race into two and made the cut in the way that most people here carve things up, taking the Greek race away as one, separate from all the rest, and to all the other races together, which are unlimited in number, which don't mix with one another, and don't share the same language – calling this collection by the single appellation 'barbarian'. Because of this single appellation, they expect it to be a single family or class too. Another example would be if someone thought that he was dividing number into two real classes by cutting off the number ten-thousand from all the rest, separating it off as a single class, and in positing a single name for all the rest supposed here too that through getting the name this class too came into existence, a second single one apart from the other. But I imagine the division would be done better, more by real classes and more into two, if one cut number by means of even and odd, and the human race in its turn by means of male and female, and only split off Lydians or Phrygians or anyone else and ranged them against all the rest when one was at a loss as to how to split in such a way that each of the halves split off was simultaneously a real class and a part. (*Statesman* 262c10–3a1)

There is certainly *something* mistaken in the divisions of animals as well as the new examples of numbers and humans, but what exactly is it? I suggest that they are mistaken because the big class that is divided off has no unity and thus it cannot be part of the essence of the kinds that it contains. Because the term "barbarian" picks out a group that has no language or practices in common, it does not belong to the essence of any particular person or group of people that they are barbarians. Similarly, not being equal to 10,000 is not part of the essence of 3. Instead, an account of the essence will only include *ideas*, which seem to be genuine unities. Plato here is explicitly making room for genuine divisions that do not mark out relations of essential predication. While these divisions obviously do not cut into "natural kinds", the Visitor does not say anywhere that Socrates says something *false*. Nor should he: all animals are either humans. Rather, Socrates has gone *too* fast and, in so doing, lumped together animals which have

no business being lumped together. Conversely, by going to fast one would miss *true* and *essential* features of humans, 10,000, and Greeks. To take perhaps the clearest example among these, 10,000 is essentially an even number and it has this feature in common with 2, but not 3. Given that arithmetic is fundamentally concerned with the nature of the even and odd (*Gorgias* 451a–c), missing this fact would be a big problem. In the case of humans, the fact that they are not interbreeding is missed and of great significance for the art of the statesman, one of whose jobs is to regulate human intercourse.

This corroborates the interpretation suggested by charity considerations in the *Sophist*. In sum, we have good reason to doubt that all Platonic divisions mark out relations of essential predication.

Just like the structural features of division, the points made in this section suggest that the Traditional View's requirement that divisions only mark out relations of essential predication, is false. Of course the interlocutors are *trying* to mark out essential predications, since they are *trying* to define the sophist and statesman. And of course the division would be successful if it did those things. All I am arguing for is that the interlocutors can succeed at dividing without accomplishing this goal.

5 The Puzzle Again

If we discard the Traditional View of division in favor of the Minimal View, we can now solve the problems for the straightforward interpretation of the puzzle of the sophist. Let us see how discarding exclusivity and essential predication can help.

Consider exclusivity. We can say that every division in the *Sophist* is really a division, with the one kind *Sophistry* simply being an example of a kind that is a species of several different, coordinate genera. Both in the divisions of sophistry and the lengthwise and breathwise division we are concerned with putting together multiple divisions.³⁴ Without exclusivity, we are no longer forced to say that these accounts are incoherent because jointly inconsistent. Instead, we *can* say that (even if only one of them expresses the essence of sophistry) they all are true together. Now consider essential predication. We can again say that every

³⁴ Someone might object here that the lengthwise and breathwise divisions do not provide sufficient support for this claim, since exclusivity may still be a requirement on each *dimension* of a division. On this view, what is important is that exclusivity hold between *human* and *divine* production, since these were divided at the same time. However, the other two problems for the stronger exclusivity assumption detailed above reemerge for this view.

division in the *Sophist* really is a division, with the one kind *Sophistry* being an example of a kind that is accidentally acquisitive but essentially productive. Thus all of the Visitor's argumentation while making the divisions is correct, as far as it goes. It is just not enough to get what he wanted, until he reached the last.

To the extent that one's goal is to get a scientific division that captures the essence of something like sophistry, dividing unscientifically will constitute some sort of mistake in one's division, even if the division does capture a peculiar attribute of a kind. Indeed, Platonic characters in many places assert that a particular kind of division is mistaken in one way or another (*Phaedrus* 263e1–3, Statesman 262c10–3a1, Philebus 16e4–7a5). One way this can happen is by assuming falsely that a kind is a member of a certain genus. For example, in the first definition of the Statesman, the Visitor and Socrates mistakenly placed statesmanship as a kind of herd-rearing instead of more generally a kind of herd-keeping (the mistake is made at 261d and noted at 275c-e). The mistake here stems from a non-exhaustive division: not all forms of taking care of a herd are properly called rearing.³⁵ Finally, one might make a mistake by not "cutting at the joints" and perhaps the clearest example of this is in *Statesman* 262c–263a, where the Visitor imagines dividing number into 10,000 and everything else. Here the problem is that the subkinds one has divided into do not capture the essential distinctions within a kind as one would, for example, by dividing number into even and odd.

The sort of mistake that I am arguing is made in the case of the sophist is much more subtle, but closely related to the sorts of mistakes that happen in the *Statesman*. Like the first mistake in the *Statesman*, the mistake in the *Sophist* comes in not when making the distinction (productive or acquisitive?), but in placing the sophistry into one of these categories. But whereas the problem with statesmanship was that it simply *is not* herd-rearing at all, the problem with sophistry is that it is *only accidentally* acquisitive. That is to say, being acquisitive is not part of the account which says what sophistry really is. In this way, we get a situation that resembles the second kind of mistake in the *Statesman*: not being 10,000 is not going to enter into the definition of the number 2, even though it is true that 2 is not 10,000. The difference with the *Statesman* case is that the accidental feature could have been avoided by dividing differently. That is not the case with the *Sophist*. Sophistry has certain features (e.g., being acquisitive) accidentally that

³⁵ A further sort of mistake in the same passage does not have to do with the division itself, but with *stopping* the division prematurely and mistaking statesmanship with one of its genera. For the two mistakes, see 274e–275a. The definition that results will of course be incorrect, but here at least we do not see a mistake in the division. In this case, the Visitor says that what they have said is "true but incomplete and unclear" (275a4–5).

other crafts (e.g., angling) have essentially. Nothing, on the other hand, is essentially not 10,000. So, while the mistake I have identified in the definitions in the *Sophist* is distinct from those elsewhere, it is nonetheless of a piece with them.³⁶

Of course, one might still have gualms about the truth of particular accounts, such as the Noble Sophist. The Noble Sophist seems to show something very important about the method, at least as it is practiced in the *Sophist*: it is not infallible.³⁷ One can, it seems, get results that are *prima facie* false by a perfectly ordinary application of the method. I myself want to stay neutral on the correct interpretation of the Noble Sophist and indeed the question of whether it is true or false. But the mere fact that its truth can be reasonably called into question by the interlocutors (as it is called into question in 231a), seems to be enough to show that, for all they know, the method could produce false results. However, this is not a problem of many definitions per se, since this would be just as problematic if the method were only able to give one definition as an output. There are any number of ways one could try to deal with this fallibility: one could add norms that further constrain it, one could require certain background knowledge to be in place before one divides,³⁸ one could claim that some sort of "insight" is needed,³⁹ or one could live with it. While it seems clear that Plato raises the problem of fallibility, there is less evidence about how he wants to deal with it. The problem that Theaetetus raises and is taken up by the Visitor (231b-c), is fundamentally a problem of *many definitions*. While Theaetetus appears to have been motivated to raise this problem only after the seemingly false account of the Noble Sophist, in principle, it could have been raised before. *This* problem, the problem of the many definitions, is solved by rejecting the Traditional View of division in favor of the Minimal View.

³⁶ Thanks to an anonymous referee for prompting me to clarify this issue.

³⁷ The fallibility of the method may be particularly noticeable when it is applied to difficult subject matters, such as false beliefs, as opposed to something like the angler. In this way, the sorts of problems raised by the Noble Sophist seem behind the choice to pause the division at 236a–7c and the transition to the central section of the dialogue about the problems of falsity. If one is already thinking that one's method is fallible, then once one is unsure how to go on, it makes sense to stop using it. Thanks to an anonymous referee for pointing me in this direction and rightly emphasizing the importance of the Noble Sophist to an understanding of division in the dialogue as a whole.

³⁸ This is plausibly Aristotle's view in Posterior Analytics II.13.

³⁹ See Henry 2011.

6 Conclusion

I have argued that the Traditional View of division must be discarded if we are to solve the puzzle of the sophist. In its place, I have elaborated and defended a Minimal View of division, on which it still has some structure, in particular, transitivity, and does mark out relations of predication, but is not necessarily dichotomous or exclusive, and can fail to mark out relations of essential predication. So, while there is less structure than the Traditional View originally claimed, there still remains some structure.

The question remains, however, what Plato was trying to show us by using the puzzle. The discussion above gives us some hint: not all divisions get at relations of essential predication. But this was what we wanted from division. The program going forward, then, is clear. We want to rule out the non-scientific divisions. Progress on this program would spell out the notion of a scientific division and articulate norms that rule out problematic divisions. This is exactly what happens in the *Statesman*. The Eleatic Visitor there argues for a norm to divide slowly (262a8–c1, 264a8–b4) and to divide into the smallest number possible (287c3–5). While the *Sophist* investigates division generally, without regard to whether the division is useful for the purposes of science, the *Statesman* starts to articulate norms for scientific divisions.

On the picture sketched here, the point of introducing the puzzle is to motivate the search for norms that is carried out in the *Statesman*. While division is necessary for scientific inquiry into essence, the divider must be careful. The best way to see this is to see how, if one is not careful, the method can run wild.⁴⁰

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