The Soul-Turning Metaphor in Plato's Republic Book 7*

DAMIEN STOREY

In Book 7 of the *Republic*, Plato introduces a metaphor for what education ought to do—it ought to turn the soul around. Although it is a well-known metaphor, and one that is often referenced in discussions of both the *Republic* and education, it has received little direct attention. This is unfortunate not only because of its importance to Plato's view of education, but also because it has been misunderstood in ways that have led to significant confusions about what Plato is up to in Book 7, and especially in the Cave allegory, with which it is intertwined.

The problem is not so much the interpretation of the metaphor itself. While not incontestable, the essential details of the metaphor, as it is first introduced in what I will call 'the soul-turning passage' (518B7–19B5), reveal themselves clearly enough when examined carefully. The problem is that as we read further into Book 7, we find further uses of the metaphor that seem to compel us to adopt another, incompatible reading. Since commentators have tended to focus exclusively on either the earlier or the later evidence, the tension between these two readings has never been resolved. This has contributed to some of the most fundamental disagreements about what Plato says in Book 7, the most notable of which concerns the Cave allegory and, specifically, the interpretation of the freed prisoner's first turn from the shadows to statues, which Plato likens to turning the 'whole soul.'

- * This paper has been greatly improved by comments on earlier drafts from Cinzia Arruzza, Robert Howton, Nicholas Smith, and Haris Theodorelis-Rigas.
- 1 The few sustained discussions of the metaphor tend to converge. See, for example, Reeve 2010, and Smith 2019, introduction. My exposition of the basic metaphor (sections 1 and 2) aims to put this reading on firmer ground, adding new detail and argument.

For some commentators, this likeness confirms the view that the Cave allegory parallels the Divided Line analogy that precedes it: the prisoner's first turn represents an advance to the cognitive level called *pistis* in the Line and is the result of an education in 'music' ($\mu o \nu \sigma \iota \kappa \acute{\eta}$) and gymnastics.² But for those who draw on Plato's use of the soul-turning metaphor later in Book 7, the prisoner's first turn represents the effect of a mathematical education, corresponding to the Line's higher cognitive level of *dianoia*, and is, thus, a counterexample to the supposed neat parallel between the Line and Cave.³

This being so, references to soul-turning in Book 7 have figured prominently in the debate about the relationship between the Line and Cave. This is especially true of a difficult and stubbornly divisive passage near the end of Book 7, 532B6-D1, which has been one of the debate's key battlegrounds. But while much of the heat surrounding the passages I will examine is generated by debates about the Line and Cave, I will focus on the narrower task of finding a consistent reading of the soul-turning metaphor itself. For this task, the most relevant question is how the Cave allegory aligns with the Republic's educational curriculum. Arguably, this is also a prior question: the Cave is first and foremost a metaphor for the effect that education has on a person's soul (514A1-2), so it seems appropriate, where possible, to settle what it says about education before considering its relationship with the Line. Thus, I will for the most part put questions about the Line analogy aside. Nonetheless, the conclusion I will reach will favour the view that the Line and Cave are parallel: the prisoner's first turn does, as the parallel's defenders suggest, represent the effect of an education in music and gymnastics.

My argument will proceed as follows. I begin by offering a detailed defence of what I take to be the most sensible reading of the soul-turning passage. I draw attention to the fact that the passage makes *two* claims: that education is the craft of turning the soul and that it must turn the 'whole soul' (section 1). It is the latter claim, once properly understood, that shows us the essential role that music and gymnastics play in turning the soul and, thus, in the corresponding imagery in the Cave allegory. This passage also gives us everything we need to figure out, in general, the meaning of the soulturning metaphor. I will emphasise that it must be understood as metaphor

- 2 This interpretation has been popular since Malcolm 1962. See also Wilson 1976 on the relationship between *pistis* and music and gymnastics.
- 3 See, for example, Ferguson 1934; Robinson 1941; Ross 1951; Burnyeat 1987; and Schofield 2007. See also Karasmanis 1988 and Tanner 1970 both of which accept untraditional forms of parallelism in which even *pistis* is a result of mathematics.

for education as such, not the effect of one or more educational subject (section 2).

I then address a series of objections to my reading of the metaphor. Many commentators have concluded that the prisoner's first turn represents the effect of a mathematical education, not of music and gymnastics. These commentators draw not on the soul-turning passage—which is usually neglected but on references to soul turning that occur later in Book 7. I will argue that some of the arguments for this view arise from demonstrable errors in the interpretation and application of the metaphor and can be set aside quite decisively (section 3). But more needs to be said about the most divisive passage, 532B6-D1, where Socrates appears to say that most of the prisoner's progress including the first turn from shadows to statues represents an education in mathematics. This is often cited as the key evidence against a parallel between the Line and Cave, and defenders of the parallel have attempted various alternative readings, with little success. 4 I will argue that the correct reading of 532B6-D1 is one that neither side has considered, and that it is consistent with Plato's description of the soul-turning metaphor elsewhere in Book 7 (section 4).

I THE SOUL-TURNING PASSAGE

The opening section of the soul-turning passage introduces a simile between two metaphors for education: between turning a body around and turning a soul around. This section is worth quoting in full:

τὴν παιδείαν οὐχ οἵαν τινὲς ἐπαγγελλόμενοί φασιν εἶναι τοιαύτην καὶ εἶναι. φασὶ δέ που οὐκ ἐνούσης ἐν τῇ ψυχῇ ἐπιστήμης σφεῖς ἐντιθέναι, οἶον τυφλοῖς ὀφθαλμοῖς ὄψιν ἐντιθέντες. — Φασὶ γὰρ οὖν, ἔφη.

Ό δέ γε νῦν λόγος, ἦν δ' ἐγώ, σημαίνει ταύτην τὴν ἐνοῦσαν ἑκάστου δύναμιν ἐν τῆ ψυχῆ καὶ τὸ ὄργανον ῷ καταμανθάνει ἕκαστος, οἶον εἰ ὅμμα μὴ δυνατὸν ἦν ἄλλως ἢ σὺν ὅλῳ τῷ σώματι στρέφειν πρὸς τὸ φανὸν ἐκ τοῦ σκοτώδους, οὕτω σὺν ὅλη τῆ ψυχῆ ἐκ τοῦ γιγνομένου περιακτέον εἶναι, ἕως ἄν εἰς τὸ ὄν καὶ τοῦ ὄντος τὸ φανότατον γένηται ἀνασχέσθαι θεωμένη· τοῦτο δ' εἶναί φαμεν τἀγαθόν. ἤ γάρ;—Ναί.

Τούτου τοίνυν, ἦν δ' ἐγώ, αὐτοῦ τέχνη ἂν εἴη, τῆς περιαγωγῆς, τίνα τρόπον ὡς ῤἄστά τε καὶ ἀνυσιμώτατα μεταστραφήσεται, οὐ τοῦ ἐμποιῆσαι αὐτῷ τὸ ὁρᾶν,

4 For those who cite it as evidence against parallelism, see the list of authors in n. 3. Alternative readings have been attempted by Bosanquet (1895, 298), Malcolm (1962, 40), Wilson (1976), and Bedu-Addo (1977, 217).

άλλ' ώς ἔχοντι μὲν αὐτό, οὐκ ὀρθῶς δὲ τετραμμένῳ οὐδὲ βλέποντι οἶ ἔδει, τοῦτο διαμηχανήσασθαι. Ἔοικεν γάρ, ἔφη.

Education is not what some who profess to be educators say it is. They say that it is putting knowledge into souls that lack it, like putting sight into blind eyes.—So they say.

But the present argument indicates that the power that is in every soul, the instrument with which each of us learns, just like an eye cannot turn from darkness to light unless it does so together with the whole body, must be turned from that which is coming to be together with the whole soul, so that it can bear the sight of that which is, the brightest of the things that are—what we call the good. Isn't this so?—Yes.

So education would be the craft of turning this very thing [sc. the instrument with which each of us learns], 5 a craft concerned with how to most easily and effectively turn it around: not of putting sight into it, but rather assuming that it has sight, yet is not turned the right way or looking where it should, a craft that tries to correct this. $(518B7-D7)^6$

This simile is used to make two connected, but importantly separate claims. Claim (a): education is not the craft of 'putting knowledge into souls' (like putting sight into blind eyes) but the craft of—in some sense—turning souls around (like turning a sighted eye from darkness to light). And claim (b): we cannot turn the 'instrument with which each of us learns' just by itself (like turning only a person's eyes) but must turn it 'together with the whole soul' (as the eyes must turn around together with the whole body).

I will put aside for the moment how to interpret these claims. For now, I want to examine how (a) and (b) differ. The difference bears some relation to a part—whole distinction: the eye and the whole body; the instrument with which we learn and the whole soul. In (a), we learn that education's goal is to turn the 'eye' in the right direction, and since the 'eye' is analogous to the instrument with which we learn in the soul—i.e. the rational part of the soul (e.g. 436A8-B1; 580D7-E2)—the implication is that the end of education is to correctly orientate *this* part. In (b), in contrast, we learn that this part must be turned 'together with the whole soul' (σὺν ὅλη τῆ ψυχῆ):

- 5 I take the antecedent of τούτου ... αὐτοῦ, D3, to be τὸ ὄργανον, C5, as Adam (1902) argues. Most modern translators take τούτου ... αὐτοῦ to anticipate τῆς περιαγωγῆς, D3-4, and take the object of τῆς περιαγωγῆς and μεταστραφήσεται, D5, to be the soul, rather than the instrument with which we learn. Either reading fits the interpretation I will offer here.
- 6 The translations of this and all longer passages from Plato are my own. Shorter quotes are adapted, at times significantly, from Reeve 2004.

that is, together with the *rest* of the soul, in addition to the instrument with which we learn. We might think, then, that (a) and (b) differ because they are about turning different parts of the soul: (a), about turning the rational part; (b), about turning the other parts. But this would be a mistake. They are different claims, but they are about same thing: education, which is a turning of the soul and, more exactly, a turning of the whole soul. Claim (a) refers specifically to the instrument with which we learn not because education concerns only this part, but because turning this part, which represents attaining knowledge, is education's ultimate goal. After all, the purpose of (b) is to warn us *against* the error of thinking that education can achieve this goal by educating—by turning—only the rational part; rather, it must educate the whole soul. As we will see, we do find places where Plato refers to turning just one part, like turning the rational part to the Form of the Good at the end of his curriculum, but 'education' as such is to be understood as turning the whole soul, even if this occurs in stages.

The soul-turning passage continues with a complex elaboration of claim (b), but one that nonetheless becomes clear with some interpretation. It allows us to draw two conclusions: first, that the basic message of claim (b) is that we cannot adequately educate the rational part of the soul without also educating the soul's non-rational parts; and, second, that the subjects that make this possible are the music and gymnastics that were described in Book 3.⁷

Socrates draws a distinction between two kinds of 'virtues' (ἀρεταί) of the soul: the virtue relevant to the instrument with which we learn, 'the virtue of thought' (ἡ <ἀρετή> τοῦ φρονῆσαι), and the virtues of the rest of the soul, the non-intellectual virtues. The virtue of thought has the unique characteristic of being determined from birth: it 'never loses its power but is either useful and beneficial or useless and harmful, depending on the way it is turned' (518E2-19A1). The other virtues, in contrast, come later (if

- 7 For a similar view of the role of music and gymnastics, see Miller 2007, 313, and Reeve 2010, 225-26. Adam (1902, 98) likewise acknowledges that turning the whole soul implies a role for 'the moral discipline of Books II–IV.'
- 8 'Virtues', ἀρεταί, here seems to be used in a more general sense than in Book 4. None of the Book 4 virtures, including wisdom (σοφία), were acquired by nature, but the 'virtue of thought' appears to be the set of natural intellectual abilities discussed throughout Book 6, like 'ease of learning, good memory, quick wits, sharpness' (503C2)—abilities that prefigure wisdom, for the rightly educated. On the other hand, while ἀρεταί may broader here, it does not exclude the earlier, narrower sense.

ever) though 'habit and practice' (ἔθεσι καὶ ἀσκήσεσιν; 518D11); in this respect, they are compared to virtues of the body, like strength. This difference between virtues has the following consequence: some people lacking education can have, by nature, remarkable intellectual abilities, yet never engage in the 'habit and practice' necessary to acquire the other virtues. In other words, some people can be 'vicious, but clever' (πονηρῶν μέν, σοφῶν δέ; 519A2). In the language of the body side of the simile, vicious but clever people are those who see sharply, but are looking in the wrong direction: their 'sight isn't inferior but rather is forced to serve bad ends, so that the sharper it sees, the worse things it accomplishes' (519A3–5).

While these vicious but clever people are the most dangerous kind of people, they had the potential to be the best kind, had they been correctly educated:

If a nature of this sort had been hammered straight from childhood and freed from the leaden weights of kinship with becoming, which have been fastened to it by feasting, greed, and other such pleasures and which turn the soul's vision downwards—if, being rid of these weights, it turned to look at the true things, then I say that the same soul of the same person would see these most sharply, just as it does the things it is now turned towards. (519A7—B5)

This passage is richly metaphorical but not, I think, difficult to decipher. The kind of education described as being 'hammered' from childhood is the kind of habituation—the 'habit and practice' mentioned earlier—required to prepare the soul for the non-intellectual virtues. The leaden weights that prevent the soul from turning are a reference to the bonds that prevent the Cave prisoners from turning away from the shadows. And these weights, from which the soul is to be freed, represent the unruly passions that are corrected in the process of instilling the non-intellectual virtues: thus, they are 'fastened to [the soul] by feasting, greed, and other such pleasures.'9

So understood, we see that a central lesson of the soul-turning passage is that if education is to prevent the misuse of rational powers, it needs to develop the possessor's whole character by shaping it in a way that instils the non-intellectual virtues too. In Book 4, we learned that these non-intellectual virtues involve states of the appetitive and spirited parts of the soul, not just the rational part, and that music and gymnastics are the subjects that result in a sufficiently healthy condition—sufficient, that is, for the auxiliar-

9 For comparable readings of this passage, see Nettleship 1897, 262; Wilberding 2004, 135; and Reeve 2010, 224–25.

ies of the city—of all three parts of the soul (441E8-42B3).¹⁰ Music and gymnastics are in fact the only candidates in Plato's curriculum for subjects that can educate using the 'habit and practice' described here: the others, recall, are the thoroughly intellectual subjects of mathematics and dialectic. Indeed, Plato will shortly use precisely the fact that music and gymnastics 'educates the guardians through habit' (522A4) to distinguish them from mathematics.

Still, we need to be careful about how we relate music and gymnastics to claim (b). There is a sense in which music and gymnastics turn the whole soul just by themselves, insofar as they benefit all three parts of the soul. This is reflected in the Cave allegory by the fact that the freed prisoner's first turn from shadows to statues is a turn of his *whole* body. But for the rational part, this can only be a partial turn—a preliminary education—that prepares it for the more challenging intellectual education that will turn it 'towards being,' and this will be the work of mathematics and dialectic. Thus, all subjects contribute to fully turning the whole soul.

But music and gymnastics do have a special role in the turning the whole soul, which is why it is their effect that is represented by the dramatic first turn of the whole body. The view of education criticised in claim (b)—the view that sees education as simply 'putting knowledge into souls'—only con-

10 This is uncontroversial for the spirited part, but it has been questioned for the appetitive and rational parts. Gill (1985) denies that the appetitive part benefits directly from an education in music and gymnastics. Wilberding (2012) offers a detailed response, concluding that it is directly educated by one form of gymnastics. For my purposes, it is enough that the appetitive part is educated as a result of music and gymnastics, even if this an indirect result. The result is that the appetitive part is well-ruled and capable of figuring in moderation and psychic harmony (441E8-42D3), and Plato appears happy to call this an 'education' by music and gymnastics (548A5-B2; 549A5-B7; 559B8-C1). Nearer at hand, the soul-turning passage claims that education must affect the whole soul, which naturally includes the appetitive part. With respect to the rational part, the worry is that music and gymnastics use non-rational methods unsuited to the rational part, and they educate youths who have yet to develop the ability to reason (402AI-4; 44IA7-BI). Wilberding (2012, 142-43) concludes that music and gymnastics do not educate the rational part. I find this implausible given that Plato explicitly asserts the contrary: 441E8-42A2. The solution, I believe, is to recognise that the rational part is more than its ability to reason: like the other parts, it has desires and pleasures that, plausibly, can be shaped by non-rational training. For example, music appears to nurture a desire for learning and inquiry (441C9-D6), which in children we might understand as a kind of pre-rational curiosity. See also Jenkins 2015.

siders the education of the rational part of the soul, and this is the respect in which it is contrasted with an education that affects the whole soul. Clearly this shortcoming is not solved by mathematics and dialectic, which also educate only the rational part (at least directly). So while the 'whole soul' is of course all three parts, it is the two non-rational parts that are in most danger of being neglected. The relevant difference in Plato's curriculum, then, and what enables it to meet the requirement of turning the whole soul, is its emphasis on an education in music and gymnastics.

2 WHAT DOES IT MEAN TO 'TURN' THE SOUL?

Why is education compared to a 'turning' of the soul? What is this supposed to tell us about education? I will side with those commentators who claim that it tells us that education, properly understood, does not proceed by instilling new information or new skills, but by directing a student's existing abilities towards the right ends.¹¹

Recall the following simile: education is not 'putting knowledge into souls that lack it, like putting sight into blind eyes.' There is an ambiguity in this line. While the the soul side appears to describe putting *states* of knowledge—specific facts—into a soul, the body side of this simile appears to describe restoring the *ability* to see to blind eyes. To be analogous, then, one side has to give way to the other: either the soul side refers to some epistemic ability, or the body side refers to specific things seen (visible facts reported, say, to the blind). If we accept the first reading, then Plato seems to be denying that education concerns the transmission of information.¹² If we accept the second reading, he seems to be denying that education concerns imparting new abilities.

If the first reading is right, then Plato would seem to be drawing a contrast between simply handing students information (like telling a blind person about what they can't see) and helping students find the answers for themselves (like helping someone see something for themselves). This reading has the advantage of capturing something that Plato does appear to believe and that is at least implicit in all his discussions of education. Terence Irwin

¹¹ See Mohr 1984, 41, n. 1; Reeve 1988, 49-50; 2010; and Smith 2019.

¹² See Irwin 1995, 301.

¹³ In one of Plato's first discussions of education, in the Meno, a strong implicit theme is the contrast between education as passing of information from one person to another and education as helping a person figure out the right conclu-

claims, plausibly, that the latter is illustrated in the Cave by the fact that the freed prisoner is left to identify everything he sees for himself (the only prompting he gets is being asked what he sees; 515D4-7).¹⁴

However, while it is, as elsewhere, implicit here that education is not merely a transmission of information, the specific point Socrates is making is captured better by the second reading. While some statements of the simile are ambiguous, others are not. For example, the claim that education proceeds 'assuming that [an eye] has sight' cannot be interpreted as 'assuming a student has the relevant knowledge or information,' and, thus, the preceding reference to 'putting sight into it' cannot mean putting information into a student's soul. Rather, the characteristic 'having sight' is identified with the power or ability (δύναμις) to learn (518C4-6). Similarly, sight's defect of being 'not turned the right way' does not appear to represent how one reaches a conclusion (for example, learning by rote rather than figuring it out for oneself). Within the metaphor the means of learning is the same for both the educated and uneducated: they both use sight, though they are looking at different things. Plato even emphasises how 'sharply' (ὀξέως) clever but vicious people can see the shadows (519A1-5), and presumably they see them for themselves no less than the freed prisoner does (suggesting, perhaps, that reaching a conclusion for oneself is a necessary, but not sufficient condition for education). In general, Plato's exposition of the metaphor focuses on what end education must turn students' abilities towards, rather than the means by which it does so. About the means, Socrates is studiously neutral, referring only to a way to 'most easily and effectively turn it around.' This makes sense if he is making a point about education as such, since his curriculum, which lasts from infancy to the age of fifty, does not employ a single means of educating, but is comprised of a variety of subjects that have little in common other than that they each bring the student a step closer to the right destination.

In summary, we can say that the metaphor's message is that education should concern not imparting new abilities but correctly orientating existing ones. This fits what we saw in section 1: the virtue of thought is present from birth, but it can end up being turned in either the right or wrong direction. Cashing out the metaphor explicitly, Plato is saying: the aim of edu-

sions for themselves, in a way that encourages explanatory understanding. See, for example, Devereux 1978.

¹⁴ Irwin 1995, 301.

cation is to direct a student's natural intellectual abilities towards the right ends or end; attempting to *teach* cleverness—to make people 'clever at speaking,' say—without directing it at the right ends will at best be harmful, since for sight looking in the wrong direction, 'the sharper it sees, the worse things it accomplishes' (519A5-6). Moreover, trying to make someone clever would appear to be ineffective, since the virtue of reason that determines a student's intellectual potential is an inborn trait that is not created through education: nature supplies our fundamental abilities; education supplies their direction. ¹⁵

A final and, I believe, decisive reason in favour of this reading is that the message it attributes to the soul-turning passage is not at all new, but has been a theme since the beginning of Book 6, and is part of the very reason why the images of the Sun, Line, and Cave were introduced. It is easy to make the mistake of thinking that the topic addressed by the Sun, Line, and Cave begins at 504A2, when Glaucon asks about 'the most important subjects' and invites a discussion of the Form of the Good. But it is in fact the continuation of a longer discussion of education, one in which Socrates has already introduced the 'vicious but clever' character and explained how 'the naturally best souls become especially bad when they receive a bad education' (491D10–E2). He has also already, in Book 6, explained that this one best nature can be led—be turned—in two possible directions, depending on the education it receives:

If the nature we proposed for the philosopher happens to receive the proper instruction, I imagine it will inevitably grow to attain every virtue. But if it is not sown, planted, and grown in a suitable environment, it will develop in entirely the opposite way, unless some god comes to its aid. (492AI-5)

Unlike Book 7, however, here Socrates does not describe the 'appropriate instruction,' but the harm of the wrong kind of education, as found in his contemporary society: an upbringing dominated by the collective will of the crowds at assemblies, courts, or theatres, with parasitic sophists teaching people how to pander to the crowd's opinions, while knowing 'noth-

15 The view of education in the *Republic* assumes a wide variation in natural ability. Students begin the same curriculum, but they continue only until they are discovered, through frequent testing, to have reached their natural limit, whereupon they are placed in a role that suits their nature. Those who survive all the testing will be very few indeed, and Socrates takes pains to emphasise the danger of letting someone with the wrong nature reach this stage of the curriculum (537C6-40C2).

ing about which of these opinions is fine or shameful' (493A6-C8). What passes for philosophy, on the other hand, is a game of refutation that has no concern for truth or falsity (495A10-98B1). Those who 'succeed' in this society—according to its criteria for success—do so not because they've been educated differently from their neighbours, but because they were born with the 'best' or 'philosophic' nature, which allows them to thrive in whatever environment they find themselves in. In contrast, as Socrates concisely puts it: 'a small nature will never do anything large' (495B5-6). Education, then, does not control who succeeds or fails, but it does control how 'success' and 'failure' are understood: with the wrong education the best natures will aim to achieve, or be 'turned' towards, the wrongs ends; with the right education they will aim to achieve the right ends. Thus, the soul-turning passage develops, and should be read in light of, a theme that is already well established in the *Republic*.

Two of the conclusions reached so far are worth underlining, since they are at odds with what Plato is thought to say elsewhere in Book 7. First: the soul-turning metaphor describes a fact about education as such, not about some educational subject and not others. Plato is claiming that, from start to finish, education is a matter of shepherding natural abilities in the right direction. Second: music and gymnastics are among the subjects that the soulturning metaphor represents. One argument for this is simply that they are subjects in Plato's educational curriculum, so they can hardly be left out (at least not without denying the first claim). But they are also more than just included. Plato's exposition of the soul-turning metaphor shows special concern for the role they play. Only music and gymnastics have the responsibility for shaping the fundamental motivations—for truth rather than reputation, justice rather than pleasure, and so on—that lead, if unchecked, to the 'vicious but clever' character described here and in Book 6. Consequently, if we deny a place to music and gymnastics in the metaphor, it is very hard to make sense of the claim that education must turn the whole soul. Nonetheless, both of these claims have been denied.

3 MATHEMATICS AND TURNING THE SOUL

From the evidence of the soul-turning passage, we've seen a strong case for aligning the following three elements, as the first (but not only) step of the soul-turning metaphor:

Cave-metaphor: the initial, whole-body turn of the prisoner.

Soul-metaphor: the initial turn of the 'whole soul.'

Educational subject: music and gymnastics.

Many commentators have thought that this alignment is upset by various things that Plato says later in Book 7, or implications thereof. Where we have so far found music and gymnastics, these commentators find mathematics. In the next section I will examine the most challenging of these: Socrates' commentary on the Cave allegory, 532B6–DI, where he appears to attribute the prisoner's turn from shadows to statues to the effect of a mathematical education. Now, I will consider the following three objections: ¹⁶

- (1) Plato explicitly credits mathematics with turning the soul towards being (526E3-5; 525A1-3; 525B9-C6, and 533D1-4), so it could not be the work of music and gymnastics.¹⁷
- (2) Plato denies that music and gymnastics are among the subjects that turn the soul towards being, and for apparently sound reasons: they are concerned with becoming, not being, and they cultivate certain habits, not knowledge (521C1-22B4).
- (3) There is only one *turn* in the Cave allegory, namely, the prisoner's turn from shadows to statues. So the simile must compare turning the soul only to this specific point in the allegory. It is surely wrong, then, to say that this point represents the effect of music and gymnastics alone; indeed, since he explicitly credits mathematics with turning the soul (from the evidence of (1)), mathematics is a more likely candidate.

In light of the discussions in sections 1 and 2, my response to objection (1) will be unsurprising: if the soul-turning metaphor makes a general point

- 16 I present these as objections to bring out the dialectic of my argument; they are often presented, *mutatis mutandis*, simply as evidence for competing interpretations. At least one of these objections is common in almost any discussion of the relevant passages, but some interesting examples are Burnyeat 2000, 42–45, and Schofield 2007.
- 17 Specifically, what is said to turn the soul 'towards being,' as a precursor to dialectic, is five branches of mathematics that occupy ten years of the education of the guardians. While it is commonly speculated that there is another, ethical form of *dianoia* (e.g. Cooper 1966; Fine 2003; and Smith 2019), I find it hard to see how this could inform an interpretation of the soul-turning metaphor. In any case, my task here is to find a consistent reading of the *text* of Book 7, and an ethical form of *dianoia* never appears in the text. All of the pivotal passages, such as 521C1-22B7 and 532B6-D1, refer specifically, and apparently exclusively (see 533C7-E2 and 533B1-8), to mathematics.

about education as such, then it does not make sense to argue about which subjects in Plato's curriculum it does or does not apply to. To do so would be a kind of category error. It is, however, an easy error to make if someone fails to distinguish claims (a) and (b), since the latter claim—that education must turn the whole soul—does appear to concern just one stage in the Cave allegory—the prisoner's initial turn of his whole body—and, correspondingly, to concern just one educational step. Thus, if someone doesn't sufficiently distinguish (a) and (b), they might have the impression that they are forced to choose: *either* the soul-turning metaphor concerns music and gymnastics *or* it concerns mathematics and dialectic.¹⁸

This impression is perhaps encouraged by the fact that Socrates devotes the majority of the soul-turning passage not to explaining the turning metaphor (at least explicitly), but to explaining the need to turn the whole soul, as if it were the only purpose of the turning metaphor. But this reflects the structure of the discussion of education in Book 7. Socrates is starting at the beginning: by the end of Book 7 he will have described how each of the subjects in his curriculum contributes to turning the soul, and in the soul-turning passage he explains the contribution of the first subjects, music and gymnastics (though briefly, since they were described at length earlier, unlike mathematics and dialectic). This first stage also provides him with a good illustration of the basic principle behind the turning metaphor: education must try to point the best natures in the right direction. As we saw, the key idea is that those with the best natures have equal potential to be heroes or villains, so education needs first of all to ensure that students reliably care about the right ends, even 'while still young and unable to grasp the reason' (402A2-3). This much is the work of music and gymnastics. After this, education can focus on the subjects that are concerned specifically with pointing the instrument with which we learn in the right direction, turning it from the study of sensible entities to the study of intelligible entities.

So we find the following division of labour in Book 7: in the soul-turning passage itself, Socrates describes the need to educate the whole soul and introduces the principal steps that make this possible; next, in the reminder of Book 7, he describes how, once this is achieved, the intellectual education of rational part ought to be conducted. This prepares the ground for my response to objection (2): in the putatively problematic passage Socrates

¹⁸ It is precisely this error that leads Wilson (1976, 126) to identify the turning of the soul with mathematics.

is explaining this division of labour. We should not forget that up to this point the discussion of education has proceeded as if music and gymnastics were the only subject the citizens will need; no other subjects have been mentioned. But Socrates now introduces the need for a new subject:

This [sc. what will 'lead the guardians up to the light'; 521C2] is not a matter of flipping a potsherd, but of turning a soul from a day that is a kind of night in comparison to the true day—the ascent $[\dot{\epsilon}\pi\acute{\alpha}\nu\circ\delta\circ\nu]$ to what is, which we say is true philosophy.

Yes, indeed.

Then mustn't we try to discover the subjects that have the ability to bring this about?

Of course.

So what subject is it, Glaucon, that draws the soul from what is coming to be to what is?

(521C5-D5)

The subject of gymnastics is quickly rejected on the grounds that it is concerned with something that comes to be and is destroyed (so can hardly be what draws the soul to what is), and Socrates then asks about music, to which Glaucon replies:

But this was the counterpart of gymnastics, if you remember. It educated the guardians through habit [$\xi\theta\epsilon\sigma\iota$]: with harmony it transmitted a certain harmoniousness, not knowledge; with rhythm a certain gracefulness; and in its stories, whether fictional or truer, it maintained other habits akin to these. But as for a subject leading to something of the sort you are now looking for, there was nothing in music. (522A3-9)

It is important to pay attention to the question Socrates has asked here. He asks specifically about the subjects that 'have the power to bring about' a result that he describes in three different, but equally unambiguous ways: 'turning the soul from a day that is a kind of night in comparison to the true day'; 'the ascent to what is, which we say is true philosophy'; 'draw[ing] the soul from what is coming to be to what is'. That is, the subject or subjects that lead a student from the world of the senses to the study of intelligibles. Clearly the subject is neither music nor gymnastics: neither has any pretence of teaching students about intelligibles. Their role is to help prepare students' characters so that, when the time comes, they will be appropriately receptive to the subjects that do teach them about intelligibles. To express this point through the Cave imagery: music and gymnastics have the power to free the prisoners from their chains so that they can turn their whole body towards

the statues, making progress *within* the cave, which represents the realm of becoming; but the subjects Socrates wants to discover now are those that have the power to bring about the 'ascent' *out* of the cave, into the real world, which represents the realm of what is.¹⁹

Notice that Glaucon thinks that music is unsuited to this role because it educates through 'habit'. His assumption is presumably that habituation is too deeply embedded in the world of change, sense, and desire to draw the soul from what is coming to be to what is, out of the cave. But Glaucon knows that habits have already secured a central role in the turning of the soul, since just moments ago he learned that turning the whole soul involves fostering virtues through 'habit and practice' (518D11). What he says now, then, must be understood not as a denial that music has a part in turning the soul, but a denial that it is the specific subject that brings the student to the realm of what is. In short, the purpose of this exchange between Socrates and Glaucon is not to *delete* a subject from the soul-turning education, but to introduce the surprising fact that they a new subject needs to be *added* to the curriculum: mathematics.

Finally, objection (3). This objection is belied by the text. It asserts that turning the soul is represented only by the prisoner's turn from shadows to statues, yet the text provides explicit evidence against this. For example, in the passage just quoted, 521C5–D5, the representation of the turn includes the prisoner's ascent out of the cave: 'turning a soul from a day that is a kind of night in comparison to the true day—the ascent to what is, which we say is true philosophy.' On reflection, of course this is the case. The soul-turning metaphor concerns what education as such should achieve, and the journey out of the cave, from sensible to intelligible realm, is education's most important achievement. This is why, in the soul-turning passage and throughout Book 7, the turn is referred to as a turn towards being, which ends with 'the sight of that which is, the brightest of the things that are—what we call the good.' (518C9–D1). The prisoner's turn to the statues represents progress within the world of becoming, sense, and belief, not an education that reveals 'what is.' let alone the Form of the Good.

Nonetheless, objection (3) arises because of a genuinely puzzling feature of the text. The prisoner's turn from shadows to statues represents only a

^{19 &#}x27;Ascent,' ἐπάνοδος, is later used to describe specifically the journey out of the cave—'the ascent out of the cave to the sun' (532B7-8)—that comes *after* the prisoner has turned and seen the statues.

small part of the soul's turn. The full soul-turning metaphor corresponds to the full representation of education in the Cave, which extends from chained prisoner (unturned) to seeing the sun (fully turned). Yet the only part of the action in the Cave allegory that really looks like *turning* is the prisoners turn from shadows to statues. The rest of the journey is better described as walking or climbing.²⁰

It is important, to begin with, to keep in mind that the soul-turning metaphor itself is not part of the imagery of the Cave allegory. It is a metaphor for education that runs in parallel with the Cave's own, separate imagery. The parallel does not *have* to be between two turning metaphors. True, Socrates begins with a simile between two turning metaphors—the intellect must turn with the whole soul, like an eye must turn with the whole body—but after this, as we saw, he compares the soul's turn and the prisoner's *ascent*. Though the parallel would perhaps be more satisfying if it could be construed as a kind of turn, nothing commits Plato to this. He could be employing two different but overlapping metaphors: soul turning, on the one hand, and a combination of body turning and ascending, on the other.

But a more satisfying response is available: that the ascent involves another kind of turn. Notice first that in the Cave allegory educational progress is also represented by an up-down metaphor. Plato takes pains to arrange its imagery so that every cognitive advance—every new kind of object that the prisoner sees—corresponds to a change in height. The prisoners look down at the shadows; the statues casting them are above them; the cave's exit is much higher, along with the external shadows and reflections; their external originals are higher still; and the sun is highest of all. Thus, educational progress is also represented by journeying or looking increasingly higher. Socrates instructs us to 'think of the upward journey and the seeing of things above as the upward journey of the soul to the intelligible realm' (517B4-6) and describes how mathematics 'can draw the soul towards truth [...] by directing upward what we now wrongly direct downwards' (527B8-10).²¹

As we would expect, given that they both represent educational progress, this up—down metaphor is interwoven with the soul-turning metaphor. But

²⁰ Wilson (1976, 126) deals with this by claiming that turning the whole body is a new metaphor, unrelated to the turning of the body in the Cave. I think the context and content of the soul-turning passage, both of which link it strongly with the Cave, make this very unlikely.

²¹ See also, for example, 529A1-C3 and 532B6-D1.

more than this, there are times when they seem to be the *same* metaphor. For example:

And when the eye of the soul is really buried in a sort of barbaric bog, dialectic gently pulls it out and leads it upwards [àváyei àvω], using the crafts we described to help it and cooperate with it in turning the eye of the soul around [συμπεριαγωγοῖς]. (533D1-4)

Leading the eye of the soul upwards is to turn it, this passage suggests. Of course, this could be a mixed metaphor, but there is another piece of evidence that suggests otherwise. In the soul-turning passage itself we saw the following line (quoted in context above): '[leaden weights] turn the soul's vision downwards—if, being rid of these weights, it turned to look at the true things ...' (περικάτω στρέφουσι τὴν τῆς ψυχῆς ὄψιν· ὧν εἰ ἀπαλλαγὲν περιεστρέφετο εἰς τὰ ἀληθῆ ...; 519B2-4). What makes this especially interesting is Plato's willingness to use a turning verb, στρέφουσι, to refer to the downwards vision (the same verb that was used to describe turning the body earlier, 518C7).²² Since this passage is part of the original exposition of the soulturning metaphor, it is good evidence that Plato intends the 'turn' to include turning the eyes upwards. So understood, it incorporates the metaphorical role of the eyes in the image of the Sun, where the difference between sensible and intelligible apprehension was represented by whether the eyes are turned (τρέπειν; 508C5) towards objects at night or lit by the light of the sun. Thus, on this reading, the turning of the soul, which involves (a) an initial turn of the whole soul and (b) a more full turn of its intellectual 'eye', corresponds in the body side of the imagery to two kinds of turn: turning (a) the whole body *around* and (b) the eyes *upwards*.

4 MAKING SENSE OF 532B6-DI

I turn now to a fourth and most challenging objection. At 532B6-D1, Socrates offers his own commentary on what the turn from shadows to statues means. Here is the passage:

[i] Ἡ δέ γε, ἦν δ' ἐγώ, λύσις τε ἀπὸ τῶν δεσμῶν καὶ μεταστροφὴ ἀπὸ τῶν σκιῶν ἐπὶ τὰ εἴδωλα καὶ τὸ φῶς καὶ ἐκ τοῦ καταγείου εἰς τὸν ἥλιον ἐπάνοδος, καὶ ἐκεῖ πρὸς μὲν τὰ ζῷά τε καὶ φυτὰ καὶ τὸ τοῦ ἡλίου φῶς ἔτι ἀδυναμία βλέπειν, πρὸς

22 See Adam's (1902, 180-81) discussion of the phrase περικάτω στρέφουσι, which he construes as 'turning around downwards'.

δὲ τὰ ἐν ὕδασι φαντάσματα θεῖα καὶ σκιὰς τῶν ὄντων, ἀλλ' οὐκ εἰδώλων σκιὰς δι' ἐτέρου τοιούτου φωτὸς ὡς πρὸς ἥλιον κρίνειν ἀποσκιαζομένας; [ii] πᾶσα αὕτη ἡ πραγματεία τῶν τεχνῶν ἃς διήλθομεν ταύτην ἔχει τὴν δύναμιν καὶ ἐπαναγωγὴν τοῦ βελτίστου ἐν ψυχῇ πρὸς τὴν τοῦ ἀρίστου ἐν τοῖς οὖσι θέαν, ὥσπερ τότε τοῦ σαφεστάτου ἐν σώματι πρὸς τὴν τοῦ φανοτάτου ἐν τῷ σωματοειδεῖ τε καὶ ὁρατῷ τόπω.

[i] As for the release from bonds and the turning around from shadows to images [i.e. the statues casting the shadows] and the light of the fire and, then, the ascent out of the cave to the sun and, there, the continuing inability to look at the animals, the plants, and the light of the sun, but the ability to look at divine reflections in water and shadows of the things that are, rather than merely at shadows of images cast through another such light, when judged in comparison to the light of the sun²³—[ii] this whole practice of the crafts we've discussed has this ability and leads the best part of the soul up towards the contemplation of the best among the things that are, just as, before, the clearest thing in the body was led towards the brightest thing in the bodily and visible realm. (532B6-D1)

The basic structure of this passage is (i) a description of the freed prisoner's progress in the Cave allegory (up to but not including looking directly at the objects outside the cave, corresponding to dialectic) followed by (ii) a statement of a now familiar simile: that the educational crafts Socrates has described lead our rational faculties to the study of the Form of the Good just as, in the allegory, the eye was led to vision of the sun. We are not told how (i) and (ii) are connected, but it is generally assumed that (i) is a more detailed description of the simile in (ii): that is, (i) is the stages through which the eye is led to the vision of the sun. The problem, for my reading, is that it seems to have one stage too many: it includes not only looking at the 'divine images' outside the cave, but also the turn from the shadows to the statues inside the cave. Given that 'the crafts we've mentioned' means the five mathematical crafts described over the past ten Stephanus pages—this is confirmed by a repetition of this phrase shortly after (533D3-4) in a context that leaves

23 Many modern translations make explicit the comparisons that are rather subtle in the Greek of this clause (from ἀλλά, c3). Rowe is typical: 'not shadows of mere images, and cast by a light no more real than they are, by comparison with the light of the sun.' Possibly this captures Plato's meaning better, and it would suit my reading well, but for caution's sake I choose a translation that is more literal and neutral.

no doubt that it means only the mathematical crafts²⁴—Socrates appears to be saying that the turn from shadows to statues is a result of an education in mathematics, not music and gymnastics. I'll call this reading of the passage the 'standard' reading. Myles Burnyeat gives the following succinct statement of the lesson often drawn from the standard reading:

Both the puppets on the wall (C2) and the divine reflections outside the cave (C3) are mathematicals. The ground for this is that 532bc (cf. 533d3-7) assigns the entire process of conversion between C1 and C4 to 'the sciences we have described', which are the five mathematical sciences and no others (music and gymnastics were firmly excluded at 521e-522b [i.e. objection (2)]).²⁵

Even its supporters recognise that the standard reading of 532B6-D1 sits uneasily with much of what Plato says in Book 7. To illustrate this, commentators have pointed not to the soul-turning passage itself—which is, inexplicably, rarely mentioned—but the fact that Socrates tells us that the cave dwelling represents the *visible* realm (517B1-4), which is the wrong realm for dianoia and mathematics. Beginning with David Ross in 1951, many commentators have attempted to accommodate this conflict by claiming that Plato intends there to be two incompatible interpretations of the Cave allegory: somewhere between 517B and 532B the allegory 'shifted a stage upwards' and 'the second stage within the cave stands no longer for the plain man's observation of sensible things, but for the beginning of the life of science.'26 I think this strategy is hard to defend. Other than soothing the tension that troubles Ross and others, there is no advantage to having two incompatible interpretations of the same allegory. The allegory is already complicated enough without adding this esoteric twist. In any case, the imagery cannot accommodate two interpretations, at least in a substantial and useful way. If it represents both of two largely unrelated things, then there are two

- 24 Contra Malcolm (1962, 40), who argued that the crafts it included not only mathematics, but also music and gymnastics, and Gill (2007, 260–62), who argues that it refers to a form of dialectic. See also 531C9–DI.
- 25 Burnyeat 1987, 159. See also Burnyeat 2000, 45.
- 26 Ross 1951, 75. Most commentators who defend double-reading interpretations take 532B6–D1 to be, in one way or another, more representative of Plato's real view. See Scott 2015, 98–100; Schofield 2007; and Murphy 1932. An exception is Wilson (1976), who uses a similar argument to defend a position very close to my view of music and gymnastics. See Robinson (1941, 195–202), who also holds the standard reading, for an attempt to dissolve the tension between the two passages.

possibilities: it is an artfully ambiguous metaphor that meaningfully symbolises both, which is evidently not the case (as far as I'm aware, no one has even attempted to show how it could symbolise a mathematical education—a problem I return to below); or it is a metaphor that 'stands,' in some attenuated sense, for at least one thing to which it bears no symbolic relation, in which case it cannot really be said to represent it at all.

The tension caused by the standard reading would be more acceptable if it were an instance of a larger theme in Book 7. Thus, objections (1) to (3) have presented a foundation on which to make a case for it: if the standard reading of 532B6-D1 fits with at least some passages in Book 7, then we have a reason to take it seriously even if it requires us to jump through interpretive hoops to avoid clashes with other passages.²⁷ But now that we have seen that (1) to (3) are in themselves unconvincing, the standard reading sits on its own: it has Socrates contradict all his other uses of the soul-turning metaphor up to this point, including, most seriously, his explicit statement of the metaphor in the soul-turning passage. We have, then, a strong motivation to re-examine 532B6-D1.

The reading that I propose turns on two observations, both of which are missed by the standard reading. The first becomes apparent once we notice that if the standard reading is accepted, there is a problem internal to the passage. The assumption so far has been that (i) gives a list of stages that are then discussed as a unit in (ii). But, in fact, rather than list them, (i) *contrasts* the stages in the prisoner's journey in quite a specific way. The point is not simply that the line includes stages inside and outside the cave—though that already calls for explanation²⁸—but that showing how these stages differ seems to be Plato's purpose here. The focal point of the contrast is the point at which the prisoner, having just left the cave, acquires a new and su-

- 27 E.g. Adam (1902) comments on 532B6–D1: 'Nor is this the only passage where the 'turning round' of the prisoners while still in the cave and their gradual ascent are identified with the [mathematical] προπαιδεία, or with part of it: see 521 C.' The reference is to 521C5–D6, discussed in section 3 in relation to objection (2).
- 28 The standard reading could adapt to this much by proposing distinct stages in the *Republic*'s mathematical education. Some suggest, for example, that the earlier stage is an empirical branch of mathematics (since the cave represents the visible realm). See Scott 2015, 91; Sedley 2007, 263 n.9; Schofield 2007, 220 n.11; and Karasmanis 1988, 163. Such readings are highly speculative, however, and have to contend with the fact that the only early stage of mathematics mentioned is childhood mathematics taught through play (536D5–E4), which is not what a two-stage readings requires.

perior ability, namely, the ability to look at shadows and reflections in sunlight, 'rather than merely at shadows of images cast through another such light.' But, we are told, this ability is still limited in comparison to what comes after it, since the prisoner has a 'continuing inability to look at the animals, the plants, and the light of the sun.' Thus, rather than a list, the line ranks the following abilities, from best to worst:

- (ia) Being able to look directly at the things outside the cave.
- (ib) Being able to look at reflections and shadows outside the cave.
- (ic) Being able to look at shadows in the cave.²⁹

More exactly, since the ability to look at shadows and reflections is the focus, we can say that the line aims to make clear the merit of this ability in relation to the one that proceeded it and the one that will succeed it: (ib) is superior to (ic), but inferior to (ia). A sound interpretation of the passage must explain the relevance of this ranking.

The second observation is that (ii) does not in fact refer us to the whole series of stages in (i), but to its focal ability, (ib). We are told that the mathematical crafts have 'this ability' (ταύτην [...] τὴν δύναμιν), where the ταύτην ('this')—often left untranslated—makes it plain that the relevant antecedent is the ability just mentioned: the ability to look at 'divine images' outside the cave. This is the same ability that they set out to discover at the outset of the discussion of mathematics: their aim was to 'try to discover the subjects that have the ability $[\delta \acute{v} \nu \alpha \mu \nu]$ to bring this [sc. 'the ascent $[\dot{e}\pi\acute{a}\nu o\delta o\nu]$

- There is one peculiarity to this set of abilities. In the Cave, as in the Line, there appear to be *four*, not three, significant abilities. The missing ability is the ability to look not at the cave's shadows, but at the *statues* that cast these shadows. Why is this left out? A promising explanation was suggested to me by Nicholas Smith. It has often been noted that the statues in the cave and the shadows and reflections outside are, at least in one respect, ontologically equivalent: they are all images of the real objects outside (see Fogelin 1971, 381–82; Bedu-Addo 1979, 103–5; Smith 1996, 36–37; and Sedley 2007, 266). While I cannot discuss the philosophical significance of this observation here, it suggests the following answer: since the superiority of (ib) is not brought out by a direct comparison with a second ability to see images of real things, Plato chooses to sidestep this difficulty by comparing it to (ic) together with, as we should note, an unfavourably comparison between the light of the whole cave dwelling to the light outside: 'another such light, when judged in comparison to the light of the sun' (see n. 23).
- 30 That is, the δύναμις to see 'divine images' that is the implicit opposite of ἀδυναμία at C9.

to what is'] about?' (521D1-2). Consonantly, the 'leading up' ($\dot{\epsilon}\pi\alpha\nu\alpha\gamma\omega\gamma\dot{\eta}\nu$) that is attributed to the mathematical crafts does not refer to all stages in (i), but to what it describes as an 'ascent' ($\dot{\epsilon}\pi\dot{\alpha}\nuo\delta\circ\varsigma$) out of the cave, which comes after the prisoner's release and turn towards the statues. As elsewhere, when Plato talks about mathematics 'leading' a student towards being, it is a leading from becoming to being, or from the visible to the intelligible. Similarly, as elsewhere, both $\dot{\epsilon}\pi\alpha\nu\alpha\gamma\omega\gamma\dot{\eta}\nu$ and $\dot{\epsilon}\pi\dot{\alpha}\nuo\delta\circ\varsigma$ are metaphors for journeying upwards, and so out of the cave. Thus, neither the ability nor the leading referred to in (ii) includes the turn from shadows to statues. (Notice that we also have to limit the scope of the 'leading up' in the other direction, to exclude the last part of the journey, which is the work of dialectic.)³¹

Put together, these observations lead us to the conclusion that (i) describes the ability to look at images outside the cave as better than a preceding and worse than a subsequent ability and, then, (ii) attributes the acquisition of this middle ability to the several mathematical crafts they have been discussing, conceived now as a unified 'practice' or 'enterprise' ($\pi p \alpha \gamma \mu \alpha \tau \epsilon i \alpha$). In other words, it tells us that mathematics is what draws students from the sensible world, symbolised by the cave dwelling, to the point where they have a limited ability to study intelligible objects, not directly, but through images: up to the point of *dianoia*. This is, of course, very close to what Socrates has been saying all along: mathematics has the ability to 'lead the soul up and turn it towards the contemplation of what is' (525AI-2). The crucial difference is that we now learn that it is not the whole of the contemplation

31 Burnyeat (1987, 159 n. 37) gives a clear statement of the alternative reading: 'The key phrase is πᾶσα αὕτη ἡ πραγματεία at 532c, where αὕτη refers to the release from chains and the activities at C2 and C3 just described (532b6-c2) and $\pi\tilde{\alpha}\sigma\alpha$ tells us that all of this belongs to mathematics.' That is, he sees the sentence structure as comparable to '2, 4, 6—all these even numbers we discussed earlier are divisible by 2.' Given the lack of a verb in (i) followed by the abrupt shift to (ii) this is a natural way to read the line. But the αὕτη and the ταύτην cannot both refer back to (i), and the ταύτην is grammatically unambiguous. Moreover, given that, as we have just seen, (i) is *not* in fact a list, a better illustration of the sentence structure would be: '1 and then 2, which is even unlike 1 and 3—all this business of even numbers we discussed earlier' The unusual sentence structure is best understood, I believe, to be reflecting a scene-setting tone in which Socrates invites us to conjure the imagery of the allegory and recall the crucial moment that illustrates dianoia, about which Glaucon certainly needs reminding: it was only mentioned once, almost in passing (516A6-8), and with no indication of its significance at the time.

of what is, but just a preliminary step—it is looking at images of what is, but not directly at it (the work of *noēsis*).

Now consider the context in which we find 532B6-D1. The standard reading treats the passage as a summary, albeit a revisionary one, of what has been said about education so far, before moving on to the discussion of dialectic. According to my reading, in contrast, the passage tells us something new: despite the praise heaped on the mathematical arts up to now, they have only a penultimate status, and a whole new subject is needed to complete the turn towards what is. As with the initial introduction to mathematics, we should remember that, unlike the *Republic's* modern readers, the existence and need for yet a further subject has not yet been revealed to Glaucon (thus his response to our passage is one of surprise). The passage introduces its penultimate status to Glaucon by reminding him of the cave allegory and telling him that the mathematical arts correspond not to the ultimate but to the penultimate stage in the prisoner's journey, when he cannot yet look at the things themselves, but can look at their images.

This gives the passage a meaningful place in the sequence of the discussion surrounding it. In the immediately preceding lines (532A1-B5), Socrates has been telling Glaucon that dialectic is represented in the Cave allegory by (ia), looking directly at the objects outside the cave. Then, in 532B6-D1, he explains what this entails: that the mathematical crafts must, therefore, be represented by something lower than (ia), namely (ib), looking at those objects indirectly through images outside the cave. His aim, here and in the subsequent few paragraphs, is to emphasise that after the mathematical arts, despite their ability to turn the soul towards being, there still remains a need for a higher kind of study. He concludes this transition with a statement that bears a similarity to the message of 532B6-D1, again emphasising the mathematical arts intermediate or penultimate status by comparing it to something lower and higher: the 'crafts we described' are 'brighter than belief, dimmer than knowledge' (533D5-6).

I will close with an observation about the methodology behind the standard reading, and in general the interpretation that construes the initial turn of the whole body in the Cave allegory as a representation of the effect of mathematics. There is a sense in which this interpretation abandons the task of making the relevant metaphors intelligible. That is, it does not attempt to explain the turning metaphor or the relevant parts of the Cave allegory—shadows, statues, chains, release, turning of the whole body, and so forth—as metaphor. There is no attempt, for example, to explain how mathematics

breaks our metaphorical chains or leads us away from metaphorical shadows. It is, rather, an interpretation that simply asserts that the metaphor 'stands' for something, as the x or y of an equation might, without making the soul-turning metaphor, or the corresponding metaphors in the Cave, meaningfully and plausibly representational, and thus intelligible in the way in which a philosophical metaphor ought to be. It is an interpretation that, in short, is remarkably lacking in any actual interpretation. The simplest explanation for this is that the relevant imagery does not in fact represent the effect of mathematics in they way that they suppose, so commentators have failed to construe the imagery as if it does. In contrast, if we stick to the account Socrates gives us in the soul-turning passage, we have an interpretation rooted in meaningful ways to construe the content of both of the two turning metaphors—the soul and body—and how they interact with the corresponding metaphors in the Cave allegory. Unless we begin by assuming weakness or incoherence in Plato's metaphors, this is surely the kind of interpretation that we should prefer.

REFERENCES

- Adam, J. (1902), *The Republic of Plato*, vol. 2 (Cambridge).
- BEDU-ADDO, J. T. (1977), 'A Theory of Mental Development: Plato's *Republic* V–VII. Part II: The Allegory of the Cave', *Platon*, 29, 212–224.
- —— (1979), 'Διάνοια and the Images of Forms in Plato's *Republic* VI–VII', *Platon*, 31 (61/62), 89–110.
- BOSANQUET, B. (1895), A Companion to Plato's Republic (New York).
- BURNYEAT, M. F. (1987), 'Platonism and Mathematics: A Prelude to Discussion', in Graeser, A. (ed.), *Mathematics and Metaphysics in Aristotle* (Bern and Stuttgart), 145–172.
- (2000), 'Plato on why mathematics is good for the soul', in Smiley,
 T. (ed.), Mathematics and Necessity in the History of Philosophy (Oxford),
 1–81.
- COOPER, N. (1966), 'The Importance of διάνοια in Plato's Theory of Forms', *Classical Quarterly*, 16, 65–69.
- DEVEREUX, D. T. (1978), 'Nature and Teaching in Plato's *Meno'*, *Phronesis*, 23, 118–126.
- FERGUSON, A. S. (1934), 'Plato's Simile of Light Again', *Classical Quarterly*, 28, 190–120.

- FINE, G. (2003), 'Knowledge and Belief in *Republic* V–VII', in *Plato on Knowledge and Forms* (Oxford), 85–116.
- FOGELIN, R. J. (1971), 'Three Platonic Analogies', *The Philosophical Review*, 80, 371–382.
- GILL, C. (1985), 'Plato and the Education of Character', *Archiv für Geschichte* der Philosophie, 67, 1–26.
- ——— (2007), 'The Good and Mathematics', in Cairns, D. and F.-G. Herrmann (eds.), *Pursuing the Good: Ethics and Metaphysics in Plato's* Republic (Edinburgh).
- IRWIN, T. (1995), Plato's Ethics (Oxford).
- JENKINS, M. (2015), 'Early Education in Plato's Republic', British Journal for the History of Philosophy, 23 (5), 843–863.
- KARASMANIS, V. (1988), 'Plato's *Republic*: The Line and the Cave', *Apeiron*, 21, 147–171.
- MALCOLM, J. (1962), 'The Line and the Cave', Phronesis, 7, 38-45.
- MILLER, M. (2007), 'Beginning the "Longer Way", in Ferrari, G. R. F. (ed.), *The Cambridge Companion to Plato's* Republic (Cambridge), chap. 12, 310–344.
- MOHR, R. (1984), 'The Divided Line and the Doctrine of Recollection in Plato', *Apeiron*, 18, 34–41.
- MURPHY, N. R. (1932), 'The "Simile of Light" in Plato's Republic', *Classical Quarterly*, 26, 93–102.
- NETTLESHIP, R. L. (1897), Lectures on Plato's Republic (London).
- REEVE, C. D. C. (1988), *Philosopher-Kings: The Argument of Plato's Republic* (Princeton, N.J.).
- ——— (2010), 'Blindness and reorientation: education and the acquisition of knowledge in the *Republic*', in McPherran, M. (ed.), *A Critical Guide to Plato's Republic* (Cambridge), 209–228.
- ROBINSON, R. (1941), Plato's Earlier Dialectic (Ithaca).
- Ross, D. (1951), *Plato's Theory of Ideas* (Oxford).
- SCHOFIELD, M. (2007), 'Metaspeleology', in Scott, D. (ed.), *Maieusis: Essays on Ancient Philosophy in Honour of Myles Burnyeat* (Oxford), 216–231.
- SCOTT, D. (2015), *Levels of argument: A comparative study of Plato's* Republic *and Aristotle's* Nicomachean Ethics (Oxford).
- SEDLEY, D. (2007), 'Philosophy, Forms, and the Art of Ruling,' in Ferrari, G.R.F. (ed.), *The Cambridge Companion to Plato's Republic* (Cambridge), 256–283.

- TANNER, R. G. (1970), 'διάνοια and Plato's Cave', *Classical Quarterly*, 20, 81–91.
- WILBERDING, J. (2004), 'Prisoners and Puppeteers in the Cave', Oxford Studies in Ancient Philosophy, XXVII, 117-39.
- ——— (2012), 'Curbing One's Appetites in Plato's *Republic*', in Barney; R., T. Brennan; and C. Brittain (eds.), *Plato and the Divided Self* (Cambridge).
- WILSON, J. R. S. (1976), 'The Contents of the Cave', *Canadian Journal of Philosophy*, Supp. vol. II, 117–127.