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RESEARCH ARTICLE

A living reasonable account: on the status of Timaeus' *eikōs logos* (again)

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Abstract

Is an account of hair or nails as negotiable as one of the Demiurge? It should not be. The aim of this paper is to supplement existing interpretations of Timaeus' *eikōs logos* in order to provide well-grounded answers to this and similar questions. More specifically, I shall demonstrate that Timaeus' account cannot be confined to a single epistemological field, namely that of unstable likeliness, because it exhibits a much more nuanced and graduated structure, just as do the realities it deals with, and, as a whole, leaves minimal room for refutation and scepticism.

Keywords: ancient philosophy; Plato; *Timaeus*; Plato's cosmology

I. Premise

The nature and the epistemic status of Timaeus' *eikōs logos*[1] are among the most debated issues of Plato's scholarship, but consensus has been reached on some key points. A recent, widely accepted view is that the use of *eikōs* implies not only the idea that Timaeus' account concerns the sensible world as an image (*eikōn*) and, hence, that it is a likely account. But above all, it is a *reasonable* account, inasmuch as it aims to match a standard of stability, namely that of the Demiurge's practical *reasoning*, and has the world as image of the intelligible produced by the Demiurge as its object.[2] According to Myles Burnyeat's reading of *Timaeus* 29b3–d3, Plato would clearly be distinguishing between stable accounts, which concern the intelligible realm, and the *eikōs logos*, which is intrinsically less stable.

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[1] I shall use 'account' to refer to the *muthos*/*logos*, since Vlastos (1939) [1995] 71–73 effectively demonstrated that there is no tension between these terms in the *Timaeus*, and that Timaeus more often associates the adjective *eikōs* with *logos*; see also Donini (1988) 37–40. While insisting on the importance of the notion of μῦθος, Burnyeat (2005) 145 acknowledges that one can simply conceive myth as a kind of *logos*. Commenting on this paper, Betegh (2010) 221–24 has maintained that 'there is no real opposition between the two at all', while significantly emphasizing that 'a λόγος about anything that has come to be can naturally take the form of a narrative', that is, of an aetiological myth whose degree of reasonability depends on the philosophical skills of its proponent; this will prove consistent with my own conclusions. Important recent discussions include Morgan (2000) 271–77; Rowe (2003); Johansen (2004) 48–68; Broadie (2011) 31–60.

[2] This is a rough summary of the contents of Burnyeat (2005), to some extent anticipated by Osborne (1996) and Rowe (2003). My reading is meant to supplement Burnyeat's, hence as a rule I adopt the translation of *eikōs* he proposes ('reasonable'), though, as rightly pointed out by Broadie (2011) 33 n.15, the term likely better expresses the link between *eikōs* and *eikōn*. The other possible translation of *eikōs*, 'probable', is sometimes used by Cornford and may be acceptable, provided that it is not understood in a probabilistic sense, but as referring to the fact that the account is the best possible: see Morgan (2000) 271–74; Johansen (2004) 53; Burnyeat (2005) 156–57.

The legacy of Burnyeat's paper has been nuanced by some very insightful analyses.[3] First, Gábor Betegh emphasized that one can both think that Timaeus' account is 'reasonable' (in Burnyeat's sense) and acknowledge that it implies some limitations to the human capacity to meet the standard of the Demiurge's reasoning. Sarah Broadie reached similar conclusions, but also made two points which will prove important for my argument: first, she hinted at the possibility that Timaeus' use of the plural *logoi* or *muthoi* may refer to sections of the account characterized by different degrees of reliability;[4] second, she suggested that some parts of the account are not negotiable.

In this paper I will take careful account of these last two aspects: once properly supported and exploited, they will lead to a new overall outline of the structure and epistemological status of the *eikōs logos*. More specifically, I will show that Timaeus' *eikōs logos* is not only made up of a range of narrative blocks, but is a *unitary whole* consisting of different accounts, each having a different degree of stability within the whole because of the specific objects it deals with and, above all, its specific argumentative function. In order to reach this conclusion, I shall first show that we can distinguish at least four parts within Timaeus' account: on the one hand, each part has a specific object, is characterized by a specific epistemic status and plays a distinct argumentative role; on the other, each part has a degree of negotiability[5] depending on the aforementioned features (sections II–IV). I will then verify whether this reading is consistent with an effective interpretation of the famous presentation of reasonable accounts in the proem (section V). This will eventually lead me to detect the very specific structure of Timaeus' account, which is a unitary whole (ἕν-ὅλον), just as the world is (section VI). Ultimately, I will argue that Plato's cosmology is able to justify its own effectiveness and that it *really* embodies the safest and most stable cosmological account one can hope to provide: there is very little room for refutation and scepticism in Plato's account of the sensible world as a whole.

II. Reasonable accounts of divine objects

The notion of *eikōs logos* is somewhat obscure in the first part of Timaeus' speech (the so-called 'works of reason'), but certain passages provide enlightening indications as to the status and objects of Timaeus' account. The first is the conclusion to the argument showing why the Demiurge produced the world as a beautiful living being provided with soul and intellect (Pl. *Ti.* 29d7–30c1). Burnyeat has suggested that the argument that the world is a living being provided with soul and intellect reproduces the Demiurge's practical reasoning in the following way:[6]

1. (x)(y) (x has understanding & y has not) → (x as a whole is finer than y as a whole).
2. (x) (x has understanding) → (x has soul).

Conclusion:

3. This cosmos is a living creature with soul and understanding.

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[3] See especially Betegh (2010); Broadie (2011) 31–60.

[4] Broadie (2011) 48–50. This is a development of Burnyeat (2005) 153–55; see also Sedley (2007) 101–03, but already Donini (1988) 42–47.

[5] Henceforth I will use the term 'negotiable' (as already Broadie (2011) 52 does) in order to indicate a claim, or position, which Timaeus would regard as just possible, or provisional, and hence one which he would regard as provisional and subject to amendment.

[6] Burnyeat (2005) 160–61.

On the one hand, the premises indicated by Burnyeat are generally, and somewhat analytically, connected to the relation between 'understanding' and 'soul', and they are taken to reproduce the Demiurge's practical reasoning. On the other, the Demiurge *is said* to have produced the world as he did and, hence, to *reason* in this way, based on a further premise, namely because 'he was good' (Pl. *Ti.* 29e1). Without this premise there would be nothing to guarantee that the Demiurge wants the world to be 'x' rather than 'y', and hence that the conclusion (3) might apply to the Demiurge. Consequently, the problem with Burnyeat's analysis is that stating that the Demiurge *is* good, and that because of this he reasons in such and such a way, implies having a grasp on *the nature* of the Demiurge, that is, being able to argue that the Demiurge is good and, *a fortiori*, that it is necessary for the Demiurge to exist. Hence, the argument at Pl. *Ti.* 29d7–30c1 cannot *just* reproduce the Demiurge's reasoning, for it also encompasses a reasoning *on* the Demiurge and his reasoning.[7] Not by chance, at the very end of the passage (Pl. *Ti.* 30b6–c1) Timaeus explicitly states that the Demiurge's action is providential *according to the reasonable account* (κατὰ λόγον τὸν εἰκότα): again, this cannot be part of the Demiurge's reasoning itself, but must be a description and evaluation of this reasoning based on an original conception of the Demiurge.

Significantly, Timaeus' account also includes statements concerning the relationship between the Demiurge and his generative act. For instance, at Pl. *Ti.* 42e Timaeus refers directly to the Demiurge's *nature* (ἐν τῷ ἐαυτοῦ κατὰ τρόπον ἤθει). This cannot be just a formal description (i.e. along the lines of a claim like 'whatever condition the Demiurge is in, this is his natural condition'), for in this context what Timaeus is distinguishing (whatever the extent to which he is doing so) is two different dimensions in which the Demiurge can at least be described (or even act): one pertaining to his ordering action, the other to his stable being. Now, whatever the Demiurge might be,[8] his nature is not that of a generated object, and, as we have seen, Timaeus' account does imply knowledge of this ungenerated and divine object.

This leads to the question of whether Timaeus' *eikōs logos* can *legitimately* encompass a description of ungenerated, divine entities. *Timaeus* 40d6–e3 says something important in this respect:

> We cannot, then, mistrust the children of gods, though they speak without probable *and* necessary proofs (καίπερ ἄνευ τε εἰκότων καὶ ἀναγκαίων ἀποδείξεων λέγουσιν); when they profess to report their family history, we must follow established usage and accept what they say.[9]

Francis Cornford provides a somewhat deflationary translation of εἰκότων <u>καὶ</u> ἀναγκαίων ἀποδείξεων as 'probable *or* necessary proof'. Some embarrassment emerges also from Burnyeat's treatment of the passage.[10] On the one hand, by appealing to the passage's alleged irony, he stresses that it is not necessary to assume that 'a statement being about the temporal realm does not *eo ipso* make it an *eikōs logos*'. On the other, he keeps Cornford's translation and does not provide any robust analysis of the implications of the reference to 'necessary demonstrations' here. However, the passage says something different, and something more, for it succinctly suggests that it is *possible* that a reasonable

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[7] If Sedley (2019) is right that the Demiurge's goodness is among the objects of recollection for human souls, my point is confirmed *a fortiori*.

[8] After the classic views of Cornford (1937) 34–39, and Cherniss (1944) 425, see Brisson (1994) 101–08, Menn (1995), Ferrari (2003), Johansen (2004) 69–91, Karfik (2007), and Broadie (2011) 7–26.

[9] Translations are taken from Cornford (1937), modified where necessary. The Greek text is taken from Petrucci (2022).

[10] Burnyeat (2005) 150–51.

demonstration is also necessary. First, and more generally, by referring to gods (if one wishes to be *very* cautious, generated ones) it contradicts the idea that the exclusive object of an *eikōs logos* must be situated within the 'temporal realm': Timaean cosmology is full of gods,[11] which in some cases have a special relation to the intelligible (the world soul, for instance, is partly made up of specific intelligible 'material'). So, the passage implies that a discourse about *either the temporal realm or the highest divinity having a place in it* does not *eo ipso* make it an *eikōs logos*.

There is also more to this, however, for there is no reason why one should follow Cornford's translation and claim, with Burnyeat, that 'εἰκώς and ἀναγκαῖος appear here as adjectives characterizing *two* kinds of proof (ἀπόδειξις) or argument' (my emphasis).[12] In this context, the sentence ἄνευ τε εἰκότων <u>καὶ</u> ἀναγκαίων ἀποδείξεων is meant to stress the fact that traditional theogonies are based on neither reasonable nor necessary demonstrations, but the phrase does allow for the possibility of producing demonstrations which may be either reasonable or necessary, *or both*: that is, *in principle*, a reasonable account can include necessary demonstrations.[13] One might argue that Timaeus' account is *just* reasonable. However, in this case one would face a number of puzzles, the most challenging of which derives from the fact that Timaeus repeatedly claims that he is providing the *best* possible reasonable account, that is the one which should be hardest to refute.[14] Therefore, assuming that it is possible for a reasonable account to be both reasonable and necessary, if Timaeus' account were *not* reasonable *and* necessary, any reasonable and necessary account would by definition be superior to his, while the possibility of a necessary reasonable account can perfectly explain why Timaeus can claim the superiority of his own reasonable account.

But what does it mean for a demonstration, or account, to be reasonable *and* necessary? On the one hand, 'necessary' here cannot refer just to formal correctness, for this would imply that any formally correct statements about, say, the world soul would be more valuable than those of traditional theogonies. So, 'necessary' here must mean that a demonstration has *true* related premises *and* a valid argumentative development.[15] On the other hand, Timaeus' account does indeed refer to premises which cannot be but true in a

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[11] See especially Karfik (2004) 96–148.

[12] Burnyeat (2005) 151.

[13] I am not saying that the translation is impossible: as LSJ points out, '*sometimes the elements joined by τε … καὶ … are joined in order to be compared or contrasted rather than simply joined*' (my emphasis) and the presence of ἄνευ might support this reading. However, this especially refers to conditions which are permanent in two different situations, or qualifications applied to a single object in two senses. Consistent with this, I am not saying that Timaeus wishes to suggest an equivalence between the two terms: the emphasis is indeed on their reciprocal difference, but in no way does the phrase imply that a necessary demonstration *cannot* be reasonable or vice versa. In addition, my reading is not affected by the overall interpretation of this passage, which has sometimes been taken to be ironic: even if it were ironic, a highly questionable assumption, not all the details in it would be affected by irony, and this is especially applicable to an issue (that of the 'reasonability' of a theological account) which is key to the whole narrative. See also Pl. *Ti.* 68b6–8 (μήτε τινὰ ἀνάγκην μήτε τὸν εἰκότα λόγον καὶ μετρίως ἄν τις εἰπεῖν εἴη δυνατός), where nothing implies that an account, or reasoning, must be either necessary or reasonable, although 'necessary' and 'reasonable' themselves are two different notions, and 53d4–6, which I will discuss in due course (section IV).

[14] See especially Pl. *Ti.* 29d and 48d, with Osborne (1996) 191–94, and Broadie (2011) 36–37, 46–48.

[15] As suggested by one of the readers, we find a broad variety of different understandings of necessity in Plato, and it has been noted that in the *Timaeus* Plato implicitly refers to two different notions of necessity even within the same argument (for example, at 42a3–b1 Timaeus combines a necessity related to the Demiurge's intervention with material necessity, which is related to the receptacle: see Johansen (2004) 143–46; moreover, as is widely known, Timaeus refers to a crucial aspect of the receptacle's power as 'necessity' (47e4–48a5). However, this very variety allows the reader to discover on a case-by-case basis specific meanings of the term. In the passage which I am analysing, Timaeus explicitly talks about the necessity *of a demonstration* (ἀναγκαίων ἀποδείξεων), i.e. of necessary demonstrations, and I struggle to see how the necessity of a demonstration may be related, for example, to the receptacle. See also n.30.

very strong sense, that is, necessarily true. We have already encountered a very telling example of such premises, when considering Timaeus' reasoning about the Demiurge: the Demiurge is good, and this is not presented as subject to any possible refutation.[16] Similarly, statements about forms in themselves are by definition irrefutable and stable (Pl. *Ti.* 29b5–c1 and 51d3–52a7).

Timaeus' account, however, does not concern *only* these kinds of entities, as of course it also, and primarily, deals with the sensible world at many different levels: it ranges from an intermediate entity such as the world soul, whose substance is also made of intelligible essence, to very specific parts of human beings, such as the hair and nails, which are not *in themselves* images of any form.[17] Hence, Timaeus' account as a whole can be provisionally regarded as the best possible reasonable account, that is, as being reasonable and necessary, because some parts of it are necessary themselves, while others derive from them to different extents according to a well-shaped argumentative structure.[18]

However, the pay-off of my proposal is still limited, for the epistemological status of the treatment of the sensible world is still to be determined, and one could in principle regard it as being widely and homogeneously negotiable. In the following sections I shall argue that this is not the case.

III. Reasoning about the receptacle

As we have seen, parts of Timaeus' account are both reasonable and necessary since they deal with the cosmological function of stable intelligible objects. This opens up the possibility that other sections may have a different status, depending on the objects they concern and the argumentative relation they have with the most stable sections. A very good test case is represented by Timaeus' account of the receptacle.[19] Timaeus apparently opens his discussion of the receptacle by highlighting the limited possibility of providing a full account of the 'principles' (Pl. *Ti.* 48c–d). Nonetheless, he then clearly states that by exploiting the 'power of reasonable accounts' (δύναμις τῶν εἰκότων λόγων), he will produce not merely a reasonable account, but a discourse leading to 'the judgement that is appropriate for what is reasonable' (τὸ τῶν εἰκότων δόγμα). The tension between these points is easily resolved, since the initial cautiousness is only explicitly related to the 'unnamed principles', and nothing implies that these principles coincide with the receptacle.[20] In other words, the fact that some higher principles cannot be grasped in such a way as to be included in the reasonable account does not imply projecting any form of scepticism about the consistency and epistemic strength of the following claims (although they will not prove as strong as those about divine entities, as I will show).

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[16] See also Broadie (2011) 54, but it seems to me that this must also be an implicit premise of Burnyeat's perspective: if the Demiurge's reasoning is a standard to live up to, it cannot be subject to instability or negotiability.

[17] *Cf.* Pl. *Prm.* 130c5–d2. Even Baltes and Lakmann (2005) 15–16, who admit quite a wide range of 'forms', deny that there are forms of parts of human beings (see already Syrianus, *In Aristotelis Metaphysica* 107.12–14).

[18] I am *not* claiming that the whole discourse is necessary just because it encompasses necessary parts, which would be an application of the fallacy of composition, but because it is construed in such a way as to be structured in a valid form starting from necessary premises. One might object that Timaeus could implicitly be interrupting his reasonable account when talking about the principles underlying the physical world. This would fit well with a more traditional conception of the reasonable account, but would be quite puzzling, since at the end of the proem (Pl. *Ti.* 29c7–d3) Timaeus explicitly states that he will offer a reasonable account and makes no mention of limitations, interruptions, etc.: hypothesizing such interruptions would be a sort of ad hoc explanation.

[19] On which see Brisson (1994) 175–266; Algra (1995) 72–120; Miller (2003); Johansen (2004) 92–136; Broadie (2011) 173–242; Fronterotta (2014); Beere (2016); and Ferrari (2022) lxxxiii–xc.

[20] This is confirmed by Pl. *Ti.* 54d–e, where no proper discussion about the principles in question is proposed; on these passages see Cornford (1937) 212–13; Rashed (2013) 109–10.

Consistent with this, Timaeus shows no scepticism about the fact that in what follows he will be able to produce the reasonable judgement about the objects he is going to deal with, and the reason must at least in part lie in Plato's awareness of the difference between his own account and all other explanations of the physical realm. As Timaeus has just said (Pl. *Ti.* 48b–c), while his (i.e., Plato's) predecessors limited their accounts to sensible objects, assuming that the elements are the ultimate constituents of reality, he can argue that a further principle is at stake, that is the receptacle, and do so *eikotōs* (48c1)! In this way, Timaeus' reasonable account *does* provide a firm description of the receptacle, at least with respect to its interaction with sensible particulars. Through the exploitation of the 'power of reasonable accounts', Timaeus is able to provide the sensible realm with a different foundation, allowing him to consider each sensible particular as such and the sensible realm overall (περὶ ἑκάστων καὶ συμπάντων) as images of forms in the receptacle.[21] Consequently, this is a good reason for Timaeus to claim that his account about the sensible realm in the so-called 'works of necessity' has an epistemic status which, by producing the reasonable judgement (τὸ τῶν εἰκότων δόγμα), reaches the highest possible level of reasonability.

This finds confirmation at Pl. *Ti.* 51a–b, a fundamental passage concerning the relation between sensible particulars and the receptacle. Though Timaeus acknowledges that it is hard to conceive what the receptacle is in itself, and it is even harder to explain precisely how it communicates with forms, he is not at all hesitant when he says that *it is not false* (οὐ ψευσόμεθα), hence, that it is true, to describe it as he does.[22] This description, moreover, is not at all superficial, for it shows the cosmological function which the receptacle has with respect to sensible particulars and forms, and the different ontological status it has with respect to the former. Indeed, the idea that each element (and, more generally, each sensible particular) is a qualified portion of the receptacle implies what has been said some lines above, where Timaeus states that the ontological stability of the receptacle allows one to call it a 'this' (τοῦτο), while a sensible particular is a 'such' (τοιοῦτον).[23]

Stating that the description is true neither implies that it is necessary and irrefutable nor that it is a just 'belief' (that is, without any further qualification). Not by chance, Timaeus later explicitly indicates that the epistemic status of any reasoning on the receptacle is different from *both* knowledge of the intelligibles and the standard belief we get of sensible particulars: one can only grasp the receptacle through an illegitimate reasoning (Pl. *Ti.* 52b). This peculiar expression indicates that the presence and features of the receptacle can be conceived only indirectly, through a sort of rational deduction,[24] and

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[21] Note that at Pl. *Ti.* 30c–31b Timaeus explicitly claims that the world as a whole, as a complete living being, is an image of the complete intelligible living being.

[22] This is confirmed by Pl. *Ti.* 72d4–8, on which see the Appendix (supplementary material). On the relation between 'reasonable/likely' and truth, see also Bryan (2012) 121–60 and Gerson (2013) 172–74.

[23] Reading the passage with Zeyl (1975), against Cherniss (1954), but my point does not depend on this: Timaeus is in any case providing a robust ontological account of the difference between the receptacle and sensible particulars. Not by chance, Timaeus positively ascribes to the receptacle some substantial features, which are key in order to define its role in the generation of the world (namely, being ἀνόρατον, ἄμορφον, πανδεχές, μεταλαμβάνον … τοῦ νοητοῦ). Furthermore, I see no way in which one could regard these characterizations as inconsistent or intrinsically contradictory, as Sayre (2003) suggested. Rather, they sound quite technical, and this allows Timaeus to commit himself to their truth, while the fact that images such as that of gold are then evoked says nothing about the inner consistency of the argument: of course, Timaeus' account of the receptacle is complex, and this depends on the fact that it is difficult to grasp its nature fully; however, 'Timaeus has means to emerge from the dark place' (Miller (2003) 215), and my reading explains how this account can be consistently framed within the reasonable account as a whole.

[24] *Cf.* Zeyl (2010) 120 n.7, who speaks of a sort of 'transcendental deduction'. I see no reason why the expression must rather refer to the use of images (Algra (1995) 79–81 and Broadie (2011) 214 n.87), while a term Plato uses, *logismos*, is quite weighty in his epistemology: see, for example, *Meno* 98a4–5, *Prm.* 129e5–130a1, *Phd.* 79a3, *Phdr.* 249b6–c4.

indeed, in the absence of any direct acquaintance with the receptacle, the only reason why Timaeus can state that the deduction is true is that it is based on certainly true premises and follows an appropriate logical articulation. In this case, what we have here is the direct application of the principle I outlined in the preceding section, according to which some parts of Timaeus' reasonable account are in themselves necessary, and that they serve as necessary and true premises for further deductions.

Similar conclusions can be drawn with respect to Timaeus' description of the relation between the receptacle, forms and sensible particulars. First, to say that each element is a qualified portion of the receptacle is unreservedly the most correct way (ὀρθότατα, Pl. *Ti.* 51b3) in which one can account for this issue. Second, in order to establish the existence of forms (51c–d) Timaeus rejects any statement based on confidence (φάναι διισχυριζόμενον), but states that it would be fine 'if we could see our way to draw an evident *horos* of great importance in few words' (εἰ δέ τις ὅρος ὁρισθεὶς μέγας διὰ βραχέων φανείη). This does not remain just a hypothetical goal, for Timaeus will declare that the attempt has been successful (52d2–4). Also in this case, no shadow of scepticism obscures Timaeus' phrasing: rather, he binds the epistemological effectiveness of his description to its argumentative rational strength, for what Timaeus will provide is an *evident horos* (*cf.* the construction with a predicative participle: ὅρος … φανείη). Again, the reason why Timaeus can describe the *horos* as evident cannot *merely* depend on the objects at issue, since we have seen that the receptacle itself can be grasped only indirectly: in other words, Timaeus' account here cannot be evident just because it deals with objects which are open to direct and unequivocal apprehension. Timaeus must therefore be relying on the argumentative structure sustaining such claims: his account of the receptacle and of its interaction with sensible particulars and forms belongs to a *specific part* of the reasonable account, namely one about an object which is epistemologically superior to sensible particulars. Accordingly, it has a lower epistemological status than the discussions on these intelligible objects, but the epistemic import of Timaeus' account consistently depends on the premises he has already established and on the good argumentative construction he is developing from them.[25]

This reading (and only this reading, if I am right)[26] also applies to Timaeus' discussion of the pre-cosmos, which could hardly be included among the contents of the Demiurge's reasoning, or be seen to describe a *standard* post-creational generation (γένεσις). Indeed, the representation of the pre-cosmos can be consistently formed according to reasonability (ὥσπερ εἰκὸς ἔχειν, 53b3) inasmuch as it is part of a rational argument having as its premises the conception of the three kinds and the Demiurge's status as teleological cause.

Briefly, Timaeus' description of the receptacle and its relations to forms and sensible particulars can be isolated as a specific part of the reasonable account, but it is also claimed to be undoubtedly true depending, above all, on the argumentative construction within which Timaeus frames this section, hence on its premises and on the deduction from which it derives.

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[25] This is consistent with the description of Timaeus' account up to the generation of the human soul as a sort of *a priori* reasoning (Sedley (2019) 64–65). A similar background can be detected in Timaeus' account of time (37d–38b), where he clearly affirms that the use of the present tense for the intelligible is to be stated κατὰ τὸν ἀληθῆ λόγον (37e7–38a1), and no doubt is expressed as to the opportuneness (38a2: πρέπει) of using future and past tenses for the sensible realm.

[26] Broadie (2011) 52–54 suggests that Timaeus' epistemological distinctions are not negotiable. In order to make this claim, however, I believe one must accept the more general framework I am proposing, for otherwise one would be faced with an intrinsic puzzle related to the overall nature of the reasonable account.

IV. What about the rest?

One would expect at this point a discussion of Timaeus' account of sensible particulars. There is however a further intermediate step, for structural aspects regulating the dynamics of the sensible world, and especially those related to the elements, are also provided with a specific epistemological status. Let us turn to the passage on the generation of the elements, where Timaeus cautiously seems to introduce the possibility of someone refuting his geometrical account (Pl. *Ti.* 53e–54b):

> We must do our best, then, to construct the four types of body that are most perfect and declare that we have adequately grasped the nature (φύσιν) of these things sufficiently for our purposes (φάναι τὴν τούτων ἡμᾶς φύσιν ἱκανῶς εἰληφέναι). Now, of the two triangles, the isosceles is of one type only; the scalene, of an endless number. Of this unlimited multitude we must choose the best, if we are to make a beginning on our own principles. Accordingly, if anyone can tell us of a better kind that he has chosen for the construction of these bodies, his will be the victory, not of an enemy, but of a friend. For ourselves, however, we state (τιθέμεθα) as the best of these many triangles one kind, passing over all the rest; that, namely, a pair of which compose the equilateral triangle. The reason is too long a story; but if anyone should put the matter to the test and discover that it is not, the prize is his with all good will.

Scholars have read this passage as implying a very cautious approach to the issue.[27] The first point to be emphasized is that Timaeus very strictly limits the range of claims which could theoretically be submitted to 'beneficent refutation'. It does not include the principle that the most beautiful object is worth choosing, and the reason why this is indisputable is that we know that the Demiurge *is* good, and hence would reason for the best. This is probably also the reason why it does not concern the idea that the elements should be reduced to perfect geometrical solids: if the world has to be beautiful and orderly, the Demiurge has to introduce specific numbers and shapes into it (53b). Again, no doubt is expressed about the fact that the regular solids should be selected in order to accomplish this ordering. All these points are in fact identical with, or closely related to, the philosophical principles of the account, which not by chance are said to be closely followed in the argument (54a3).

  Hence, the only claim which Timaeus apparently leaves open to refutation is the following: of all possible scalene triangles, the most beautiful is the right-angled. In doing this, however, Timaeus makes it clear that he *could* provide a rational justification for his choice, but that this would lead him astray, for it is 'too long a story'. Now, the reason why the rectangular scalene triangle is the most beautiful is disputed: it could depend on the possibility of construing bigger equilateral triangles (traditional position), or on the symmetrical way in which the combination of six of these triangles can form an equilateral triangle, or again on the proportions of the sides of this kind of triangle.[28] Be that as it may, Timaeus' argument would not be based on any *physical* observation, but rather on purely mathematical conceptions, which would in turn represent the basis for the application of the physical properties of the elements.[29] This difference is key, for of course any

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[27] This clearly emerges in Cornford's translation, which, for example, apparently takes ἡμᾶς as an accusative of limitation; however, the pronoun is just the subject of εἰληφέναι in the infinitive, and consequently there is no reason to take ἱκανῶς in a relative sense.

[28] On this controversy see Cornford (1937) 231–39 (for the traditional position); more recently Artmann and Schäfer (1993); Bodnár (2008), to be consulted also for an up-to-date *status quaestionis*; Rashed (2013) 109–10.

[29] Indeed, physical properties such as weight, density, etc., play a crucial role in Plato's account, but their description and articulation have the idea of the specific geometrical constitution of the elements as their background: see above all O'Brien (1984) especially 88–98; Karfík (2004) 160–74.

demonstration based just on physical observation could reach a consistent account of which triangle is most beautiful, but would base this account on the dynamics which properly belong *just* to the material and sensible world. In contrast, Timaeus' line of reasoning is based on a criterion of beauty which is prior to any possible physical application of the objects at issue, and hence can be saved from the flux characterizing the sensible realm. So, the reason Timaeus is so confident is that he could spell out a mathematical argument 'on demand', which would then provide the basis for a description of the shape of specific sensible objects, namely, the elements: *this* introduces some kind of instability in the reasoning. Therefore, the fact that the rectangular scalene triangle is the most beautiful triangle in itself and/or for the production of equilateral triangles is not negotiable, just as it is not negotiable that the Demiurge would select it since he is good and is aware of its excellence; what can in principle be negotiable is therefore its beauty *with respect to its physical application* (as confirmed by the specific reference to 'the construction of *these* bodies' in the passage quoted above).

This does not prevent Timaeus from remaining somewhat cautious, for it is in principle possible that someone has a different account to propose, and that this latter account complies with physical exigences. Note, however, that this possibility is theoretical exactly because, as we have seen, Timaeus' 'disputable' choice is just the last step in a longer reasoning, which is not subject to possible refutation, starting from the Demiurge's status and concluding with the selection of the most beautiful of all scalene triangles. Not by chance, Timaeus has described (53d4–6) the stereometric structure of the elements (that is, that they are specific geometrical solids, and accordingly have all implied geometrical features) by describing this as a hypothesis 'according to the reasonable account accompanied by necessity' (κατὰ τὸν μετ᾽ ἀνάγκης εἰκότα λόγον). As we have already seen, a reasonable account can also entail necessary demonstrations, and here we have a specific confirmation that this also applies to the physical realm *as far as its geometrical structure is concerned*.[30]

The overall lesson is that, although aspects of Timaeus' account become more negotiable the closer we get to the consideration of sensible particulars, this lowering of the epistemological status of the reasonable account is progressive and occurs over multiple steps. Timaeus acknowledges this, insofar as *in principle* he leaves wider room for alternative accounts, but in fact he continues to safeguard the epistemological strength of all parts of his account which concern, or are directly related to, objects having a robust epistemological and ontological status.

Such a transition, moreover, is entirely conscious and programmatic for Timaeus, who even establishes it as a necessary condition for him to devote himself consistently and legitimately to the discussion of the sensible realm (59c–d):[31]

> It would be no intricate task to enumerate the other substances of this kind, following the *idea* of reasonable discourses (τὴν τῶν εἰκότων μύθων μεταδιώκοντα ἰδέαν). When a man, for the sake of recreation, lays aside the accounts about eternal things and gains an innocent pleasure from the consideration of such plausible accounts concerning generation (ἣν ὅταν τις ἀναπαύσεως ἕνεκα τοὺς περὶ τῶν ὄντων ἀεὶ καταθέμενος λόγους, τοὺς γενέσεως πέρι διαθεώμενος εἰκότας ἀμεταμέλητον

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[30] This use of ἀνάγκη might be regarded as ambiguous, for one might understand it as referring to a characteristic of the receptacle; see n.15 above, on 40e1–2. Since this is just a side point, it should not negatively affect my overall argument. However, this reference to necessity is strongly related to a logical aspect, namely the nature of a *logos* (especially considering the attributive position of μετ᾽ ἀνάγκης), and this makes it at least probable that Timaeus is spelling out a feature of his account at this particular point.

[31] On this passage see also Bodnár (2008) 30–32, and above all Donini (1988) 28–30, to whom I am much indebted here.

ἡδονὴν κτᾶται), he will add to his life a sober and sensible pastime. So now we will give it rein and go on to set forth the reasonable things (τὰ ἐξῆς εἰκότα) that come next in this subject as follows.

Timaeus has described the geometrical structure of each element, has introduced the principle of break-up and composition, and has already indicated some of the varieties occurring within each kind of element, up to some kind of fusible water. Before proceeding in this discussion, however, he stops and, quite *ex abrupto*, apparently excuses himself for lingering on these issues (*cf.* 59c5: τἄλλα δὲ τῶν τοιούτων), which are parts of τὴν τῶν εἰκότων μύθων ἰδέαν, that is *the form, or species, of reasonable tales* (59c6–7). Now, this passage can hardly be consistently read both from a traditional perspective, according to which a reasonable account is such inasmuch as it deals with generated and sensible objects, and from Burnyeat's, according to which a reasonable account reproduces the Demiurge's practical reasoning. As far as I can see, neither is able to robustly explain why Timaeus should excuse himself for carrying on his reasonable account *of sensible particulars*, for after all neither can justify the possibility for Timaeus to distinguish different epistemological statuses within his account (as implied by the opposition between 'eternal things' and 'generation'), or *not* to deal with sensible particulars (a possibility implied by the description of this discussion as 'innocent pleasure' and not as the core of the account).[32] My approach can, on the contrary, make quite good sense of Timaeus' remark. As a matter of fact, we are now relatively far from the first apparent hesitation Timaeus showed, concerning the theoretical objection against the identification of the most beautiful triangle: the geometrical solids, associated with the elements, have now been put in motion according to physical patterns and dynamic factors, which then determine their interactions, continuous degradation and production. Whatever one's view about the status of sensible particulars and, more specifically, that of the elementary triangles as physical objects, it is beyond doubt that it is one thing to evaluate the beauty of the geometrical figures which are meant to construe the elements, and quite another to observe the cyclical perishing and generation of sensible particulars. Therefore, we have now properly entered the discourse about 'what has generation' (τὸ γιγνόμενον), with all the weight of its ontological and epistemological limitations, as clearly stated both in the proem (27d–28a) and in the second part of the account (51d–52a). This also implies that each claim in this section is affected by a degree of approximation, for instance as regards the exact size and mixture producing each species within an element, aspects which rather depend on physical dynamics and hence are left unexplored. Consistent with this, we find here a clear indication that Timaeus regards this development of his speech as a distinct part of the overall account, for he presents it as a form (or species) of reasonable tale, namely one dealing with generation (γενέσεως πέρι). Not by chance, Timaeus must be confident that his version is correct, but there is no trace of any strong commitment as to its truth. This is hardly surprising, for no account of such objects can ever warrant such a commitment.

Therefore, should one conclude that at this level all accounts have the same epistemological status? This would not only be absurd, but would also contradict Timaeus' initial claim, that his reasonable account will not be of lesser value than anyone else's (29c–d). This is the reason why in the quoted text Timaeus indicates a criterion which can effectively distinguish those reasonable accounts which are valuable from those which are not: it all depends on whether (and how) they are proposed as the development of discourses concerning intelligible beings. This criterion is not just theoretical (for Timaeus explicitly indicates that it is applicable to the reasonable discourse he is unfolding), and

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[32] Valuable recent literature has emphasized the ontological reasons why the receptacle and sensible particulars are intrinsically distinct from a metaphysical point of view: see for example Beere (2016).

rightly so: for if one takes a quick look at the overall development of Timaeus' account, it is easily noted that he has good reasons to claim that his plan complies with the criterion mentioned. Indeed, in the proem of the account and in crucial sections of its first and second parts, Timaeus focuses on intelligible objects (namely, forms and the Demiurge) and because of this he can claim authority and value for the reasonable account of generation he is now providing. In this framework, it is noteworthy that Timaeus does not really distinguish these premises from their development in relation to sensible particulars; on the contrary, he suggests that this part of the reasonable discourse, concerning the dynamics of the elements, is a distinct *species* of reasonable account, namely that concerning generation (Timaeus can thus consistently maintain that this will be explained in due course).

This offers confirmation of the fact that the negotiability of Timaeus' account is progressive and variable throughout the speech (since premises must precede epistemologically weaker parts: this also makes good sense of the sequence 'works of reason–works of necessity–works of reason and necessity' commonly identified from Cornford onwards, and of the fact that the receptacle is introduced only at a relatively later stage); and this, in turn, depends on the argumentative relation of each part with the discussions on the intelligible realm included in the reasonable account. Interestingly, the principle in question is also explicitly highlighted by Timaeus when he introduces the section of his speech devoted to human psycho-physiology. This section has a peculiar place within the tale, for it has a preliminary beginning even before the receptacle is introduced,[33] at 44c–d:

> And now if correct nurture lends help towards education, [a man] becomes entirely whole and unblemished, having escaped the worst of maladies; whereas if he be neglectful, he journeys through a life halt and maimed and comes back to Hades uninitiated and without understanding. These things, however, come to pass at a later stage. Our present subject must be treated in more detail; and its preliminaries, concerning the generation of bodies, part by part, and concerning soul, and the reasons and forethought of the gods in producing them. Of all this we must go on to tell, on the principle of holding fast to the most reasonable account (τοῦ μάλιστα εἰκότος ἀντεχομένοις).

Burnyeat has suggested that Timaeus' references to reasonability are weaker when they concern the lower gods' actions. However, I agree with Betegh that the actions of the lower gods still mirror (but do not coincide with) the Demiurge's providential plan, and hence that this shift does not really affect the epistemological status of Timaeus' discourse from Burnyeat's own perspective.[34] This is not the whole story, however, for the Demiurge himself has just explicitly indicated that there is a clear axiological difference between the generated gods, who are in principle perishable but *de facto* will never perish, and the other living beings (or the other parts of living beings), which are perishable both in principle and *de facto* (41a–b). In other words, here we enter a section dealing with objects, which have an ontological and epistemological status characterized by a *specific* instability. If all this is sound, Timaeus' claim that he will cling here to *the most reasonable account* must be understood in a relative sense: it will be the best *possible* reasonable account with respect to the status of the specific objects under consideration here. Therefore, a difference must be at stake, as further specified at the reopening of the discussion on human beings at 69a–b:

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[33] From the point of view of literary composition, Broadie (2011) 181–82 is right to note that the 'works of necessity' is a sort of very extensive parenthesis within the discussion of the generation of human beings.

[34] Betegh (2010) 215–18.

> Now that the materials for our building lie sorted and ready to hand, namely the kinds of cause we have distinguished, which have to be combined (δεῖ συνυφανθῆναι) in the fabric of our remaining discourse, let us briefly return to our starting point and rapidly trace the steps that led us to the point from which we have now reached the same position once more; and then attempt to crown our story with a completion fitting (ἁρμόττουσαν) all that has gone before.

The reason why it has been necessary for Timaeus to linger at length on the receptacle clearly emerges here: the discourse about human psycho-physiology can be effectively achieved only once the kinds of their causes are indicated, for a proper understanding of them is *necessary* in order to develop the rest of the discourse (*cf.* particularly δεῖ at 69a8). Not only this, but the reason why it is necessary is that the rest of the discourse will be produced out of the descriptions of these causes, descriptions which therefore count as argumentative premises. If this is correct, what Timaeus is saying here is that the development of the third part of the discourse must necessarily comply with a criterion in order to be acceptable, because it can properly crown the reasonable account *if* it will harmonize with what preceded it (*cf.* ἁρμόττουσαν … τοῖς πρόσθεν, 69b1–2).[35] Thus, just as in the case of 59c–d above, Timaeus here lays out an external criterion for the establishment of the validity and reliability of any statement concerning human psycho-physiology, that is its argumentative relation with respect to the sections of the discourse dealing with the causes of human beings. The reason why such a framework *can* have this crucial role is that, as we have seen, it contains a discussion of objects, each of which has an ontological and epistemological status which is higher than that of sensible particulars. The reason why such a framework *must* have this role is that our possibility to rationally account for sensible particulars as such is minimal.[36]

I hope that the discussion I have been developing is detailed enough to already allow for a comprehensive conclusion.[37] Timaeus' reasonable account encompasses different parts, each having different objects, from the intelligible realm and the receptacle to the elements and complex sensible particulars, and the ontological and epistemological discrepancies of these objects condition the reliability of each part of the account. The parts are not disconnected from one another, however, for those which are more stable play the role of non-negotiable premises for the others, whose (degree of) negotiability depends on their being 'harmonic' (in the sense outlined above) with non-negotiable premises and their place within the overall argumentative construction of the account.

If this conclusion is sound, at least two further steps are required. First, it is necessary to check whether the conclusion is consistent with Timaeus' proem (section V). Second, no notion of a reasonable account can hope to be really effective unless we show that Plato conceives of the account consistently with a specific structural model (section VI).

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[35] Of course ἁρμόττειν should be understood in the stronger sense of being strictly related to the premises and consistent with them, that is, not merely as not being contradictory (in the way propositions concerning different objects under different respects can be non-contradictory). Plato's use of 'harmonic' terminology to refer to similar relations is attested, for example, in a much-debated passage of the *Phaedo* (συμφωνεῖ at 100d5).

[36] A similar logic is implicit in the short methodological digression at 61c6–d4: the reason why Timaeus makes it clear that he is in any case maintaining a correct articulation of the issues to be discussed is that their very articulation is the guarantee that the discourse is reliable.

[37] However, should any readers be as pedantic as the author of this paper, they will be happy to know that in the online version of this paper I have included an Appendix in which I propose a brief analysis of further passages.

V. Back to the proem

If the above conclusion is sound, at least one further step is required, namely to check whether it is consistent with Timaeus' proem. While *Timaeus* 29b3–d3 has traditionally been considered a manifesto for the weakness and negotiability of the reasonable account, in this section I shall show that the passage can in fact be read consistently with what has been emerging from my analysis:

> Now in every matter it is of great moment to start at the right point in accordance with the nature of the subject. Concerning a likeness and its model, then, we must make this distinction: an account is of the same order as the things which it sets forth, an account of that which is abiding and stable and discoverable by the aid of reason will itself be abiding and unchangeable (so far as it is possible and lies in the nature of an account to be incontrovertible and irrefutable,[38] there must be no falling short of that); while an account of what is made in the image of that other, but is only a likeness (εἰκών), will itself be but reasonable (εἰκώς), standing to accounts of the former kind in proportion: as reality is to becoming, so is truth to belief. If then, Socrates, in many respects concerning many things (the gods and the generation of the universe) we prove unable to render an account in all respects entirely consistent with itself and exact, you must not be surprised. If we can furnish accounts no less reasonable than any other, we must be content, remembering that I who speak and you my judges are only human, and consequently it is fitting that in these matters we should accept the reasonable discourse and look for nothing further.

In general terms, scholars agree on the following positions.[39] Timaeus *in principle* distinguishes two realms, the intelligible realm and its image, and two kinds of discourse, one stable and irrefutable, while the other, concerning the image, is *eikōs*.[40] Following Burnyeat's reading, this framework can be interpreted in a specific way: just as the sensible realm is generated in such a way as to aim to reproduce the model, an *eikōs logos* aims to provide an account of the sensible realm by taking the Demiurge's reasoning as a standard to live up to. This holds both in a positive sense (i.e. the *eikōs logos* aspires to this standard) and in a limitative one, for the *eikōs logos* is in any case bound to the sensible realm and cannot exceed this limit; thus, as such, it cannot be stable and irrefutable.

I would claim, however, that what this passage indicates is only a general framework for the epistemological status of Timaeus' discourse. While the sharp distinction between irrefutable and reasonable accounts applies to the previous distinction between the model and its image, nothing excludes that an overlap between these kinds of account can be given in a specific, well-structured reasonable account: indeed, one can say that a discourse that *as a whole* concerns the sensible realm can still touch upon the intelligible realm *from the point of view of its function with respect to the sensible realm* (that is, provided that the discussion is *not* only about what is intelligible as such). This would be consistent with Timaeus' general claim, provided that its grounding principle is respected, namely that there is a close connection between the ontological nature of the objects of discourses and the epistemological value of such discourses. The main reason why Timaeus does not present the specific nature of his reasonable account here, but only a general framework, is that at this point in the narrative it would be impossible for him to clearly state all possible articulations of a reasonable account, for all we know of the world is that it is a generated

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[38] On the textual puzzle of this phrase see Mourelatos (2010) 233–35; the issue is not relevant for my purposes.

[39] See section I for relevant references.

[40] Betegh (2010) 215–18 has also emphasized that a further distinction within the latter kind can be detected, and his rethinking of Burnyeat's views introduces an argument for a multilevel conception of the reasonable account (though through an argument which is quite different from the one I am proposing).

image of forms. However, this does not imply that, after due discussion, the account *cannot* include sections considering it from different points of view.

All this strongly encourages us to understand the distinction in quite a flexible way: the proem allows a reasonable account of the generation of the world to deal *also* with the receptacle or the intelligible realm, provided that it does so with a focus on their function with respect to the generation of the world.[41] This is exactly the representation which my analysis has brought to light. Timaeus' reasonable account indeed also refers to objects which are not images of anything, or which cannot be included in the Demiurge's reasoning, but does so by considering them causes of the world. Moreover, as we have seen, the differentiation of the objects of each part of the account does not violate Timaeus' principle of onto-epistemic correspondence: on the contrary, the parts which concern more stable objects are not negotiable and play the role of premises, while those concerning lower entities draw their epistemic strength from their consistency with these premises.

This reading can also effectively make sense of Timaeus' apparent caution as to the value of his account: although it is not the only possible reasonable account, it is no less reasonable than any other. This has been understood in the sense of a conscious limitation of the reliability of reasonable accounts concerning the sensible realm.[42] However, not only would such a reading of the passage imply that everything included in Timaeus' account is, from his (and Plato's) point of view, *entirely* negotiable, but it would also (and even more dangerously) suggest that one would lack any criterion to decide why one reasonable account is stronger than another.[43] My reading can rather explain the limitation as follows: the account as a whole is the best possible because its parts are either non-negotiable or consistently derive from non-negotiable premises. However, it is possible *in principle* for other accounts to be acceptable, albeit different, since it is possible to conceive of the set of different negotiable parts as being equally consistent with the non-negotiable premises. Of course, Timaeus can legitimately admit the *possibility* that some of the account's parts do not match the truth inasmuch as they are to some extent poorly or only partially consistent with the premises (see especially Pl. *Ti.* 29c5–7), but this would not really affect the *overall* reliability of the account, for all accounts of the generation of the world would run this risk. What Timaeus must preserve in order to ensure that his account is the best possible reasonable account is the appeal to non-negotiable premises and to an overall correct argumentative structure.

VI. A living account

A further step is still needed, however, for the effectiveness of the picture just outlined depends on its being based on an effective theoretical foundation. One of the key features of my account is the notion that the *eikōs logos* is actually made up of a multiplicity of parts, and hence of *logoi*. In very general terms, this is not a new idea. By stressing the use of the plural *logoi* at 29c6 (see also 48d2) and *muthoi* at 59c6, Burnyeat argued convincingly that Timaeus is not referring to distinct propositions, but to different sections of his discourse.[44] Broadie suggested that these are different blocks in Timaeus' narrative.[45] However, I do not think that all this is enough to conclude that Plato consistently

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[41] This is true *a fortiori* if, as scholars have suggested (see, most recently, Bryan (2012) 116–21), the proem's distinction is rather normative.

[42] See for example Mourelatos (2010) 244–45.

[43] But this cannot be the case, of course, as scholars have repeatedly emphasized: a valuable recent discussion can be found in Sattler (2020) 236–40.

[44] Burnyeat (2005) 152–54.

[45] Broadie (2011) 48–50.

conceives of his account in the way I have suggested, for it is necessary to check whether he also produced a conscious and effective description of the sense in which an account can be simultaneously unitary, complex and made up of parts that each have a different status and different functions. The structural model allowing a whole and its parts to be described best in these terms is that of a unitary whole, *hen-holon*, made up of non-homeomerous parts. In what follows, I shall argue that this is exactly the way in which Plato would describe the edifice of a well-structured discourse.[46]

In very general terms, this structural description matches that of *holon* as spelled out in the *Parmenides*, namely as 'that from which no part is missing' (Pl. *Prm.* 137c4–9). However, three other dialogues provide a more detailed account. The first relevant passage is the Eleatic Stranger's second criticism of the Monists in the *Sophist*. After dismissing the possibility of conceiving being as a strict unity, he proposes another monistic description of being, namely being as a *holon* (Pl. *Soph.* 244e). In this case, too, the object is in principle composed of all the parts which are meant to compose it, but in order for it to work as a unitary entity we must also consider 'one' as its irreducible affection (ἀλλὰ μὴν τό γε μεμερισμένον πάθος μὲν τοῦ ἑνὸς ἔχειν ἐπὶ τοῖς μέρεσι πᾶσιν οὐδὲν ἀποκωλύει, καὶ ταύτῃ δὴ πᾶν τε ὂν καὶ ὅλον ἓν εἶναι, Pl. *Soph.* 245a1–3). Leaving the *ad hominem* nature of the Stranger's criticism aside, the passage implies quite a clear conception of a structure which is a whole made up of parts, and in a way which ensures its unity.

Quite strict parallels for this perspective can be found in two other dialogues, in both cases with respect to the notion of virtue.[47] In the *Laws* (12.965d–e) the Athenian lists three possible ways in which virtue itself could be structured by nature with respect to specific virtues, that is as absolute unity, as a whole, or both.[48] In this case the Athenian does not pursue the enquiry into these structures, but it has been noted that the passage is strongly reminiscent of the question which Socrates wishes Protagoras to answer at *Protagoras* 329d. There Socrates first asks whether virtue is absolutely unitary or has parts, and then, if the latter is the case, whether these parts are similar to those of gold, or to the parts of a face.[49] It is likely that the option of the parts of a face is to be associated with the *hen-holon* structure of the *Laws*: not only does in principle a face have all the parts which it is meant to have, but it is also functionally and structurally unitary, although its parts are qualitatively and functionally different from one another. One can also detect some kind of asymmetry: certain parts of the face are indeed more important than others, as in the case of the eyes, which are traditionally granted primacy.[50] All this eventually leads to the conclusion that in such a model parts are structure-laden:[51] a mouth is a mouth only inasmuch as it is part (either *de facto* or in principle)[52] of a face. A consequence of all this is that while in principle a unitary whole lacks none of the parts it is meant to have, some

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[46] I accept the conclusions reached by Harte (2002) in her seminal study on Plato's conception of parts and whole, though I shall mainly adduce different passages, and will probably refer to a more specific version of this structure as an organic unity.

[47] The unity of Plato's virtue is a famous theoretical puzzle, especially after Vlastos' celebrated, and criticized, introduction of the notion of Pauline predication. My analysis will not imply any commitment to a particular reading of the issue.

[48] See especially Pl. *Leg.* 965d3–7 τοῦτο, ὦ φίλοι, εἰ μὲν βουλόμεθα, τὰ νῦν οἷόνπερ σφόδρα πιέσαντες μὴ ἀνῶμεν, πρὶν ἂν ἱκανῶς εἴπωμεν τί ποτ' ἔστιν εἰς ὃ βλεπτέον, εἴτε ὡς ἓν εἴτε ὡς ὅλον εἴτε ἀμφότερα εἴτε ὅπως ποτὲ πέφυκεν.

[49] See especially Centrone (2004).

[50] As correctly noted by Centrone (2004); moreover, this would make quite good sense with respect to the image of virtue, for in Plato's intellectualistic perspective φρόνησις does indeed have a special status with respect to all other virtues (see for example *Phd.* 69a6–c3).

[51] This is a fundamental aspect of Plato's conception of the parts of a whole according to Harte (2002) especially 273–81.

[52] As we shall very soon see, it is possible to conceive of a whole as mutilated, but the point is that the parts of a whole have some kind of identity only inasmuch as the whole of which they are parts exists *in principle*.

minor parts can be removed from it without altering its identity: in this case, it will remain what it is, yet in a mutilated form, as it were.[53]

In all these passages Plato explicitly spells out a structural model, that of the *hen-holon*, in which:

1. the whole is a composition of non-homeomerous parts;
2. the whole is something different from the mere sum of its parts;
3. each part has a specific position and/or plays a specific function with respect to the other parts;
4. the whole as such has priority over its parts, and some parts have priority over others (as the aforementioned case of a mutilated whole clearly shows);
5. while in principle the whole lacks none of its parts, some minor parts can be removed from it without altering the identity of the whole.

Of course, such a structure finds a most suitable example in living beings, but Plato does not restrict the structure in question to these objects. Indeed, if one turns to the *Phaedrus*, the same model is ascribed to a correctly shaped *logos* (264b–c):

> But surely you will admit at least this much: every speech must be put together like a living being (ὥσπερ ζῷον), with a body of its own; it must be neither without head nor without legs; and it must have a middle and extremities that are fitting both to one another and to the whole (πρέποντα ἀλλήλοις καὶ τῷ ὅλῳ).

The analogy refers of course to structures, and Plato is explicit here in emphasizing that the unavoidable features of this shared structure are the following: the whole is *in principle* provided with *all* the parts it contains by nature; all parts are arranged in their natural way with respect both to each other and to the whole, that is, the discourse-living being. The latter requirement is especially to be understood in a strong sense, because each part is meant to play a specific role. Just as a living being must be provided with, say, a head and feet, each located in its proper place, because each has to play a specific role, so in a discourse each part must occupy a certain position with respect to other parts and to the whole, in order for each part and the whole to work as they should.[54] If this is correct, the overall conclusion follows that a well-shaped discourse and a living being are compositions of non-homeomerous and structure-laden parts, that is, parts having a specific functional position with respect to one another and to the whole, and that they are, as wholes, something more than the mere sum of these parts. Also, if the analogy is to be trusted, it is possible to conceive of both a living being and a discourse that are mutilated yet still possess their distinctive identities, though only if what they lack are non-vital (i.e. non-primary) parts.

Let us now turn back to the *Timaeus*, and especially to what has been a rather widespread commonplace since antiquity: while giving form to the reasonable account, Timaeus (or, better, Plato) implicitly represents himself as a crafter of discourses; accordingly, the relationship between Timaeus and the reasonable account is the same as that between the Demiurge and the world.[55] This view has usually been taken as a sort of

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[53] This is perfectly consistent with Aristotle's definitions of ὅλον and κολοβόν in *Metaphysics* Δ 26.1023b26–27.1024b28.

[54] Interestingly, according to Plato this view also applies to the simplest possible λόγοι, that is, minimal propositions: see Harte (2002) 167–77, on Pl. *Soph.* 261d1–262e1.

[55] *Cf.* for example Procl. *In Ti.* 1.9.15–24. This theoretical nucleus was exploited especially by the Neoplatonists (see Motta (2018)), but has been revived by contemporary scholarship: see especially Osborne (1996). This point might be further expanded, for example by considering the fact that Timaeus' account is in any case an *image* of

literary nuance related to Plato's self-representation as a writer, but in this case, as far as I understand it, it would sound more like a self-celebratory claim. Plato would be presenting himself as a rational, benevolent myth-maker or, at most, as a philosophical writer establishing a new way of conceiving the literary genre.[56]

But what about the philosophical pay-off of this representation? That the sensible world is a unitary living being, shaped as an image of the intelligible living being, is explicitly stated by Plato and is important in itself (*Tim.* 30b–31b).[57] The crucial elements supporting this description are the sensible realm's unity and its completeness: the sensible world must be one and complete precisely because it is shaped as an image of the intelligible living being.[58] Not by chance, the Demiurge excludes the possibility of limiting the production to divine living beings: unless the world encompasses all the parts it is meant to, and is thus complete in principle, it cannot exist at all (*Tim.* 39e6–9).[59] At the same time, this implies that there is an explicit asymmetry between the various parts constituting the world, which are therefore not homeomerous and play different roles within the whole. Obvious as it may be, it is useful to recall that the world encompasses an extremely varied range of 'objects', from the world soul to the elements, from sensible particulars made out of the elements to the parts of each sensible particular, on the model of the human being.[60] In addition, each 'part' of this cosmic whole plays a specific role within it, and this applies at all degrees of the spectrum, from the eminent regulative role played by the world soul and the heavenly bodies to the specific roles providentially ascribed by the lower gods to the different parts of human body. It is impossible to conceive of any of these parts anywhere but in their place and role within the world: they are teleologically shaped, insofar as they exist in view of the correct functioning of the world as a whole; hence, they are entirely structure-laden. At the same time, however, one can consistently *think of* the world as still existing as mutilated in very marginal parts. After all, while the world could not exist without its soul and body or without the species of mortal living beings in general, it would be absurd to imagine Plato committed to the idea that the world could not exist if a catastrophe *de facto* caused the disappearance of all rabbits or oysters (regrettable as this might be), and this applies *a fortiori* to some parts of the body, such as hair. Hence, the world is a living being in the specific sense that it has *the structure* of a living being: it is a *hen-holon*, as specified by the relevant parameters listed above. And, as we have seen, this is also the structure of a well-shaped account.[61]

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the realities it deals with, just as the sensible world is an image of its causes; in this sense, both belong to the same kind. (I am here providing a superficial summary of what George Boys-Stones has pointed out to me.) I think this is entirely plausible and would at any rate preserve my main point, for one might still detect some kind of epistemological discontinuity within Timaeus' account as an image of the objects it deals with in each individual case.

   [56] I am not excluding the possibility that this consciousness and aim might be part of the story (especially in the sense suggested by Broadie (2011) 51–52). However, it seems to me that, if we are to take such a complex (and, I would add, bizarre) conception of the structure of a discourse seriously, we must assume that it is based on major requirements and leads to a major pay-off. Though this is not necessary for my argument, it should be noted that later Neoplatonists were also able to ascribe to Plato a new conception of the literary genre precisely because he had been the first to provide a consistent joint account of the generation of the world and of discourses (cf. *Anonymous Prolegomena to Plato* 5.55–59).

   [57] On the representation of the intelligible world as a living being, see Parry (1991).

   [58] I am very hesitant to agree with Sedley (2007) 108 n.36 that Plato is referring here to the specific form of 'animal'.

   [59] It is noteworthy that exactly at this stage, and exactly in order to make this point, Timaeus returns to the description of the intelligible realm as a living being (see especially νοῦς ἐνούσας ἰδέας τῷ ὃ ἔστιν ζῷον, 39e7–8).

   [60] This point would be strengthened if, as Boys-Stones (2021) convincingly argues, Plato's account of creation were actually characterized by that distribution of creative activity across different levels.

   [61] This might also be directly suggested by Timaeus at Pl. *Ti.* 69a6–b2; see also Pl. *Grg.* 505c10–d3.

VII. Timaeus' account reconsidered

At this point we can return to the conclusions reached so far on Timaeus' reasonable account, for the *hen-holon* structure of the world is exactly the same as that which emerged in sections II-V. As we have seen, Timaeus' reasonable account is a unitary whole and not a mere sum of homeomerous parts.[62] Each part of the account differs from the others with respect to a series of parameters. The first is negotiability, which varies throughout a complex spectrum ranging from zero (for instance, as to claims concerning the intelligible realm) to high (for Timaeus' commitment to specific claims about the human body as such rather depends on how consistent they are with their premises). The second parameter is the quality of being structure-laden. Sections on human psycho-physiology rely on those elucidating the causes of human beings, but also on the discussion of their interaction at the level of the construction of the elementary bodies. The latter, in turn, can be consistently and effectively conceived of insofar as it rests on some certain theoretical premises and on the specific interactions between the Demiurge, forms and the receptacle. The third, consequent parameter is function. The fact of being more or less negotiable and of being intrinsically related to all other parts entails that each part plays a distinct role within the overall account. Not only do non-negotiable parts play the role of stable general premises, so do intermediate sections with respect to less stable ones.

Of course, the stability of the various parts depends on the ontological status of their respective objects, ranging from the intelligibles to parts of sensible particulars, *but* it is the relation of these parts within the overall argumentative structure of the account (that is, the overall grasp of reality implied by the account) which ensures that more stable parts can act as necessary premises and that less stable parts can be reliable. Hence, the epistemological status of Timaeus' discourse *as a whole* mainly depends on its complex structure as an argument, which also means that even parts of the discourse which are less stable, and hence highly negotiable because of the nature of their objects, can acquire stability and philosophical effectiveness in virtue of their argumentative position with respect to the premises. And this also leads to the more general pay-off of my argument: shaping the reasonable account in this way ensures the philosophical reliability and stability of Plato's cosmology on argumentative grounds, without renouncing the possibility of effectively accounting for the sensible world because of its intrinsic instability, and rather providing an effective structural model for an epistemologically robust account of the world.

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[62] At the same time, attempting to trace these parts, that is, epistemological degrees, back to more sclerotic structures (for example, that provided by the 'Divided Line') would be misleading. Rather, it is intriguing that Timaeus works across standard boundaries, establishing how a discourse dealing with the sensible world can also include a discussion of intelligible causes, that there is also a specific discourse about the receptacle and that one can produce discourses on sensible objects with different degrees of negotiability.

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