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978-0-521-84595-3 - Proclus: Commentary on Plato's *Timaeus*, Volume III

Dirk Baltzly

Excerpt

[More information](#)*Introduction to Book 3*THE STRUCTURE OF BOOK 3 OF  
PROCLUS' COMMENTARY

The portion of Proclus' commentary translated in this volume takes in *Timaeus* 31b–34b in which Plato describes the body of the universe. However, Book 3 of Proclus' commentary – equivalent to volume II of the Teubner text of the *in Timaeum* – spans *Timaeus* 31a to 37c and thus includes *Timaeus*' discourse on the construction the World Soul and its union with the body of the universe. Because of the wealth of detail involved in Book 3 as a whole, the translators have taken the decision to dedicate a volume each to the body and soul of the universe (volumes III and IV respectively). The final volume of our series (volume V) will condense into one the translation of Books 4 and 5 of Proclus' commentary – equivalent to the third volume in the Teubner series of Proclus' text.

The question of the *skopos*<sup>1</sup> or target of the *Timaeus* in general is taken up in the introduction to volume I. Notionally, the *skopos* of the dialogue is supposed to be *physiologia* or the study of the realm of nature (I. 1.17–20). 'Nature' here should be given its Aristotelian sense: what is at issue is the realm of things that change. This will include the body of the world as well as its soul, the individual heavenly gods such as stars and planets, as well as the kinds and individuals that inhabit the sublunary realm. However, we must remember Proclus' views on (what he takes to be) the characteristically Platonic manner of explaining things in the realm of nature by reference to productive, paradigmatic and final causes (I. 2.1–9).<sup>2</sup> By his lights, Plato's exploration of the subject matter of *physiologia* traces the explanation of these things back up to the Demiurge, the paradigm of the All-Perfect Living Being, and the Good. Moreover, the universe that is described as if it came to be in the *Timaeus* is itself a 'visible god' (34ab). Thus from Proclus' point of view, the *Timaeus* is actually a profoundly *theological* work.

<sup>1</sup> On the concept of *skopos*, see Mansfeld (1994) and, earlier, Praechter (1990), 45–7.

<sup>2</sup> On Plato's distinctive method in *physiologia* and explanation by true causes, see Lernould (2001), 105. Lernould's book, however, mostly concentrates on the structure of Proclus' commentary in Books 1 and 2 (= Diehl vol. I).

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In Book 3, this concern with the productive and paradigmatic causes of the visible cosmos is pursued through the theme of the ten gifts of the Demiurge. Proclus considers in this section of the text what the Demiurge is said to do and divides this activity into ten gifts that 'the god who exists eternally' provides to 'the god who will at some time be' (*Tim.* 34ab). These gifts are catalogued at *in Tim.* II. 5.17–31.

1. The cosmos is perceptible by virtue of being composed of fire and earth. The nature of these elements requires that there should also be the intermediates, air and water (*Tim.* 31b).
2. The elements within it are bound together through proportion (*analogia: Tim.* 31c).
3. It is a whole constituted of wholes (*Tim.* 32c).
4. Its spherical shape makes it most similar to itself and similar to the paradigm upon which it is modelled (*Tim.* 33b).
5. It is self-sufficient, lacking organs for nutrition or sensation of anything external to it. This gift of the Demiurge has moral and theological import, since self-sufficiency is a property of what is good and characteristic of divine beings (*Tim.* 33cd).
6. The motion of the world's spherical shape upon its axis makes it similar to the motion of Intellect (*Tim.* 34a; cf. *Laws* 10, 898a).
7. The world's body is animated by a divine world soul (*Tim.* 34b).
8. It has a revolution in time and is thus 'a moving image of eternity' (*Tim.* 36e–37a).
9. The cosmos has the heavenly bodies in it, which Plato describes as the 'instruments of time' and Proclus as 'sanctuaries of the gods' (*Tim.* 39d; *in Tim.* II. 5.28).
10. Finally, the Demiurge makes the visible world complete or perfect (*teleios*). By virtue of all the living things within it, it is an imitation of its paradigm, the fourfold All-Perfect Living Being (*Tim.* 39e–40a).

This theme of ten Demiurgic gifts is carried forward from Book 3 through Book 4 and serves as one of the means by which Proclus organizes his discussion of Plato's text. It allows him to develop further what he sees as the physico-theological character of the dialogue, since it organizes the text by reference to two gods: the one who bestows the gifts, and the "created" god upon whom the gifts are bestowed. The properties with which the universe is endowed are suitable qualities to make it divine since they promote the similarity between the visible model and its paradigm found in Intellect: the All-Perfect Living Being itself. This paradigm is, of course, itself an intelligible god in Proclus' scheme of things, being located in the third of the triads that constitute Being (*Plat. Theol.* III. 53.26).

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## The structure of Book 3

The ten gifts of the Demiurge provide one means by which the *skopos* of the dialogue as a whole – distinctively Platonic “divine” physiology – is more narrowly specified in Book 3. Another theme that Proclus pursues in Book 3 is that of the contrast between wholes and parts.

At the outset of Book 1, Proclus specifically identifies ways in which Plato investigates *physiologia*. At different points it may seek these matters in *images*, at others in *paradigms*. Sometimes it looks at things as *wholes*, while at other times it moves at the level of *parts* (I. 1.17–20). In his commentary in Books 1 and 2, the contrast between investigating nature in images and paradigms has been to the fore. The recapitulation of the *Republic* and the narrative of Atlantis have been investigations carried through in images (I. 4.7). Book 2 tends to be dominated by the investigation of physiology through paradigms, since this portion of the text is chiefly taken up with issues surrounding the nature of the Demiurge and the paradigm to which he looks in generating the sensible cosmos.

Immediately at the beginning of Book 3, Proclus revisits the theme of wholes and parts which has hitherto been less obvious. We can conceptualize the creation of the universe as a sequence of foundational acts (*hypostasis*). In the first hypostasis, only wholeness (*holotês*) is at issue. In this way of looking at the universe, we consider it as an imitation of the All-Perfect Living Thing. Given the nature of its paradigm, it must then be something living, possessed of intellect and divine. The second foundation ‘divides the cosmos by wholes and brings about the creation of whole parts’ (*holon meros*, II. 2.12–14). By these ‘whole parts’ he means the essence of the soul considered in itself, and the body of the world similarly considered. Finally, there is a third foundational act in which the cosmos is divided into parts and each of the portions is completed or filled out. Here too, there are ‘whole parts’:

The third foundation comes next which involves cutting the universe into parts and completing each of the portions. Plato provides an account of how fire, how air, how water and how earth itself have come to be when at last he looks at the ‘body-making’ activity (*sômatourgikê energeia*) of the Demiurge. But even in these matters, he does not descend to the level of particulars, but remains at the level of elements considered in their entirety. For the wholesale creation (*holê dêmiourgia*) of the wholes is one that involves whole parts, but [the creation of] individuals (*atoma*) and genuine particulars (*ontôs merika*) he gives to the young gods (42d6). (in *Tim.* II. 2.22–3.2)

Unlike the ten gifts of the Demiurge, these three foundations should not be thought of as exclusive divisions of the narrative structure of the dialogue. The first foundation can be seen in this way: it refers to the portion of Timaeus’ account that comes before 31b. But the second and third foundations coincide if considered as segments of the dialogue.

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At no point does Plato's text really consider the world's body or soul in itself, as opposed to considering the elements from which they are made up. Thus, Timaeus immediately argues from the fact that the Demiurge made the world's body visible and tangible that it must have fire and earth in its composition (*Tim.* 31b4). This, in turn, requires the presence of air and water as middle terms to create a continuous geometrical proportion that unifies this body. Similarly with the World Soul: the first thing that Timaeus tells us about are the 'elements' from which it is composed: a mixture of the divisible and indivisible kinds of Being, Sameness and Difference (*Tim.* 34b10). So unlike the organizing schema of the ten gifts to the cosmos, the three foundations are thematic – not narrative.

What of the central role played by the notion of 'whole' and 'part' in this thematization of the subject matter of the text that Proclus now proposes to discuss? In particular, what is a 'whole part'? Moreover, what is the relation between the 'division by wholes' (*kath' hola diairein*, II. 2.13) of the second foundation and the cutting into parts (*kata merê temnein*, II. 2.22) of the third?

Proclus' use of whole and part as a theme is doubtless grounded in Plato's text. After all, it is Plato who describes the Demiurge as creating 'a whole composed out of wholes' (*Tim.* 33a). Proclus quotes this text in a variety of places and not all of them appear to divide or thematize the dialogue in ways that are entirely consistent with the opening of Book 3.<sup>3</sup> The general tenor of these remarks is that what is a whole composed of wholes is ever so more unified and complete than a whole composed of parts.

Along with this textual grounding, there is the semantic association of 'whole' with the term for a universal – Aristotle's '*katholou*' being from '*kata holon*', of course.<sup>4</sup> And naturally the Neoplatonists suppose that universals exhibit more of the character of the One than do particulars. After all, universals manage to be *one and the same thing* across all their many instances.<sup>5</sup> So one way to think of 'a whole composed of wholes'

<sup>3</sup> In particular, see II. 281.23–30. Here too we are told that the creation of the universe is threefold. But it is far from clear that this architectonic matches the one before us. In the first creation, the universe is brought forth from the elements bound by proportion and this makes it a 'whole composed out of wholes' (*Tim.* 33a7). In the second, though, we find the arrangement of 'whole spheres' – its composition from the elements making it impossible that it should not be divided into spheres. These spheres will be the spatial counterparts of the circles in the soul. Finally, there is a third creation in which the universe is filled up with particular or partial living things (*merikôn zôôn*). These are the heavenly, aerial, terrestrial and aquatic kinds of *Timaeus* 39e–40a.

<sup>4</sup> Cf. *Phys.* I.1, 184a24, 'a universal is a kind of whole, comprehending many things within it, like parts'.

<sup>5</sup> See, for example, Plotinus IV.1.1 where the divisibility of the universal across its instances is unfavourably contrasted with the utter divisibility of bodies.

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would be the peculiar kind of “composition” of the genus by all its various species. Proclus, of course, does not think that the species *constitute* all the ways of being the genus and so exhaust the being of the genus. The Neoplatonists turn Aristotle's mysterious doctrine of the genus as matter on its head. The genus is the power of the species and it is prior to them. In spite of the limitations of the analogy between material composition and the relation between genus and species, Proclus thinks that the universe has a kind of wholeness that is a reflection of the wholeness had by its paradigm: the intelligible Living Being Itself.<sup>6</sup> This is a whole which includes the wholes ‘being a heavenly living being’, ‘being a terrestrial living thing’ and so on.

This parallel between the universe and its intelligible paradigm helps us to understand why Proclus describes the universe as a whole in the manner of a whole – a whole *holikôs* (in *Tim.* II. 62.1–9). This status is contrasted with the ‘whole parts’ or being a part that exists *holikôs*. These ‘whole parts’ are characteristic of the second and third foundations we are presently considering. What are they?

The distinction is, I believe, a reflection in the sensible realm of a similar distinction drawn by Proclus in the intelligible realm. According to *ET* 180, the Unparticipated Intellect is a whole *simpliciter* because it has all its parts within itself *holikôs*. By contrast, each partial or particular intellect has the whole in the parts and is thus all things *merikôs*. I think we may infer that whatever is *all things* in the manner of a part is a part in the manner of a whole. So ‘all things in the manner of a part’ (*panta merikôs*) equals ‘a part in the manner of a whole’ (*merê holikôs*). What then is this? When Proclus contrasts the unparticipated with the participated intellects, he intends a greater degree of speciation, and thus plurality, in the latter than in the former. Each participated intellect is such that, though all Forms are in it implicitly, one Form in particular stands out from it explicitly (*ET* 170). All the Forms must be in it implicitly in light of the dictum that ‘all things are in all, but in each appropriately’. So if a particular intellect is a part in the manner of a whole – a *merê holikôs* – it contains in a partial or implicit way (*merikôs*) all the things that the whole of which it is a part contains in the manner of a whole. That this is so is confirmed by the disambiguation of the word ‘part’ that Proclus offers in his *Parmenides* commentary:

So that which has the same elements as the whole, and has everything in the manner of a part (*merikôs*) that the whole has in the manner of a whole (*holikôs*), we term a part. For instance, each of the many intellects is a part of the whole

<sup>6</sup> At another point at which Proclus invokes *Timaeus* 33a7, he notes that the four kinds of living being do not constitute or make up (*symplēroun*) the intelligible Living Being Itself. Rather, they are included within it (*periechomenos*), in *Tim.* II. 147.9–12.

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Intellect, even though all of the Forms are in each [but not *holikôs*]. The sphere of the fixed stars is a part of the universe, even though it is inclusive of all things contained within it, but in a different manner than the cosmos. (*in Parm.* 1112.26–33)

Using this as a guide to the sense of ‘whole parts’ in the second and third foundations referred to in the *Timaeus* commentary, we may say that the World Body and World Soul contain all that is contained in their paradigm in a manner that exhibits further speciation and plurality. The division of the universe into a psychic and corporeal element is a division in terms of wholes (*kath' hola*) because, while body and soul are ‘parts’, they are parts that *any* sensible living thing must have. This *kath' hola* division in the second foundation may then be contrasted with the division in terms of parts (*kata merê*) in the third foundation. Here we discuss the particular composition of the World Body and World Soul from the four elements and the divisible and indivisible kinds of Being, Sameness and Difference respectively. These parts are more specific and involve yet more plurality. But in spite of this fact, these parts are still supposed to exhibit something analogous to the way in which all the Forms are implicit within a particular intellect, though one stands out. In the case of the elements from which the World Body is composed, this idea of containing all things *merikôs* is to be explained by the fact that in order to be a single, visible body it must contain all four elements unified by proportion. Similarly, in order to be the very thing that it is, the World Soul must be a synthesis of Being, Sameness and Difference.

These two devices – the gifts of the Demiurge and the theme of whole and part – provide narrative and thematic frameworks, respectively, within which Proclus supposes Plato's text is organized. Let us now turn to some of the important points that he purports to find within this framework.

## ISSUES IN PROCLUS' COMMENTARY

Because of the commentary form and because of Proclus' attempt to engage both with Plato's text and with the philosophical problems that it generates at a variety of levels, it is often hard to discern the important contributions that Proclus makes. The general line of argument gets lost in the welter of particular detail. In what follows we consider Proclus' commentary on the body of the world from a higher vantage point in order to provide the context for some of his interpretations of Plato. We will explain in general terms how he reads Plato's text, and also how he meets criticisms of the views that he attributes to Plato.

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## Elements, proportions and the aether

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The first fifty pages of Proclus' commentary in this volume are dominated by considerations about the nature and number of the elements. Though Plato's text does not discuss the composition of the heavenly bodies until 40a, the question of the existence of the Aristotelian fifth element is raised by Proclus in his remarks on 31b5–9.<sup>7</sup> Proclus' response to Aristotle on the composition of the heavens and the fifth element is given piece by piece in the commentary. Its overall structure is thus hard to discern. The response has both a positive and a negative aspect.<sup>8</sup>

On one hand, Proclus criticizes Aristotle's argument from *On the heavens* I.2. This argument does not, in fact, preclude the possibility that the heavens are composed primarily of fire, if we deny certain Aristotelian assumptions about the natural motions of the elements. Specifically, Aristotle had argued that corresponding to each simple element there is a simple natural motion. Each element also has a natural place at which it is naturally at rest. The place of earth is at the centre of the universe and thus its natural motion is down or toward the centre. The natural motion of fire is upward toward its natural place. Air and water have a natural place intermediate between these. The four sublunary elements thus all have motions up or down. But if the motion of the heavens is natural and not forced, it must be because the heavenly bodies are composed of an element whose natural motion is circular. But this can't be fire, since fire's natural motion is up. Nor can it be any of the other sublunary elements. So the heavens must be composed of a fifth element, the aether.

Earlier critics had called into question Aristotle's doctrine of natural place, but this was an aspect of Aristotle's physics that the Neoplatonists sought to retain. Plotinus had also denied that fire was ever naturally at rest. Elements in their natural place either rest or move in a circle. However, Plotinus had no theory of the elements that might explain why this should be so.

Proclus gives us such a theory. This is the positive aspect of his response to Aristotle. According to this theory, each element is characterized by three defining properties – not two, as in Aristotle's theory. Among fire's defining properties is being easily moved. By contrast, earth

<sup>7</sup> The text of the lemma in question is: 'That which comes to be must be corporeal (*sômatoeidês*) and so visible and tangible. But nothing could come to be visible without fire, nor tangible without something solid, and nothing could come to be solid without earth. For these reasons when the god began making the body of the universe, he made it from fire and earth.' Proclus introduces an Aristotelian objection that fire is not the only element through which things are visible. The sun and stars are visible, but they are not composed of fire (II. 9.7–10.16).

<sup>8</sup> These ideas are pursued in more detail in Baltzly (2002).



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is moved only with difficulty. This explains why each behaves differently when it reaches its natural place. But Proclus' theory of the elements is integrated with his account of the proportion (*analogia*) that binds together all four elements in the *Timaeus* (31b–32b). It is a mathematical physics in the sense that Proclus supposes that the transformation of the elements into one another is strongly parallel to the arithmetical method through which you find the middle terms in a geometric proportion between similar solid numbers or cubes. To fully appreciate the depth of Proclus' theory of the elements and thus the force of his response to Aristotle, more needs to be said about proportions in the *Timaeus*.

*Proportions in the Timaeus*

First let us consider the way in which proportion crops up in Plato's text. An understanding of these proportions is important not only for an appreciation of Proclus' theory of the elements, but simply for an understanding of his commentary on *Timaeus* 34a–b.

- In 34a–b, the body of the world is shown to contain four elements by appeal to an argument that relies on (at least an analogy with) mathematical proportion. Since the cosmos is a four-dimensional solid, and solid numbers require two middle terms – not just one – to establish a *geometric* proportion, the world must contain air and water in addition to the elements of fire and earth which are responsible for its visible and tangible nature (31b).
- In 35b–c, *Timaeus* describes the Demiurge taking portions of the substance from which he constitutes the soul of the world. These portions form two instances of continuous *geometric* proportion: 1, 2, 4, 8 and 1, 3, 9, 27.
- In 35c–36a, the Demiurge 'fills in' the intervals between these sequences with the *arithmetic* and *harmonic* means to obtain the sequences: 1,  $\frac{4}{3}$ ,  $\frac{3}{2}$ , 2,  $\frac{8}{3}$ , 3, **4**,  $\frac{16}{3}$ , 6, **8** and 1,  $\frac{3}{2}$ , 2, **3**,  $\frac{9}{2}$ , 6, **9**,  $\frac{27}{2}$ , 18, **27**. (Original portions are indicated in bold, harmonic means in italic, and arithmetic means by underlining.)

The latter two texts fall outside the bounds of the present volume, but the arithmetic and harmonic proportions have been sometimes thought to be relevant to the text of 32a–c. Hence it will do no harm to discuss them briefly here.

Plato does not bother to explain what these various means are. Since the lectures on the *Timaeus* are for advanced students, Proclus also spends relatively little time in discussing the mathematical background to Plato's text or to his remarks on that text. The Neoplatonic sequence of studies would have included a background in mathematics – certainly prior



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to the study of Plato, if not to the study of Aristotle. (Marinus is a bit unclear in his biography about whether Proclus' own preparatory studies in Alexandria, and of Aristotle's logic under the tutelage of Olympiodorus, coincided with his mathematical studies with Hero (Marinus, *VProc.* 9).) Yet Proclus does spend *some* time outlining the nature of the proportions in question (*in Tim.* II. 19.10–20; 20.21–23.8; 30.8–36.19), just as he quickly rehearses astronomical arguments for the sphericity of the cosmos (II. 73.26–75.18). One might suppose that this was simply to reawaken the memory of the salient facts in the mind of his audience. Or perhaps it is because his audience included some who had not undertaken the full course of studies as yet.

The modern reader who wants to approach Proclus' commentary in the spirit of fifth-century AD Platonism can do so by having Nicomachus' *Introduction to Arithmetic* and Theon of Smyrna's *Mathematics Useful for Understanding Plato* at hand. Nicomachus of Gerasa was a Neopythagorean philosopher of the first or early second century AD. His *Introduction* takes the reader through the explanation of the importance of mathematical studies (I.1–6); the Pythagorean definition of number (I.7); their classifications of numbers (I.8–16); explanations of relations between numbers such as 'the superparticular'  $n + 1 : n$  (I.17–II.5); "plane and solid" numbers (II.6–20); and the theory of proportions (II.21–9). Theon's handbook is less detailed in its approach to Pythagorean number theory but includes a section on astronomy. Proclus was acquainted with both authors,<sup>9</sup> but perhaps knows Nicomachus better. Proclus follows Iamblichus in questions about the central canon of Platonic works, so he may be assumed to have accepted Iamblichus' views on the preparation for the study of Plato's philosophy as well. This may be true even if Proclus had a slightly different view on Plato's Pythagoreanism than Iamblichus did.<sup>10</sup> Iamblichus clearly thought Nicomachus was valuable since he wrote a commentary on the *Introduction to Arithmetic*. It seems likely, though by no means certain, that Proclus possessed this work.<sup>11</sup> In fact, Marinus tells us that Proclus supposed that he had *been* Nicomachus in a previous life (*VProc.* 28)!

What do these mathematical treatises tell us about the geometric, arithmetic and harmonic proportions?<sup>12</sup> The term that is used most

<sup>9</sup> Theon of Smyrna is probably the Theon mentioned *in Tim.* I. 82.15. Nicomachus is named at II. 19.4 and 20.25.

<sup>10</sup> O' Meara (1989), 148.

<sup>11</sup> The *index auctorum* in *Platonic Theology* lists Iamblichus' commentary at IV. 99.20. But it is unclear to me whether Proclus is here drawing on Iamblichus' commentary or on Nicomachus himself.

<sup>12</sup> The history of the proportions is discussed in Heath (1921) vol. i, 85–90. The earliest definitions reported are those of Archytas in a fragment of his work *On Music* preserved

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frequently for proportion is *analogia*. Writers of this period may also use 'mean' (*mesotês*), though the same term may also be used to denote the term between two others in a proportion.<sup>13</sup> Equally, authors may use *meson* for either of these functions. This latter terminology is not innocent of other associations as well. It is associated with what is physically between things and this was doubtless the origin of its technical sense. There is also Aristotle's use of the 'middle term' in a syllogism. Like the mean in a proportion, this binds together the premises and thus provides the bridge by means of which major and minor term can find their way into the conclusion.

Nicomachus defines 'proportion' (*analogia*) as follows:

in the proper sense, the combination of two or more *ratios* (*logos*), but by the more general definition the combination of two or more *relations* (*schesis*), even if they are not brought under the same ratio, but rather a difference or something else.

In the strict sense, only geometric progressions such as 2, 4, 8 count as proportion, for the ratio of the first term to the middle term is the same as that of the middle to the last.<sup>14</sup> But by extension, *analogia* may be applied to a sequence of three or more terms where the middle term or terms are such that it exceeds the previous term by the same amount that the subsequent term exceeds it.<sup>15</sup> In this case, the same relation obtains between each member of the sequence and we have an arithmetic proportion. The relation in the harmonic proportion is more complex. In the series 2, 3, 6, the middle term exceeds 2 by 1 which is  $\frac{1}{2}$  of 2. Likewise, the 6 exceeds the middle term by 3 which is likewise  $\frac{1}{2}$  of 6. So in the harmonic proportion, the middle term exceeds and is exceeded by the 'same part' of the extreme terms.<sup>16</sup>

in Porphyry and Iamblichus. The works of Nicomachus, Theon and Pappus list seven further proportions, but the history and credit for them is somewhat disputed. In any case, the first three proportions are the ones relevant to Plato's text and for this reason Proclus eschews discussion of the others (*in Tim.* II. 19.2).

<sup>13</sup> I here summarize much of what may be found in Tracy (1969), Appendix I, and D'Ooge (1972), 264 n. 2.

<sup>14</sup> [Geometric proportion] 'exists whenever, of three or more terms, as the greatest is to the next greatest, so the latter is to the one following, and if there are more terms, as this again is to the one following it, but they do not, however, differ by the same quantity, but rather by the same quality of ratio.' Nicomachus, *Arith.* II. 24.1, trans. D'Ooge. Cf. Theon, 107.5 and 114.1 ff.

<sup>15</sup> 'It is an arithmetic proportion, then, whenever three or more terms are set forth in succession, or are so conceived, and the same quantitative difference is found to exist between the successive numbers, but not the same ratio among the terms one to another.' Nicomachus, *Arith.* II. 23.1, trans. D'Ooge. Cf. Theon 113.18 ff.

<sup>16</sup> 'The proportion that is placed in the third order is the one called the harmonic, which exists whenever among three terms the mean on examination is observed to be neither