

# A *porisma* to Crouse on Boethius, Augustine, and the Mathematical Sciences

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A principle upon which Robert Crouse insists in each of his articles on Boethius is the continuity between the *Consolation* and the *Tractates*. Often treated as completely discrete works by scholars who assert an anachronistic distinction between them, Crouse argues that

The difference between the *Consolation* and the *Tractates* is not the ‘scholastic’ methodological distinction between philosophy and theology. The difference lies rather in the degree to which the presuppositions are made explicit, and the technical precision with which they are worked out.<sup>1</sup>

Indeed, as Crouse points out, the *Consolation* contains the *theologia* described in *De trinitate* as the highest division of speculative science. Crouse, like John Marenbon,<sup>2</sup> sees a particular connection between the *De hebdomadibus* and the *Consolation*.

Among these *Tractates*, the *De hebdomadibus* is a rather special case, inasmuch as it does not refer explicitly to any point of Christian dogma ... [b]ut the problem of the tractate suits very well the long discussion of divine and created goods in Book III of the *Consolation*.<sup>3</sup>

There is another connection between the *De hebdomadibus* and *Consolation* book 3. Boethius tells us that in composing the *De hebdomadibus* he “fol-

1. Robert D. Crouse, “The Doctrine of Creation in Boethius: The *De Hebdomadibus* and the *Consolatio*,” in *Studia Patristica* 18, ed. E.A. Livingstone (Oxford: Pergamon, 1982), 419. Crouse goes on to note the esoteric character of certain *Tractates*: “Everywhere, he tells Symmachus, he meets the ‘apathy of the dullard,’ and ‘the jealousy of the shrewd’; the deeper matters of philosophy are therefore to be treated with reserve, pondered in solitude, and discussed only with those capable of understanding them. He asks John the Deacon not to object to the obscurities of brevity, which are the *arcani fida custodia* and speak only to those who are worthy.” This is not the esotericism of Straussians, for whom ironic readings create contradictions from which any conclusion follows. Rather this is the esotericism of technical knowledge.

2. John Marenbon, *Boethius* (Oxford: Oxford University Press, 2003), 66–95.

3. Crouse, “The Doctrine of Creation in Boethius,” 419.

lowed the example of the mathematical and cognate sciences and laid down bounds and rules”<sup>4</sup> according to which he developed all that follows. He then laid down nine axiomatic principles presupposed in the argument. A similarly ‘geometric’ method also underlies *Consolation* book 3. As Chadwick has noted:

The pervasive influence of Neoplatonist discussion of geometrical arguments on the mind of Boethius is illustrated by a passage in the third book of the *Consolation of Philosophy* (iii, 10, 22–6). The lady Philosophy has argued that both God and happiness (*beatitudo*) are the highest good and therefore identical. From this conclusion there is a corollary which geometers call a *porisma*, namely that human beings are made happy by a process of deification. Euclid wrote a book entitled *Porismata*, on which Proclus comments that he used this Greek word in a sense other than corollary. Proclus uses the word *porisma*, exactly as in Boethius, to mean an ‘incidental gain arising out of the demonstration of the main proposition’ (*In Eucl. Elem.* I, 212, 16; 301, 22 Friedlein).<sup>5</sup>

As Wayne Hankey points out in his paper, there is a philosophical formula that descends to Boethius in a line commencing in Porphyry, developed by Iamblichus and applied to providence, freewill and prayer by Proclus and Ammonius: “everything which is known is grasped not according to its own power but rather according to the capability of those who know it” (*Cons.* 5,4,25). Crouse discusses the way that this formula informs Boethius’ “thoroughly Neoplatonic argument (at once Augustinian and Procline) about eternity and time.”<sup>6</sup> Crouse’s article “St. Augustine, Semi-Pelagianism and the *Consolation* of Boethius” concludes by noting, not without scepticism, that Goulven Madec sees in Eriugena’s work on predestination an “Augustinianism of divine simplicity.” However Crouse’s own conclusion is that because Eriugena presents the doctrine of the *Consolation* on predestination, but carefully related to texts of St. Augustine, there is need of work on “a new perspective on the place of Boethius in the Augustinian tradition.”

While the problem of the divine necessity and human freedom is certainly Augustine’s problem as well as Boethius’, I think there is a more fundamental difference between Boethius and Augustine, asserted by Crouse in his paper “Honorius Augustodunensis: The Arts as *via ad patriam*,”<sup>7</sup> which makes the Procline character of the *Consolation* in general, and of book 5 in particular,

4. H.F. Stewart, E.K. Rand and S.J. Tester, *Boethius: The Theological Tractates; The Consolation of Philosophy* (Cambridge: Harvard University Press, 1973), 41.

5. Henry Chadwick, *Boethius: The Consolations of Music, Logic, Theology, and Philosophy* (Oxford: Oxford University Press, 1981), 107.

6. Robert D. Crouse, “St. Augustine, Semi-Pelagianism and the *Consolation* of Boethius,” *Dionysius* 22 (2004): 108.

7. Robert D. Crouse, “Honorius Augustodunensis: The Arts as *via ad patriam*,” in *Congrès international de philosophie médiévale, Arts Libéraux et philosophie au moyen âge* (Montréal: Institut d’études médiévale/Paris: Librairie philosophique J. Vrin, 1969), 531–39.

clearer and thus more difficult to reconcile with Augustine. In his account of Honorius on the arts Crouse points to a difference between Boethius and Augustine on the liberal arts, specifically the mathematical sciences of the *quadrivium*. Crouse notes that “Boethius’ order of the quadrivial disciplines ... was followed by Honorius and several other twelfth-century authors, and attributed by Honorius to Boethius.”<sup>8</sup>

Thus, in the view of Honorius, that tenfold philosophy which is comprehended in the programme of the arts is *not only preparatory to the wisdom of the Scriptures*, but it is also, as a consideration of the species of the visible creation, one of the two complementary aspects of that fullness of wisdom which is divine contemplation (*italics mine*).<sup>9</sup>

Crouse goes on to say that “Honorius’ position is not basically Augustinian in inspiration.”<sup>10</sup> It is a corollary or, to use Boethius’ terminology, a *porisma*, to this view, which I would like to discuss relative to Crouse on the question of providence and Boethius’ solution to the Semi-Pelagian question. To say that the twelfth-century view of the liberal arts is not Augustinian involves asserting the following difference between Augustine and Boethius. For Boethius the mathematical sciences of the *quadrivium* are *gradus*, steps of the ascent from the sensible to the intelligible.<sup>11</sup> This is not the view of Augustine. Although in the *De ordine* of Cassiciacum he had asserted that number, the principle of the mathematical sciences, is “supreme and all-encompassing” (*totumque perficere*) ... “divine and almost eternal” (*divinos et sempiternos*)<sup>12</sup> (*De ordine* 2.14.41), and that the liberal arts could be “pursued for the sake

8. Crouse, “The Arts as *via ad patriam*,” 535n.22. On the order of the mathematical sciences, see also Jean-Yves Guillaumin, “L’ordre des sciences du *quadrivium* et la proportion géométrique,” *Latomus* 50 (1991): 691–97; Ilsetraut Hadot, *Arts libéraux et philosophie dans la pensée antique* (Paris: Études Augustiniennes, 1984).

9. Crouse, “The Arts as *via ad patriam*,” 538.

10. Crouse, “The Arts as *via ad patriam*,” 538n.37.

11. These, I argue, are the same *gradus* of the ladder on Philosophy’s dress in book 1 of the *Consolation*. In his work on arithmetic Boethius describes the sciences as steps: “This, therefore, is the *quadrivium* by which we bring a superior mind from the knowledge offered by the senses to the more certain things of the intellect. There are various steps (*gradus*) and certain dimensions of progressing (*certainae progressionum dimensiones*) by which the mind is able to ascend [and make progress] (*ascendi progredique*) so that by means of the eye of the mind, which (as Plato says) is composed of many corporeal eyes and is of higher dignity than they, truth can be investigated and beheld. This eye, I say, submerged and surrounded by the corporeal senses, is in turn illuminated by the disciplines of the *quadrivium* (*Institutio arithmetica* 1,1,7).” Latin text from *L’institution arithmétique*, edited with a translation by Jean-Yves Guillaumin (Paris: Les Belles Lettres, 1995). English translations, slightly modified, from Michael Masi, *Boethian Number Theory. A Translation of the De Institutione Arithmetica* (Amsterdam: Editions Rodopi B.V., 1983).

12. Augustine, *On Order [De Ordine]*, translation and introduction by Silvano Borruso (Indiana: St. Augustine’s Press, 2007).

of usefulness or for the sake of knowledge and contemplation (*ad cognitionem rerum contemplationemque*) (*De ordine* 2.16.44), Augustine would later reject this view and argue that the liberal arts should only serve exegesis. This is the explicit position of the *De doctrina christiana*.<sup>13</sup>

Boethius not only considers the arts a *via ad patriam*, but he holds to a particular interpretation of them. What differentiates Boethius from Iamblichus and other followers of Nicomachus of Gerasa, and what indicates the specific influence of Proclus, is his emphasis on geometry. As O'Meara points out, for Proclus, as opposed to Iamblichus and other followers of Nicomachus, "geometry reaches ... up to true and divine being."<sup>14</sup> Boethius shares with Proclus a proclivity for geometry. Proclus not only commented on Euclid's *Elements*, but he adopted the geometer's model for his own *Elements of Theology*. Boethius adopted the geometer's model in the *De hebdomadibus*, and evoked their method in book 3 of the *Consolation*. However, Boethius' use of the geometrical method is not limited to this tractate and book 3 of the *Consolation*, nor is the influence of geometry on Proclus limited to the *Elements*. In *De decem dubitationibus*, a treatise on providence, Proclus uses a geometric image "to explain how the One sums up and recapitulates in itself all that is generated by itself."<sup>15</sup>

As the whole circle is centrally (*kentrikōs*) in its centre, if it is true that the centre is the cause and the circle is the caused, then every number is in the monad, following the same reasoning, in a monadic way. In the One of providence all the things exist in a stronger way, since the One is greater than the centre and the monad; as, then, if the centre had knowledge of the circle, it would know in a centric way [that is, from the point of view of the centre].<sup>16</sup>

13. "Augustine's change in view concerning grace in *Ad Simplicianum* (396) influences *De doctrina Christiana*. In answering Simplicianus' second question, Augustine clearly shows for the first time that salvation comes entirely through grace and grace alone. Circa 393, he had changed his mind concerning the human possibility of achieving the vision of God in this life. Both of these changes necessitated a change in the role of the liberal arts. Earlier, Augustine had accepted the Porphyrian notion of the liberal arts as a training of the mind for the vision of Beauty or the One. When Augustine no longer believed that man could achieve such vision in this life, a change in the role of the liberal arts was necessary. Augustine presents his new position that study of the liberal arts should help exegize Scripture." Frederick Van Fleteren, "Principles of Augustine's Hermeneutic: An Overview," in *Augustine: Biblical Exegete*, ed. Frederick Van Fleteren and Joseph C. Schnaubelt (New York: Peter Lang, 2001), 11.

14. Dominic J. O'Meara, *Pythagoras Revived. Mathematics and Philosophy in Late Antiquity* (Oxford: Clarendon Press, 1989), 173.

15. Luca Obertello, "Proclus, Ammonius and Boethius on Divine Knowledge," *Dionysius* 5 (1981): 130.

16. Proclus, *De decem dubitationibus*, 5, 34–52, p.60, quoted by Obertello in "Proclus, Ammonius and Boethius," 130.

In this passage Proclus compares the relation between the One and existents with the relation of the centre and the circle such that a mode of knowing belonging to the centre is conceived of. Thus the principle of 'the mode of the knower' is imagined according to the relation of the circle *known* by the centre.

Scholars have noted that the character of specific books of the *Consolation* correspond to the modes of cognition articulated in book 5.<sup>17</sup> The books also correspond to the mathematical sciences of the *quadrivium*.<sup>18</sup> Thus there is in the *Consolation* a presentation of the *orbis* ('circle' or 'sphere') in each book that corresponds to the book's dominant mode of cognition.<sup>19</sup> The modes of cognition are united with the sciences in various forms of the *orbis* and its apprehension. Book 1 presents the circle of the stars, grasped by the senses and the science of astronomy. This is the source of the prisoner's healthy opinion, this true opinion and tiny spark which makes his recovery possible. Book 2 presents the *orbis* of the wheel of fortune to his imagination through music, specifically the *prosopopeia* of Fortuna. The arts of Music and Rhetoric are employed medicinally. The second book concludes with the image of fortune's handmaidens impotently circling the true self that the Prisoner has found by turning inward. Books 3 and 4 present geometric images grasped by reason. The first is drawn from the sensible and used to illustrate the intelligible, the second drawn from the intelligible and used to illustrate a higher intelligible truth. Book three presents an image of creation circling around God, while book 4 presents as its central image the nested spheres of fate circling around the still centre of providence. Thus book 5 must deal with arithmetic, and instead of a form of the *orbis*, it presents the source and end of the circle, the centre, the *cardo* or *punctus*, in its account

17. On the correspondence between the books and the modes see Thomas F. Curley, "How to read the *Consolation of Philosophy*," *Interpretation* 14 (1986): 211–63; Elaine Scarry, "The External Referent: Cosmic Order. The Well-Rounded Sphere: Cognition and Metaphysical Structure in Boethius's *Consolation of Philosophy*," in *Resisting Representation* (New York: Oxford University Press, 1994), 143–80.

18. Boethius orders the sciences such that "Arithmetic also precedes spherical and astronomical science insofar as these two remaining studies follow the third [geometry] naturally. In astronomy, 'circles,' 'a sphere,' 'a center,' 'concentric circles,' 'the median,' and 'the axis' exist, all of which are the concern of the discipline of geometry. For this reason, I want to demonstrate the anterior logical force of geometry (*seniorem geometriae vim*). This is the case because in all things, movement naturally comes after rest; the static comes first. Thus, geometry understands the doctrine of immoveable things while astronomy comprehends the science of mobile things. In astronomy, the very movement of the stars is celebrated in harmonic intervals. From this it follows that the power of music logically precedes the course of the stars; and there is no doubt that arithmetic precedes astronomy since it is prior to music, which comes before astronomy" (*Institutio arithmetica* 1,1,11).

19. Cf. my "Boethius and the Consolation of the Quadrivium," *Medievalia et Humanistica* 34 (2008): 1–21.

of the simplicity of God which contains in a simple way all diversity.<sup>20</sup> This is grasped by intellect.<sup>21</sup>

Proclus prefers geometry for the same reason Boethius adopts the various forms of the *orbis*. For Proclus, “[the science of geometry] is coextensive with all existing things, applies its reasonings to them all, and includes all their kinds in itself.”<sup>22</sup> Figure (*skhēma*) is especially effective as a ladder from lower to higher things because it “begins above with the gods themselves and extends down to the lowest order of beings.”<sup>23</sup> And Proclus, like Boethius, sees the circle as “the first and simplest and most perfect of the figures.”<sup>24</sup> Augustine would not have approved of this *via ad patriam* since, as Crouse argues, for Augustine “the way of *intellectus*, which moves from *fides*, *per scientiam ad sapientiam* requires the mediation of the Incarnate Word,”<sup>25</sup> and this word is not part of the ascent via the mathematical sciences in the *Consolation*.

20. On the geometric character of the *Consolation*, cf. Noel Harold Kaylor, Jr, “Euclid in Boethius’s ‘De Consolatione Philosophiae’ and Some of its English Translations,” *Fifteenth-Century Studies* 35 (2010): 70–79.

21. The language of book 5 of the *Consolation* evokes that of Proclus. Compare Boethius’ notion that “God possesses this present instant of comprehension and sight of all things not from the issuing of future events but from his own simplicity” (*Cons.* 5,6,155) with Proclus’ image: “As in the circle the center, the distances, and the outer circumference all exist at the same time, so also in the paradigm there are no parts that are earlier in time and others that come to be later, but all are together at once—rest, procession, and reversion.” Proclus, *A Commentary on the First Book of Euclid’s Elements*, translated with introduction and notes by Glenn R. Morrow (Princeton: Princeton University Press, 1970), 121–22.

22. *Ibid.* 50.

23. *Ibid.* 111.

24. *Ibid.* 117.

25. Robert Crouse, “St. Augustine’s *De Trinitate*: Philosophical Method,” *Studia Patristica*, vol. 16 (Berlin, 1995), 502.