A COSMOLOGICAL CONTROVERSY IN THE RENAISSANCE: MARSILIO FICINO'S AND GIOVANNI PICO DELLA MIRANDOLA'S CONTRASTING VIEWS ON THE ANIMATION OF THE HEAVENS

H. Darrel Rutkin

In the early twenty-first century, we often ask whether there is life (intelligent or otherwise) in the cosmos, but almost never whether the heavens themselves are actually alive or animated, that is, infused somehow with a soul, the *anima mundi*, or some such entity. This was not the case in the Middle Ages, the Renaissance, or the early modern period. Although Aristotelians normally answered no to this question, Marsilio Ficino (1433–99) took a decidedly Platonic turn when he answered the question positively, insistently, and consistently in a broad range of works over his entire philosophical career. By contrast, Giovanni Pico della Mirandola (1463–94), Ficino's younger contemporary, began by embracing the new Platonic position but joined the Aristotelian fold in his later works. In this essay, I will briefly compare and contrast Ficino's solid and consistent position with the changing trajectory of Pico's views over the course of his short but intense career. This essay is an exploration of central themes and some preliminary reflections thereon. These essentially Platonic views of a living universe provide the conceptual and literary foundations for understanding this issue in the early modern period.

Contact H. Darrel Rutkin at the Università Ca' Foscari Venezia, Venice, Italy (drutkin2001@yahoo .com).

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Introduction

In the early twenty-first century, we often ask whether there is life—intelligent or otherwise—in the cosmos, but almost never whether the heavens themselves are actually alive or animated, that is, infused somehow with a soul, the *anima mundi*, or some such entity. This was not the case in the Middle Ages, the Renaissance or the early modern period.¹ Although Aristotelians normally answered no to this question, Marsilio Ficino (1433–99) took a decidedly Platonic turn when he answered the question positively, insistently, and consistently in a broad range of works over his entire philosophical career.² By contrast, Giovanni Pico della Mirandola (1463–94), Ficino's younger contemporary, began by embracing the new Platonic position but joined the Aristotelian fold in his later works.³ In this essay, I will briefly compare and contrast Ficino's solid and consistent position with the changing trajectory of Pico's views over the course of his short but intense career.⁴ This essay is an exploration of central themes and some preliminary reflections thereon.⁵ These essentially Platonic views of a living universe provide the conceptual and literary

- 1. Edward Grant says that it is one of the two or three most asked questions in scholastic commentaries on Aristotle's *De caelo* from the thirteenth to the seventeenth century (Grant 1994, 469). Grant's treatment (469–87) offers a valuable orientation, but he does not discuss Ficino, nor any Platonist for that matter, since his focus is on Aristotle commentaries. In addition to Grant, I have found these various discussions helpful: Wolfson (1962); Dales (1980); Zambelli (1992), esp. chaps. 8 ("Are 'Deaf and Dumb' Stars and Their Movers at the Origins of Modern Science? Another Historiographical Case Study") and 9 ("Not the Heavens, but God Alone Is Endowed with Life and the Stars Are Simply His Instruments"); and Freudenthal (2002, 2009). This is not in any way a comprehensive bibliography.
- 2. Grant argues strongly and persuasively against Dales's position that living was the standard medieval Latin Christian Aristotelian response, and that it diminished gradually, but not completely: "We may plausibly conclude that the heavens were not gradually deanimated during the Middle Ages, largely because they were never really animated in the first place" (1994, 486). This is the case for Latin Christian Aristotelians, but not for Arabic Muslim ones. There is a larger story here that needs to be much more fully fleshed out, for which the material in this essay may function as an interesting, significant, and pivotal chapter. In this essay, I will focus on the *De vita* (1489), but Ficino also treated this issue, inter alia, in the earlier *De amore* (composed 1469) and the *Platonic Theology* (1469–73/4, 1482).
- 3. Michael J. B. Allen argues for a significant shift in Pico's later works from a more Platonic to a more Aristotelian position (Allen 1986/1995). This essay further supports Allen's assessment, as does Rutkin (2002).
- 4. For a splendid orientation to Pico's life and works, see Grafton (1997). Whenever I use the name Pico by itself in this essay, I refer to the aforementioned Giovanni Pico. When I refer to his nephew and editor Gianfrancesco Pico della Mirandola (1469–1533), I write out his name in full.
- 5. This topic has a great complexity due primarily to Aristotle's three distinct positions articulated in his philosophical writings, which W. K. C. Guthrie discusses in the introduction to his valuable translation of Aristotle's *De caelo* (Aristotle 1939/1986, xi–xxxvi, esp. xxix ff.), and to Plato's strong statements in the *Timaeus* (the major Platonic text well known during the Middle Ages). Another issue is the dynamic of Christian aversion to what smacks of paganism, as discussed by Grant (1994, 470). To further complicate matters, Avicenna, Averroes, and Maimonides all thought that the heavens were animated (Grant

foundations for understanding this issue in the early modern period. In fact, they characterize a major feature in the shift from medieval to Renaissance in the field of cosmology.⁶

One of my main research questions concerns astrology's natural philosophical (including cosmological) foundations and how those have changed (or not) over time; and then, whether and how those transformations affected astrological practice in relation to astrology's sometimes contested legitimacy, and its broad range of expression in society, politics, and culture. Whether the heavens are alive or not, and the implications thereof for astrology's cosmological and natural philosophical foundations, is a significant question within this broader context. I will argue ultimately for practical astrology's profound and perhaps surprising cosmological and natural philosophical neutrality. Astrology is currently practiced with no legitimate contemporary scientific foundation whatsoever, although one could probably be constructed, perhaps along the lines that Paul Feyerabend provocatively suggested in the 1970s.

I should also note that exploring the contrast between Ficino's fixed and Pico's changing views on the animation of the heavens (i.e., on the heavens being alive or not) can be extremely instructive, as I hope to show. This topic offers a useful focus for interpreting Ficino's and Pico's third and final controversy, which centrally involved Pico's attack on astrology and, thus, a fundamental feature of Ficino's worldview. In this essay, I will briefly discuss Pico's early views (1486–89) and Ficino's consistent views throughout his career, both of which embrace a living, ensouled universe. I will then discuss Pico's final nonanimated views in his last unfinished work, the deeply anti-astrological

[1994, 470] and Freudenthal [2002] for Averroes). Augustine was ambivalent; Thomas Aquinas was also dubious and did not consider it a religious issue (Litt 1963, 108–9; Grant 1994, 472 ff.). Both the *Speculum astronomiae* of the 1260s (mentioned in my conclusion) and the famous condemnations of 1277 also decreed that the universe is not ensouled (Grant 1994, 473). Ficino, however, came out strongly proliving universe in the *De vita* and a range of other works, including the *De amore* and *Platonic Theology*, as did later thinkers, including Johannes Kepler (Wolfson 1962).

^{6.} I discuss this shift and its significance more fully in the section of my introduction on periodization in Rutkin (2019, xxi–xxv).

^{7.} In addition to Rutkin (2002), see most recently Rutkin (2018, 2019).

^{8.} This is the case for Aristotelian vs. Platonic natural philosophy and for Ptolemaic vs. Copernican or Tychonic cosmology.

^{9.} This proposal took place in his characteristically caustic critical response to an article in the September–October 1975 issue of the *Humanist*, which contained an oath rejecting astrology by 186 leading scientists (Feyerabend 1978, 91–96).

^{10.} The two earlier controversies concerned their respective positions on the philosophy of love (Pico's *Commento* vs. Ficino's *De amore*) and the nature of Plato's argument in the notoriously difficult Parmenides. On the first, see Aasdalen (2011). On the second, in addition to Allen (1986/1995), Valcke (1997, 2006/2018), and Vanhaelen (2009), see also Maude Vanhaelen's recent edition and translation of Ficino's commentary on the *Parmenides* (Ficino 2012).

Disputations against Divinatory Astrology. ¹¹ This episode is also part of a larger argument in my PhD thesis and the forthcoming second volume of my monograph concerned with differentiating Ficino's and Pico's views—both from each other and in relation to astrology, magic, and Kabbalah—in order to critique and revise Frances Yates's still influential genealogy of Renaissance magic in her *Giordano Bruno and the Hermetic Tradition* (Yates 1964). ¹²

The texts to be explored here were all written between 1486 and 1494, except for the first one mentioned here, which was written in the 1450s. Its author shall remain unidentified for the moment, but we know who wrote it, and that he wrote it in the context of his education at a fine northern Italian university. Our author, writing to a friend and laying out the most basic natural philosophical structures, was keenly aware that Platonists think that the heavens are alive, whereas Aristotelians do not.

In treating motion (*motus*), our author first distinguishes the two main kinds, animate and inanimate, beginning with the latter: "Of inanimate motions, one is according to place, as the celestial bodies and the heaven itself (*ipsum celum*). For when they are moved, they only change place. For this reason, Aristotle composed the book *De celo et mundo*."¹⁴ Our author then discusses four types of inanimate motion with respect to form, including the generation of stones and metals in the earth. He concludes: "These four are the parts of inanimate motion according to the Peripatetics. For the Platonists would say that the first motion of the heavens is animated (*primum . . . celorum motum animatum*). For they think that there are souls in the celestial bodies (*celestibus corporibus inesse animas*)."¹⁵ For our author, then, the situation is perfectly clear: the Platonists hold that the motion of the heavens is animated and that there are "souls in

- 11. Composed 1493-94, published 1496.
- 12. Briefly, Yates (1964) presents a genealogy of Renaissance magic whereby Pico simply added Hebrew Kabbalah to Ficino's deeply astrological magical medicine. When one carefully examines the actual evidence remaining for Pico's early position (1486–87), however, one finds almost no normal astrology whatsoever, as Rutkin (2002) demonstrates, which contrasts starkly with Ficino's deeply astrological *De vita*. This issue is treated briefly in Rutkin (2010) and will be treated much more fully in volume 2 of my monograph.
 - 13. For a general orientation, see Schmitt (1983), Lines (2001), and Grendler (2002).
- 14. "Motus autem est duplex, animatus et inanimatus. Inanimatorum autem motuum alius est secundum locum, ut corpora celestia et ipsum celum. Dum enim moventur, tantum mutant locum. Ideo liber de celo et mundo ab Aristotele editus est" (95, 23–26). I will only put the page and line references here. The proper bibliographical reference will be given later. All translations are mine unless otherwise noted.
- 15. "Et hec quattuor sunt partes motus inanimati secundum Peripateticos. Nam primum Platonici celorum motum animatum dicerent. Putant enim celestibus corporibus inesse animas" (95, 35–37). This text and the others included with it would well repay further study.

the celestial bodies," whereas for the Aristotelians, the motions in place for both the celestial bodies and the *celum* itself are inanimate.

Early and Transitional Pico: Living Universe (1486–89)

Although Pico did not often discuss whether the heavens are alive or not in his early works that I have explored, he reveals his position clearly, briefly, and emphatically in the so-called *Oration on the Dignity of Man* of 1486. Pico presents his views close to the beginning in describing God's creation of the world: "Now the highest God, father and architect, had made the cosmic house (*mundana domus*) that we see, the most august temple of divinity, with the laws of arcane wisdom. He had adorned the supercelestial region with minds (*mentes*); he had invigorated the ethereal globes [i.e., the planets] with eternal souls (*aeternis animis*); and he had filled the excremental and feculent parts of the lower world with a multitude of animals of every kind." Thus Pico clearly describes the heavens as ensouled in one of his most famous early works.

2.1. Commento (1486)

A fuller discussion of the heavens being ensouled comes in Pico's *Commento* on his friend Girolamo Benivieni's love poem also written in 1486.¹⁷ The passages to be discussed here form part of a minitreatise on the relative natures of earthly and divine love, in which Pico explicates one of the great mysteries of human life: why is a given person drawn more to the love of one person than to the love of another?¹⁸ To interpret stanza 6 of Benivieni's poem, Pico states that one must first know that "among human souls the Platonists say that some are of the nature of Saturn, some of [the nature] of Jupiter, and thus of the other planets, and they intend by this that one soul will have more natural affinity and similarity of form with the soul of the heaven of Saturn (*con l'anima*

^{16. &}quot;Iam summus Pater architectus Deus hanc quam videmus mundanam domum, divinitatis templum augustissimum, archanae legibus sapientiae fabrefecerat. Supercaelestem regionem mentibus decorarat; aethereos globos aeternis animis vegetarat; excrementarias ac feculentas inferioris mundi partes omnigena animalium turba complerat" (10–11). I take the text from Pico della Mirandola (2003). As Prof. Heilen informs me, the rare word fabrefecerat is used by Calcidius in his commentary on Plato's *Timaeus*, 290. Thus, Pico seems implicitly to reveal his philosophical source here.

^{17.} I take the Italian text from Pico della Mirandola (1942/2004, 451–581). I have profited from Sears Jayne's English translation (Pico della Mirandola 1984) and Stéphane Toussaint's French translation (Pico della Mirandola 1989).

^{18. &}quot;[M]a prima che a ciò descenda, nel principio de la VI [stanza] assegna la ragione perchè sia tratto uno più a l'amore di questo che di quell'altro" (569, 18–21). This text is discussed more fully, but toward a different end, in Rutkin (2010).

del cielo di Saturno) than with the soul of the heaven of Jupiter, and another [soul] the opposite" (III.6).¹⁹ Here, each planet's *cielo* or heaven has a soul, a view that Pico explicitly attributes to the Platonists.

Pico then explains that human souls are of one sort or another not due to any intrinsic difference (i.e., their formal cause is the same), but rather because of an extrinsic and efficient cause that he goes on to identify: "That which produces these souls, namely, the maker of the world, about whom Plato says in the *Timaeus* that he sows some souls in the moon, some in the other planets and stars, which he calls instruments of time, by casting [i.e., their seeds]."²⁰ The Platonists thus claim that some human souls are of the nature of Saturn and others of the nature of Jupiter because the *opifice del mondo*, namely God, casts their seeds into these different planets, each of which has its own soul that somehow informs the individual souls seeded therein. Although Pico did not explicitly endorse this as his own view, his contemporary statement in the *Oratio* concerning a cosmos that has planets with eternal souls inclines me to believe that it reflects his own views as well.

2.2. Heptaplus (1489)

I should now briefly discuss what seems to be a transitional work both chronologically and conceptually in Pico's intellectual itinerary: the *Heptaplus*, a commentary on the creation story in *Genesis*, which must have been published by the beginning of September 1489.²¹ The last two chapters of Exposition II on the celestial world are quite useful for our purposes. Pico begins II.6 by telling us where he has been and where he is going. Having finished expounding the bodily nature of the heavens (*de corporea caelorum natura*), he proceeds to discuss its endowment with a rational soul, an *animus rationalis*, which he describes explicitly on analogy with a human being's rational soul.

The analogy holds, Pico argues, because Timaeus said that human souls were made from the same elements—and in the same libation bowl—from

^{19. &}quot;E per intelligenzia d'essa è da sapere prima, che fra l'anime umane dicono e' Platonici alcune essere di natura di Saturno, alcune di Giove e così degli altri pianeti, e intendono per questo che un'anima harà più cogniazione e conformità con l'anima del cielo di Saturno che con l'anima del cielo di Giove, e un'altra per contrario" (569, 23–28).

^{20. &}quot;[C]he non è per altro se non perchè quest'anima è di tale natura e quella di tale, nè altra causa intrinseca se n'ha ad assignare di questo, di che estrinseca ed effettiva causa ne è quello che esse anime produce, cioè l'opifice del mondo, del quale dice Platone nel *Timeo* che alcune anime nella luna, alcune negli altri pianeti e stelle, che lui chiama instrumenti del tempo, spargendo semina" (570, 1–7). For a valuable study of the concept of seeds in the Renaissance, see Hirai (2005).

^{21.} Pico della Mirandola (1942/2004, 32). For a broader interpretation, see Black (2006), with extensive further bibliography.

which the soul of the world, the *anima mundi*, was also made: "Therefore, God added to the celestial structure (*caelestis machina*) a living and rational substance (*viva substantia et rationalis*), a participant in intellect, and therefore he wanted it [i.e., the living rational substance], in his image and likeness, to be set above these aforementioned animators, namely, all the sidereal signs and planets, which are turned thus by his will."

The entire bodily fabric of the cosmos is thus endowed with a living and rational substance, the *anima mundi*. Pico completes the chapter by articulating the masculine and feminine powers of the celestial souls: "For this is the prerogative of celestial souls (*praerogativa animorum caelestium*) that at the same time they obey both functions, that of contemplation and that of ruling bodies."

23

In II.7, Pico completes the second exposition by turning to the moral implications for human beings living in the system just described. He begins by providing the reader with a disquisition on the exalted nature of our own souls: "This noble creature [i.e., the *caelum*] is to be gazed upon and celebrated by us. But if we have not forgotten the Platonic view (not to mention the theologians, whom we recall now) that our souls were tempered by God the creator (*ab opifice Deo*) in the same mixing bowl (*cratera*) and from the same elements with the celestial souls (*cum caelestibus animis*), we should see that we not wish ourselves to be the slaves of those He wished to be our brothers by nature."²⁴ Pico argues here for the dignity of man based on the ontologically kindred nature of our souls with the celestial souls. We are thus literally and explicitly made of the same stuff and mixed in the same cosmic vessel as the souls of the heavens.

3. The Living Universe, *Spiritus*, and Stellar Rays in Ficino's *De vita* (1489)

Although a living ensouled cosmos was also central to Ficino's theological *magnum opus*, the *Platonic Theology* (written from 1469 to 1474 and published in 1482), I will focus here on his astrologico-medical *De vita*, which was published in December 1489, and thus soon after Pico's *Heptaplus*.²⁵ To set the tone, I

- 22. "Adiecit igitur Deus caelesti machinae vivam substantiam et rationalem, participem intellectus, ideoque ad imaginem et similitudinem suam hanc voluit praeesse his, de quibus paulo ante diximus, animantibus, idest sidereis omnibus signis et planetis, quae illius ita nutu versantur" (240, 18–22).
- 23. "Est enim haec praerogativa animorum caelestium, ut simul utrumque obeant munus et contemplandi et regendi corpora" (242, 3–5).
- 24. "Nobilis haec creatura et nobis suspicienda et celebranda; sed, si vel platonicae sententiae, ut theologos taceam, cuius modo meminimus, non sumus obliti, temperatos animos nostros ab opifice Deo in eodem cratere ex iisdemque elementis cum caelestibus animis, videamus ne nos illorum servos velimus, quos nos fratres esse natura voluit" (242, 15–21).
- 25. I focus here on the *De vita*, but there is also relevant material in the *Platonic Theology* (Book IV in particular) and the *De amore* (Book VI). Textual references are to Ficino (1989).

should first note that Ficino announced that the universe is alive in the overall Proem, and that he defends this position in his preemptive *Apologia*.

In book III, chapter 3, Ficino systematically presents two major elements of his broader macrocosmic view. First, the body of the world is everywhere alive (mundanum corpus . . . est ubique vivum, III.3.1–2), and it lives by means of the soul of the world, the anima mundi, which is fitted to it and present to it everywhere. Second, Ficino informs us that spiritus is also present in the world everywhere, linking the tangible part of the world's body (corpus mundi) and its soul (anima mundi): "Therefore, between the tangible and partly perishable body of the world and its very soul, whose nature is very far from a body of such characteristics, there exists everywhere a spiritus, just as there is between the soul and body in us, assuming that life everywhere is always communicated by a soul to a grosser body. For such a spiritus is necessarily required as a medium by which the divine soul may both be present to the grosser body and bestow life deeply in it" (255–57). Spiritus connects the anima mundi to its corpus and thus enlivens the system.

Ficino begins book III, chapter 11 with a splendid statement of his overall program and the direction in which he is heading: "All these [i.e., discussions] are for this purpose: that our spirit—properly prepared and purified through natural things—may receive the most from the spirit of cosmic life (*ab ipso vitae mundanae spiritu*) by means of stellar rays received at the right time" (289).²⁷ With this programmatic opening sentence, Ficino reintroduces central themes to be developed in what follows, including *our spirit's* proper preparation for receiving *cosmic spirit*, namely, the spirit of cosmic life (*vitae mundanae spiritus*).

Ficino then describes the living nature of the world, in which he vividly portrays the stars as the eyes of the world: "And finally [i.e., this life of the world innate in everything] invigorates in the highest degree possible the celestial bodies which are like the head, heart or eyes of the world. Whence, through the stars as eyes, it everywhere diffuses not only its visible but also its visual rays. By these, like a sparrow, as we have said elsewhere, it looks upon things below and fosters them by being [i.e., itself] alive, nay, rather, even by thus touching [i.e.,

^{26. &}quot;Ergo per animam vivit ubique sibi praesentem ac prorsus accommodatam. Igitur inter mundi corpus tractabile et ex parte caducum atque ipsam eius animam, cuius natura nimium ab eiusmodi corpore distat, inest ubique spiritus, sicut inter animam et corpus in nobis, si modo ubique vita est communicata semper ab anima corpori crassiori. Talis namque spiritus necessario requiritur tanquam medium, quo anima divina et adsit corpori crassiori et vitam eidem penitus largiatur" (III.3.4–9). I use Kaske and Clark's valuable translation, which I modify where appropriate.

^{27. &}quot;Huc vero tendunt haec omnia ut spiritus noster rite per naturalia praeparatus atque purgatus accipiat ab ipso vitae mundanae spiritu plurimum per radios stellarum opportune susceptos" (III.11.1–3).

them] generates them, shapes them variously, and moves them" (291).²⁸ These celestial bodies as the eyes of a living cosmos thus project generating and vivifying rays into the world below in a striking cosmic analogy using extramissionist optics.²⁹

The last passage I will discuss is from III.16, where Ficino articulates the physical dimension of making talismans, focusing on stellar rays.³⁰ Here he distinguishes the nature of celestial from fiery (i.e., elemental) rays, in the process explicating how celestial rays differ ontologically from the rays of light that radiate from a lamp:

For [i.e., the celestial rays] are not inanimate like the rays of a lamp, but they are alive and perceptive, just as [i.e., those rays] shining forth through the eyes of living bodies. And they bring with them marvelous gifts from the imaginations and minds of the celestials, and the most powerful force from their strong feelings and the very swift motion of their bodies. And they act properly and especially on [i.e., human] *spiritus*, which is most similar to the celestial rays. They act besides on even the hardest bodies, for all these things are very weak in relation to the heavens. $(323)^{31}$

Here, Ficino describes celestial influences acting *directly* on a person's spirit by means of stellar rays. Ficino follows up by explaining how rays easily act on even the hardest objects (i.e., metal and stone), thus also alluding here to their *indirect* action on a person's spirit, as with a talisman that has absorbed their influence.

By presenting an animated living cosmos with celestial bodies that also have minds and imaginations, Ficino radically differentiates his world-picture from the normal patterns of Aristotelian natural philosophy, whether astrologizing

- 28. "Et denique coelestia corpora quasi mundi caput vel cor vel oculos quam maxime vegetat. Unde per stellas velut oculos radios non visibiles solum, sed etiam visuales usquequaque diffundit. Quibus more struthi, ut diximus alibi, inferiora conspicit fovetque vivendo, immo etiam ita tangendo generat et format omnifariam atque movet" (3.11.11–16).
- 29. Here and in III.16, Ficino was deeply influenced by al-Kindi's *De radiis stellarum*, but you would not know this from Kaske and Clark's commentary ad loc. For the Latin text with an important introduction, see al-Kindi (1974). For an English translation of the relevant parts, see al-Kindi (2012).
- 30. For the authoritative scholarly treatment of talismans in the medieval period (including for Ficino), see Weill-Parot (2002). For an insightful study focused primarily on Ficino, see Quinlan McGrath (2013). See also Rutkin (2013).
- 31. "Non enim inanimati sunt sicut lucernae radii, sed vivi sensualesque tanquam per oculos viventium corporum emicantes, dotesque mirificas secum ferunt ab imaginationibus mentibusque coelestium, vim quoque vehementissimam ex affectu illorum valido motuque corporum rapidissimo; ac proprie maximeque in spiritum agunt coelestibus radiis simillimum. Agunt insuper in corpora vel durissima, omnia enim haec ad coelum infirmissima sunt" (III.16.40–46).

or otherwise.³² As we saw in the first part of this essay, we know from his earliest philosophical treatises written during his student years in the 1450s—which I will now identify—that Ficino was keenly aware that Platonists think the heavens are animated and that Aristotelians do not.³³ Thus, in animating the heavens in his mature work and throughout his career, Ficino consciously and deliberately aligns himself with the Platonists.

4. Late Pico: The Turn to Aristotle (1493-94)

The last work Pico wrote—and which he left unfinished and fragmentary on his premature death on November 17, 1494—was his extensive attack on astrology, the difficult and daunting *Disputations against Divinatory Astrology*.³⁴ In order to support one of the central structures of his attack on astrology (the distinction between universal and proximate causes), Pico describes in rich detail his deeper natural philosophical views on the nature of celestial influences in book III.³⁵

Pico presents this analysis in the first part of book III, chapter 4, as he attacks the first of what he characterizes as the astrologers' five strongest arguments, and he uses it to ground important features of his argument in the second part of III.4 and throughout the rest of books III and IV. After describing the basic function of celestial heat (*caelestis calor*) in relation to life, Pico introduces life's central agent, *spiritus*:

Wherefore also in all living things, between that rather dense dwelling place, which is seen [i.e., the body], and the soul, the font of life, there is a median that we call *spiritus*, a very rare and invisible body, especially akin to that sidereal [celestial] light and heat, to which life is particularly present and through which it unfolds and diffuses its powers in this visible and earthly body. Thus a *spiritus* of this type is latent in seminal matter, whose service that more divine power [i.e., the soul], the creator

^{32.} The central patterns of what I call a medieval astrologizing Aristotelian natural philosophy, in the works primarily of Albertus Magnus and Roger Bacon, are reconstructed in Rutkin (2019, vol. I, pt. I).

^{33.} These are among Ficino's very earliest extant writings of any sort. They can be dated to 1454–55. For an edition of this and closely related texts from Ficino's time as a student at the University of Florence, with an illuminating introduction, see Kristeller (1956). The texts edited here are the ones I presented above and they reveal, among many other things, Ficino's deep knowledge of Aristotelian natural philosophy.

^{34.} For the text, I use Garin's standard edition (Pico della Mirandola 1946–52/2004).

^{35.} This material is discussed in some depth in Rutkin (2002, chap. 6). I will discuss it more fully in Rutkin (forthcoming). This material is strangely neglected in the scholarship, where Pico's natural philosophy is usually disregarded as uninteresting.

(*artifex*) of living works, uses primarily, functioning in the place of soul, from which it [i.e., *spiritus*] flowed down, and propagating the species of the generating force (*generans*) in the matter which it occupied.³⁶

After making these important refinements to our knowledge of *spiritus* in the process of generation—as the quasi-material agent or instrument of the formal cause, the soul, acting on and informing the matter of the thing being generated—Pico then relates the human *spiritus* more explicitly to *caelestis calor*, which he calls here *spiritus caelestis*: "Moreover, these [i.e., animal] spirits are not useful either for generating or preserving bodies, or for obeying the functions of the senses, if they are lacking the help of the celestial *spiritus*, that is, the heat that we discussed [i.e., *caelestis calor*], which, more mobile, pure and efficacious, and therefore closer to life, strengthens the weakness of the lower spirit (*spiritus inferior*) and renders it more akin to the soul by its intercourse." Pico here identifies the celestial *spiritus* as *caelestis calor*, and he relates it directly to the *spiritus* below in living things.

In reiterating a point he had made earlier—that the lower *spiritus* is ontologically and energetically dependent on its celestial counterpart—Pico then forestalls a potential conclusion that he used to embrace but which he now soundly and explicitly rejects, namely, that the heavens are alive:

But this is not an argument that the *caelum* is alive (*vivere caelum*) because it invigorates by its rays those things that live, for all these things live by means of their own souls.³⁸ They are propagated by means of the energy of the soul sown in their seeds, with the heat of the *caelum* supporting them, not as a vivific (*vivifico*), but as something disposing

^{36. &}quot;Quapropter in omnibus etiam viventibus, inter hoc quod videtur crassius habitaculum et animam, vitae fontem, medius est quem spiritum appellamus, tenuissimum corpus et invisibile, luci calorique illi sidereo maxime cognatum, cui vita praecipue adest perque eum suas in hoc visibile atque terrosum vires explicat atque diffundit. Sic in materia seminali latet hoc genere spiritus, cuius in primis utitur ministerio vis illa divinior, artifex vitalium operum, vice animae fungens, a qua defluxit, et speciem generantis propagans in materiam quam occupavit" (206, 23–208, 7). One should read terrosum here with the early editions and Benjamin Topp vs. retrorsum in Garin. I would like to refer here to Benjamin Topp's forthcoming edition with introduction and German translation of books I–IV of Pico's Disputationes, which is the revised version of his Osnabrück doctoral thesis from 2018.

^{37. &}quot;Non sunt autem, vel gignendis corporibus, vel servandis, vel muneribus sensuum obeundis, utiles isti spiritus, si caelestis spiritus, hoc est caloris quem diximus, ope destituantur, qui mobilior, purior, efficacior, proptereaque proximior vitae, roborat infirmitatem spiritus inferioris et suo commertio reddit animae cognatiorem" (208, 7–12).

^{38.} The terminology of rays here indicates—as do other passages in *Disputations* Book III—that Pico also embraced (like Ficino and numerous medieval natural philosophers) a geometrical-optical model of celestial influences, although he attempts to transform it, as we will see, toward anti-astrological ends.

them fittingly and most closely for life, for the reason we said. Moreover, no one would say that the power of seeing, which is from the soul, is in light or by means of light, even though we would not see without light.³⁹

Caelestis calor and spiritus are thus necessary for life, but they are not themselves alive, nor does their central role in life imply that the heavens are alive, as Pico states explicitly here. Pico thus directly repudiates his earlier position that the heavens are alive, which he held up to and including the *Heptaplus*; in this he opposes Ficino's same position as well.

Pico concludes his first argument against the astrologers thus: "Whether the life of the heavens (*vita caeli*) could be proved by other arguments or not has been disputed by me in the *Concord of Plato and Aristotle*. ⁴⁰ Thus, it is clear that nothing comes-to-be in the corporeal world without the *caelum*. Nevertheless, that this or that comes-to-be, this is not from the *caelum*, but from secondary causes, with all of which the *caelum* does the sorts of things that these were born to do, whether these causes pertain to the species or to an individual." ⁴¹ For Pico, then, there is no generation whatsoever without the heavens as the universal efficient cause, precisely as in Aristotle's *De generatione et corruptione* II.10, but this does not imply a living cosmos, and Pico deliberately inflects his analysis here toward an anti-astrological end.

5. Analysis

Pico's view here (that the heavens are not alive) is, of course, in stark contrast to Ficino's repeatedly stated view that the cosmos is alive. The life of the heavens is clearly a central issue for Pico, as it would be for any Aristotelian attacking this central tenet of the Platonist world-picture, as found, most influentially, in Plato's *Timaeus*. For Plato and the Platonists, the cosmos is a living entity, an animal (i.e., an animated being) ensouled by the *anima mundi*, a concept we have conspicuously *not* seen in our admittedly all-too-brief analysis of Pico's *Disputations*. My analysis thus reveals that Pico and Ficino have a very similar

^{39. &}quot;[U]t iam non sit argumentum vivere caelum quia vegetet suis radiis ea quae vivunt, nam vivunt haec quidem omnia per suas animas, per animae vim seminibus insitam propagantur, suffragante illis calore caeli, non quasi vivifico, sed ad vitam, ob id quod diximus, commodissime proximeque disponente. Nemo autem dixerit in luce sive per lucem esse, quae ab anima est, vim videndi, quamquam sine luce non videamus" (208, 12–20).

^{40.} It is a great pity that this text is now lost!

^{41. &}quot;Possit aliis, necne, vita caeli rationibus comprobari, disputatum a nobis in *Concordia Platonis et Aristotelis*. Ita patet in corporeo mundo nihil quidem fieri sine caelo; verumtamen quod hoc aut illud fiat, id a caelo non esse, sed secundis causis, cum quibus omnibus caelum talia facit qualia ipsae facere natae sunt, sive illae ad species, sive ad individuum, causae pertineant" (208, 20–26).

view of *spiritus*, but only if we focus tightly on *spiritus* and its immediate functions. When we expand the focus, however, we find that this similar feature, which has received so much attention in studies of Ficino's *De vita*, is used toward diametrically opposed ends within radically different worldviews, yet both regard celestial influences and their importance for human beings as utterly central.

This transformation seems to mark a major cosmological shift in Pico's views from a fundamentally Platonic to an Aristotelian position, as Michael Allen has indicated also in Pico's 1491 *De ente et uno* (Allen 1986/1995). It also corresponds to another major shift from a neutral attitude toward astrology to a rabidly anti-astrological position, which also seems to be closely associated with a parallel shift from a pro-magical and pro-*prisci theologi* position to its opposite. In this way, Pico modifies his former views as he launches a pointed and well-defined assault on central features of Ficino's worldview, including his deeply held pro-astrological views, especially in the *De vita*. We should not, however, leap to what might seem to be an obvious further conclusion: that Pico's more Aristotelian natural philosophical and cosmological views here—especially that the heavens are no longer ensouled—somehow more strongly support an anti-astrological position, as I will discuss further below.

With respect to the cosmos, we can now see that Pico began with an animated cosmos: the celestial bodies, and the *caelum* in general, were fitted with souls in the 1486 texts.⁴³ In the *Heptaplus* (1489), the heavens remain animated as Pico adds *spiritus* and *lux*, central parallel features of both the micro- and macrocosmic structures (but he does not use rays yet). In addition, Pico explicitly sets his cosmos on a Kabbalistically informed metaphysical foundation. In the *Disputationes* (1493–94), however, the heavens have been de-animated. The *caelum* is now the most perfect natural *body*; its soul has been removed. But *spiritus* and *lux* continue to play central roles in the energetic dynamics of the structure, on both micro- and macrocosmic levels. At this stage, Pico adds a further refinement to his conception of light, namely, *caelestis calor*, which corresponds closely to the *spiritus mundi* in Ficino's *De vita*.

Here, perhaps, Pico's anti-astrological movement is most pronounced. In the *Commento*, souls are seeded in the different planets. The soul of each planet then informs the formative virtue that each soul uses in making its earthly body, thereby leaving its distinctive planetary mark. In the *Disputations*, on the other hand, human souls are decidedly *not* seeded in the no-longer-animated

^{42.} This conclusion was argued for in Rutkin (2002) and will be done so much more fully in Rutkin (forthcoming).

^{43.} Some of these conclusions are drawn from the longer version of this essay and are not explicitly argued for here.

planets, and all of the planets now express only the very same virtues, namely, motion, light, and heat, which are only differentiated by degrees, and not by quality. Thus, although Pico did not himself advocate astrology in the *Commento*, he did articulate a deeply Platonic natural philosophy that provided a solid ontological foundation for natal astrology. This foundation has been reconfigured in the *Disputations* to no longer support an astrological view; for Pico, the planets and their influences are no longer qualitatively differentiated—an essential feature of astrology's natural philosophical foundations, whether Aristotelian or Platonic.

6. Conclusion

In this light, we should examine the place of astrology in relation to both kinds of cosmos: animated and de-animated. Although we have seen in the final Ficino-Pico controversy that Ficino's animated Platonic universe explicitly supported astrology, whereas Pico's de-animated, more Aristotelian cosmos emphatically rejected it, we should not generalize on this basis and thus construct an appealing but overly simplistic and schematic dichotomy. As I have discussed elsewhere, in the extremely influential and strongly pro-astrological *Speculum astronomiae* of the 1260s (which Ficino and many others explicitly attributed to Albertus Magnus), the deliberately anonymous author very explicitly denied life to his cosmos in discussing the living God of a non-living cosmos (*Deus vivus . . . caeli non vivi*, III.5–6).⁴⁴

We should now look at the broader aims of Pico's final reform strategy. His approach in this last phase, with respect to his attack on astrology—after making what appears to be a decisive switch to a pro-Aristotelian, anti-Platonic, or at least anti-Ficino stance—was to try to remove the astrological accretions from the otherwise sound foundations of Aristotelian natural philosophy. It often seems in the *Disputations* that Pico is trying to pry the astrological superstructure off of its still-solid Aristotelian natural philosophical foundation. This is to be sharply contrasted with Gianfrancesco Pico della Mirandola's far more radical intention. In addition to wanting to destroy astrology, Gianfrancesco was equally keen to undermine Aristotle, as Schmitt (1967) has shown.

^{44.} In addition to its ramifications for astrology, whether the heavens are ensouled or not is also important in relation to how the dynamics of prayer and magic are conceived.

^{45.} There may well be an anti-Arabic element here as well as the pronounced and explicit anti-astrological dimension, and this too is worthy of further investigation. Pico seems to have been informed here by a view very similar to his friend Niccolò Leoniceno's (1428–1524), the medical humanist who was ideologically committed to removing the medieval Latin and Arabic accretions from a pure Greek medicine. He was also profoundly against astrology. On Leoniceno's deeply influential approach, see Mugnai Carrara 1991. For anti-Arabic views in the Renaissance, more broadly and also specifically in relation to Pico and astrology, see Hasse (2016).

His approach was to firebomb the entire intellectual edifice with the Greek fire drawn primarily from Sextus Empiricus's skeptical arsenal. Finally, I would like to emphasize that Ficino's work in particular—with his translations of Plato and the Neoplatonists and his promotion of a living universe—sets the stage for the broad range of Renaissance and early modern views on the nature of the universe, living and otherwise.

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