

Heraclides' Three Soul-Gates: Plato Revised

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I. The Problem

In a lost Heraclidean dialogue, one Empedotimus of Syracuse reported a "mid-day" vision in which (so Proclus informs us) he had been privileged "to see the whole truth concerning souls" (fr. 93).¹ Proclus adds that this vision came to Empedotimus "by way of his bodily faculties" (fr. 91). As Heraclides conceived of soul in physical terms, this specification does not preclude a purely psychic experience. Elsewhere (fr. 94), the vision is said to have included the "sight" of, "among other things," three particular interconstellational "gates" and certain "routes" in the zodiac. Our knowledge of this vision rests largely on three complementary accounts, the first two from Proclus' commentary on Plato's myth of Er (frs. 91, 93), the third from Varro by way of Servius' commentary on Vergil (fr. 94).²

Taken together however, these accounts raise at least six substantive, and so far largely unanswered, questions:

1. Why, though the starry heavens are notoriously invisible in daytime (except during solar eclipses), is Empedotimus' vision expressly timed to "high noon" (by contrast to, say, the expressly nocturnal dream-vision of Cicero's Scipio [*De Rep.* 6.10.10])?³

¹All relevant texts are gathered in an appendix at the back.

²In *G.* 1.32-35 (c. 37 B.C.) Vergil had pretended that, by contracting its claws and thus allowing Libra to come into being as an independent (and extra-Galactic) constellation, the Galactic Scorpion was already preparing a space for the posthumous siderification of the then only 26 year-old Octavian, effectively in or near his birth constellation (Manil. 5.547-52). By flattering anticipation, then, the *divi filius* is here credited with a posthumous *novum...sidus* (*G.* 1.32) comparable to Caesar's comet (*Caesaris astrum*, *Ecl.* 9.47=*Iulium sidus*, Hor., *Carm.* 1.21.47 with Gundel *RE* XI [1921] s.v. "Kometen" 1153, 1186-87). Yet while Libra is west of Scorpion, the "gate" *ad signum scorpionis*, allegedly seen by Empedotimus, is east of Scorpion (i.e., inclusive of Sagittarius, see below, p. 171). Thus Servius' citation from Varro does not provide a true parallel to the Vergil passage in illustration of which it is cited.

³According to the (Judaean-Christian) *Sibylline Prophecies* 2.185 (p. 58 Kurfess), on the day of the Last Judgment all stars will be visible at midday to all (i.e., not only to privileged individuals like Empedotimus).

2. How does the light said to emanate from Pluton and Persephone complement the illumination already being provided by the noonday sun?

3. Was Empedotimus awake or asleep and dreaming when graced with what Varro's Latin renders as his "preternaturally enhanced vision" of the cosmos?

4. Why are Empedotimus' sights of "the whole truth concerning souls" said *inter cetera* to include only one but not both of the two intersections of zodiac and Galaxy traditionally serving as the souls' "gates" respectively of entrance into and exit from the Galaxy?

5. What is the eschatological point of the two other "gates," so conspicuously devoid of Galactic (whence also eschatological) or even calendric significance?

6. Why are all three "gates" located between rather than within zodiacal constellations?

To answer these questions, one needs to acknowledge more than the generic dependence of Heraclides here upon Platonic eschatological myths like that of Er in *Republic* X. One must also take into account his demonstrable allusions to no fewer than three other Platonic texts (*Laws*, *Phaedrus*, and *Timaeus*), his concurrent advocacy of a more pronounced form of the teleological atomism which Plato had seen fit to incorporate into the *Timaeus*, and his undeniable expertise, if not perhaps pioneering originality, in matters astronomical.⁴

As for the three textual allusions, the first one is to a calendric innovation in *Laws* 8.828D concerning Pluton. This will be seen to be evoked by, and to lend unexpected significance to, Heraclides' statement that Empedotimus' (daytime) vision took place by the light radiating from Pluton's epiphany. Next, there is language evoking the *Phaedrus*-myth to present a vision which differs from that enjoyed by the best souls in the *Phaedrus* (246C–247C) in that it concentrates on astronomicals at the expense of hyperouranic Forms. Finally, the timing of Empedotimus' vision to "high noon," so far from being gratuitous, evokes the crucial enabling role which Plato in his analysis of vision assigns to "midday light" (μεθήμερινὸν... φῶς, *Tim.* 45C).

⁴For the older view, prepared to credit Heraclides with astronomical originality, see e.g., Daebritz, *RE* VII 1 (1912), s.v. "Herakleides" 477-78. Heath 249-83 is more cautious, Wehrli, *RE Suppl.* XI (1968), s.v. "Herakleides der Pontiker" 686, openly skeptical; Guthrie 484-85, noncommittal.

Of the three Platonic texts cited, Heraclides alludes to the second and third even while turning them into vehicles for views differing from Plato's own in several respects. Thus he alludes to the *Phaedrus* passage where the Forms are cited as the ultimate objects of the soul's θεωρία, even while dropping those very Forms in favor of astronomicals, i.e., in favor of what in the *Phaedrus* had been merely penultimate objects. Thus, too, he alludes to the *Timaeus* passage cited (where the sun's fiery "midday light" is said to draw out, by force of the attraction of like to like, the fiery light from inside our eye toward the object of vision), even while exchanging that fiery light (both solar and intraocular) for luminous ether, the new fifth element. In both cases, this technique serves two ends at once. It startles readers out of the lazy assumption that similar language always conveys similar meaning. More importantly, it demonstrates to a wider audience a point not always appreciated outside the Academy itself, viz., that Plato was perfectly willing to see particular conclusions of his, identified as such by verbal allusions, challenged, modified, improved (cf. Cherniss 1945: 64-65, 83-85).

II. Pluton and the *Phaedrus*

According to Proclus (fr. 93), Heraclides told of how Empedotimus, at high noon and by the (sc. supplementary) light emanating from the epiphanies of Pluton and Persephone, had seen "the whole truth concerning souls" in the shape of "sights beheld with his own eyes." These words at once echo and contrast with those of *Phaedrus* 247C-D, where Plato describes the 'sights' beheld by souls both within and outside of our cosmos as they proceed up the meridian in the company of certain gods. Within our cosmos they see "many blessed sights and orbits" (διέξοδοι ἐντὸς οὐρανοῦ, 247A). It is safe to infer from Plato's words—as it is not safe to infer from Varro's *tres portas tresque vias*—that these διέξοδοι refer to planetary orbits. According to *Tim.* 38C, they had been created prior to the planetary bodies themselves and were helical in shape (39A), like the ἀμφίδρομοι ἐλίκαι which, according to Ptolemy's epigram (in Boll's reconstruction, 1950: 143-55), inspired him with purely intellectual (κατὰ νοῦν) intimations of immortality. But it is outside the sky that souls capable of reaching, traversing, and being carried around with the top of the sky 'see' (θεατή, θεωροῦσα, καθορᾷ) truth itself (ἀληθές, etc. four times in succession) i.e., the Forms in the plain of truth within the ὑπερ-ουράνιος τόπος.

With the help of Manilius 2.439 ff., Boll (1903: 473-78) had shown Plato's reformed calendar of *Laws* (8.828B-C) to reflect his assimilation of Attica's Twelve Gods to the twelve Babylonian zodiacal months and signs of

the Eudoxan calendar (the gods being rearranged into four serial triads such that of the six pairs of opposites—one rising when the other sets—one member is male, the other female). That Plato had in fact adopted this very correlation as early as the *Phaedrus* was later shown by Boll's pupil, Kerényi (248-49), on the basis of the sequence in which Plato there named four of the gods proceeding up the meridian. Here, grouped into four serial triads, is the complete correlation of deities and monthly signs at issue (those named in the *Phaedrus* are capitalized):

1. ZEUS (*Phaedr.* 246E)–Leo (*Nom.* 6.767C); Demeter–Virgo; Hephaistos–Libra;
2. ARES (252C)–Scorpius; Artemis–Sagittarius; Hestia–Capricorn;
3. HERA (253B)–Aquarius; Poseidon–Pisces; Athena–Aries;
4. Aphrodite–Taurus; APOLLO (253B)–Gemini; Pluton (*Nom.* 8.828D)–Cancer.

We shall never know whether in the *Phaedrus* Plato had already thought of Pluton (in lieu of the traditional Hermes) as the patron of the twelfth, or midsummer, month. All we may confidently affirm is that, to later Platonists, Heraclides' insertion of Pluton into Empedotimus' vision was bound—and no doubt intended—to convey a calendric reference to the last, or midsummer, month of the zodiacal year, when the sun was “in” Cancer.⁵ Thus, the radiance attributed to Pluton (fr. 93) designates a mere attribute of his tutelage over midsummer and so reinforces the brightness already implicit in Heraclides' timing the vision to “high noon.”

Note importantly that Pluton's tutelage over the (in Heraclides' day still non-Galactic) midsummer sign of “Cancer” in the north nowise conflicts either with Heraclides' equation of the Galaxy with “the celestial Hades” (fr. 96) or, more specifically, with the traditional locations of the soul's entrance to and exit from the Galaxy in the constellations of Gemini and Scorpius–Sagittarius respectively. Tutelage over zodiacal time-units (as specified in terms of “signs”), presence on the meridian (as in *Phaedrus*), residence in the Galaxy, and tutelage over planets (cf. fr. 95 from Olympiodorus) are not deemed mutually exclusive. On the contrary, such multiple associations, which of

⁵A further argument in favor of this more traditional reading flows from the ancient folk-belief that at high noon the Galaxy, the dead, and (in Northern Europe) the Wild Hunt may become visible. A combination of ancient belief with his version of teleological atomism would be typical of Heraclides. For the evidence, ancient, modern, and world-wide, concerning the so-called Daemonium Meridianum I am privileged to draw on the appendix “High Noon” to appear in a forthcoming publication of Prof. von Dechend.

course are the rule in later, full-fledged astrology, are to be expected as early as the “as yet imperfectly developed astrology of Heraclides’ day” (Nilsson 229). To neglect such multiple associations and, in particular, Pluton’s calendric associations with midsummer, risks short-circuiting what must be kept distinct. Thus, even Wilamowitz (II: 526) thought Heraclides’ labelling the Galaxy “Celestial Hades” (fr. 96) sufficient reason for describing Pluton’s radiance as “Galactic” in origin. Yet even those aware of Pluton’s calendric association with the northerly sign of midsummer, Cancer, do well to remember that Macrobius’ references, in the third century of our era, to “Cancer” and “Capricorn” (*In Somn.* 1.12.4, cf. *BLA* 23 n. 1), are not to the constellations of that name but to the homonymous signs, because in his day these happened to designate the Galactic constellations of Gemini and Sagittarius then housing the solstices. Macrobius’ nomenclature, then, cannot be pressed to signify that Heraclides mistook Pluton’s calendric tutelage over the (northerly) Cancer with Pluton’s presence in the (southerly portion of the) Galaxy. That said, however, Pluton does if by calendric indirection bear on vision after all. For in the *Timaeus*, “noonday (sun)light” (μεσημερινὸν φῶς, 45C) notoriously plays a key-role in the explanation of vision—exactly as we shall find it doing in Heraclides’ rival explanation of vision in terms of ether rather than fire. But before contrasting Heraclides’ with Plato’s construal of physical sight, let us attend to a basic difference between them as to eschatological vision.

III. Empedotimus’ Vision Compared to the Souls in *Phaedrus*

Certain objects of Empedotimus’ charismatically enhanced physical vision, specifically the three interconstellational “gates” mentioned by Varro, show that when Heraclides describes Empedotimus’ vision as *mortalem aspectum detersum* he means to describe it as something wholly physical and astronomical in both nature and objects, i.e., as well short of what the *Phaedrus* had defined as meta-astronomical θεωρία. All of which tallies with the reinterpretation of Platonic θεωρία in terms both corporeal and cosmological that one would have expected from Heraclides. There is more specific evidence still for his new physicalism. He adopts Philip’s elevation of ether to the rank of a fifth element (*Epin.* 981C)⁶ constitutive at once of souls, of the astronomical cosmos (i.e., including the sun and its light), and of the infinity of κόσμοι beyond our *flammantia moenia mundi*. The continuity of this luminous ether,

⁶See Moraux, *RE* 47 (1963), s.v. “quinta essentia” 1188 and 1190 for Philip of Opus’ *Epinomis* 981C and 984 respectively. That Heraclides followed suit is rightly inferred from Plutarch, *De E.* 390A by Boyancé ap. Wehrli 93 (where 350A is a misprint) and Moraux 1194.

then, is uninterrupted, e.g., by a quasi-Aristotelian bipartition of the cosmos into a sublunary and a supralunary realm. At the same time, however, Heraclides strove to accommodate Pythagorean-Platonic teleology by replacing Democritus' atoms with elemental molecules (ὄνκοι). Their predicate, ἄναρμοι,⁷ shows that whatever else be true of their shapes, these were such as to preclude entanglements and therefore needed to have their *de facto* coherence teleologically accounted for, say, by means of the attraction of like to like.

Now almost certainly Heraclides not only retained but completed Plato's correlation of elemental molecules with the regular solids. If so, he employed the fifth regular solid, the dodecahedron, to account not as Plato had done for some (still controversial)⁸ aspect of the sky's shape but for the molecular structure of his new fifth element, luminous ether,⁹ both within our soul and the cosmos and outside the latter within the infinite κόσμοι beyond.

IV. Empedotimus' Vision and Vision According to *Timaeus* 45C

Reference had already been made to one telling detail in Proclus' account (fr. 93) of Empedotimus' vision: Heraclides' express timing of the vision to high noon. Ostensibly gratuitous, that detail is in fact consistent with what, all the way from the myth's generic affinity to the Myth of Er to the transparently syncretic character of Empedotimus' very name,¹⁰ is the allusive flavor of the whole vision. Just as "seeing αὐτόπτα θεάματα bearing on the whole truth concerning souls" was bound at once to evoke and to contrast with the *Phaedrus* myth, so the odd bit of temporal specificity here at issue was bound, and no doubt intended, at once to evoke and to contrast with another well-known Platonic passage. It is, as already noted, the one in the *Timaeus* where Plato explains physical vision in terms of a process of "like to like" that is optimal in "noonday (sun)light" (μεθήμερινὸν...φῶς, 45C). Plato there construes sight as the end-product of a process involving the "outflow" (ρεῦμα)

⁷Frgs. 118-120. On the two possible meanings of these ἄναρμοι ὄνκοι 'not joined to each other' or 'not internally joined,' see Guthrie 486-87, with literature there cited.

⁸See Moraux (above, n. 6) 1186-87 for a survey of interpretations both ancient and modern, and the important reminder that, *Timaeus* Locrus to the contrary notwithstanding, the approximation in volume of the dodecahedron to the sphere had not yet been proved in Plato's time. Vlastos 94 n. 43 rightly notes that Plato's hasty reference to the fifth regular solid (*Tim.* 55C) "suggests embarrassed uncertainty."

⁹If true, this precludes Bidez's notion of the ether molecule as spherical (56). Of course, it also renders meaningless Plato's aprioristic deduction of four and only four elements from the need for two mean proportionals between two opposite solids (*Tim.* 32B).

¹⁰Bidez 55 thinks Empedo-timos equivalent to Empedo-kles; Wehrli 91, to Empedo(kles) + (Hermo)timos, one of Pythagoras' avatars.

from the eye of a fiery visual beam, triggered by the "likeness" of the intraocular "fire" to its extraocular counterpart, the "mild," because non-burning fire of "noonday (sun)light" which links the eye to its objects of vision. As Plato saw it, physical vision is wholly distinct from thought and optimal during noontime sunlight. Thereafter, it presumably declines in proportion as the fading of daylight "dampens" our intraocular fire, eventually causing our eyelids to close in sleep.¹¹ Any mental activity while asleep is merely rehearsing, in the form of dreams, strong visual stimuli received during the preceding daylight (*Tim.* 45E-46A).

To Heraclides, by contrast, seeing and thinking are both predicated on one and the same physical medium, luminous ether, the new fifth element, which links psychic awareness, ocular vision, astronomicals, and the infinite κόσμοι. For that reason alone, Empedotimus' "sights (θεάματα) of the whole truth concerning souls" are bound to signify something more inclusive than the objects of what Plato describes as daytime vision. As the sun is now no longer thought to consist of fire but of ether, sunlight, while remaining at its most effective at high noon (as for Plato), now additionally serves as the medium of thought. To one awake, that dual function spells potential conflict. For the soul's intellectual activity tends then to be diminished by intense visual distractions (cf. *Tim.* 67C-D). Noontime sleep, on the other hand, virtually eliminates these distractions even while allowing the soul to benefit from the strong ethereal continuum being provided by noonday sunlight. This then, arguably, is Heraclides' sufficient reason for timing Empedotimus' "vision" of astronomicals (normally invisible in daytime) to high noon at midsummer.¹² In sum, by timing Empedotimus' vision to (sc. sleep at) high noon, Heraclides invites the attentive reader to construe Empedotimus' mental vision at once on analogy with and in contrast to Plato's account of ocular vision.

A review of the parallels and the differences is instructive. The element drawn out by noonday sunlight through the attraction of like to like is not, as for Plato, intraocular fire but psychic ether. It is made to flow not from the eyes but from the—equally physical—soul. Nor, unlike Plato's fire, is Heraclides' ether confined to this our cosmos. Instead, it reaches through and beyond our *moenia mundi* to an infinity of κόσμοι. To Plato, finally, the

¹¹Note that more than one half of the philosophically crucial "vision of day and *night* and of (sc. lunar) months etc." (*Tim.* 47A) takes place between nightfall and sleep.

¹²Wilamowitz 526 rightly supposed that Empedotimus was sleeping and that the Galaxy itself was (i.e., did not merely bridge) the "celestial Hades." His third point, however, was unconvincing (see above, p. 165).

“mild” fire of noontime sunlight is the agent of nothing more than physiological vision. To Heraclides, by contrast, the mild fire of noontime sunlight is not fiery but ethereal, hence the medium not only of ordinary vision but also (if not normally at the same time) of psychic, equally effluence-based, *θεωρία*.

As already noted, Heraclides alludes to the *Timaeus* for the precise purpose of jolting his readers into realizing crucial differences. To that same end, Plato’s exposition had deliberately inverted the order in which, according to his own argument, the Demiurge had formed the soul and the body of the cosmos (*Tim.* 34C). Plato’s reason, it has convincingly been suggested, was that of startling “his audience out of the vulgar identification of temporal and ontological priority.”¹³ A comparable motive arguably informs Heraclides’ expressly timing Empedotimus’ vision to high noon. Would not Heraclides have expected this timing, at once so evocative of and so different from Plato’s analysis of vision in the *Timaeus*, to have startled his audience out of their tendency to equate Plato’s analysis of sight in terms of fire with Heraclides’ own, parallel, analysis of psychic *θεωρία* in terms of ether? Though no longer incorporeal, Heraclides’ *θεωρία* is not therefore reducible to eyesight. By day as well as by night, effluences emanating from outer space as well as from our own astronomical cosmos demonstrably draw from our souls an outflow of its own inherent ethereal *lumen intellectuale*.

Such, then, are the putative reasons—atomistic, teleological, and literary, (i.e., *Timaeus*-related)—why Heraclides timed Empedotimus’ vision to high noon.

V. The Astronomical Objects of that Vision

In describing the astronomical objects of Empedotimus’ vision, Varro’s summary specifies “inter cetera tres portas vidisse tresque vias,” but then proceeds to name only the three interconstellational “gates.” The first, that *ad signum scorpionis*, is briefly but unmistakably identified by an explanatory (but again shorthand) reference to Hercules’ apotheosis. For it was here, at one of the two intersections of zodiac and Galaxy, i.e., the Milky Way, that souls were thought to enter the Galaxy. By contrast, the significance of the second and third of the “gates” named (that between Leo and Cancer and that between Aquarius and Pisces) has so far eluded interpreters. For neither is there the expected complementary reference to the souls’ Galactic exit-“gate” near

¹³Cherniss 1944: 424-25. For similar techniques, see Reiche 1971: 296-329.

Gemini, nor are the "gates" named significant calendrically,¹⁴ eschatologically, or in terms of planetary astronomy. (The novel solution here to be proposed must await Section VI of this paper.)

Of the three "gates" named, moreover, it is again only the first which can be thought of as linked to a "route," viz., to the diurnal orbit linking the horizon rising and setting points of parts of the zodiac and serving as path of deceased souls. Absent souls "travelling" along the diurnal orbits of the other two (interconstellational) "gates" named, it remains unclear whether, and if so why, their diurnal arcs should have been included in so expressly eschatological a vision as that ascribed to Empedotimus. Alternatively, one might here be tempted to think of the Babylonian division of the sky into three coplanar bands paralleling the equator—viz., Anu (+17° to -17°), Enlil (+17° ff.), and Ea (-17° ff.)—obliquely traversed by the ecliptic such that the resultant ecliptical quadrants, when subdivided into three equal parts each, yield twelve schematic months and, eventually (not before -400), the twelve zodiacal signs. The scheme had Hellenic analogues spanning all antiquity. At one end there is Homer's statement (*Il.* 15.189) that Kronos' three sons divided the sky among themselves, which Olympiodorus somehow links to the radial tripartition of the planetary realm imputed to Empedotimus' vision (fr. 95). At the other end there is the Emperor Julian's reference to three distinct κόσμοι (*Or. ad Sol.* 28.148A; van der Waerden 1949: 24-26; 1974: 83, 156-60). The scheme is illustrated in figure 1 on the following page.

If, in that Babylonian scheme, Month I of the solar year is (after -400) equated with the sign of Aries, then the boundaries between Months VIII (Scorpius) and IX (Sagittarius), on the one hand, and between Months XI (Aquarius) and XII (Pisces), on the other, do indeed fall on the boundary between the bands of Anu and Ea. One could then think of the boundary between signs VIII and IX as an open "gate" admitting the sun from Anu to Ea, and of the boundary between signs XI and XII as an open "gate" admitting it from Ea to Anu. In short, the gates would be purely solar, and their relevance to "the

¹⁴For diagrams showing the chief dates of the farmer's calendar, see Reiche 1989: 38, 40, 42. We may safely ignore here the astrological notion of Leo as the diurnal, and sole, "house" (οἶκος, domicilium) of the Sun and of the (adjoining) Cancer as the nocturnal, and sole, "house" of the Moon. For it does not tally with Plato's calendric scheme, in which Zeus, not the Sun, has tutelage over Leo, sign of the first month of the Attic year; and Pluton (formerly Hermes Chthonios), not the Moon, has tutelage over Cancer, sign of the twelfth, and mid-summer, month of that year. Nor does a diameter linking the second and third of Heraclides' "gates" correctly divide the zodiac into diurnal and nocturnal halves (it should end between Aquarius and Capricorn).

whole truth concerning souls” would be indirect only. “Gates,” that is, would be soul-related by virtue of the mere fact that, to Heraclides, astronomicals and souls both consist of luminous ether.

Yet serious difficulties remain even so:

1. Why is the second “gate” located between Leo and Cancer and not, as expected, between Leo and Virgo, the ecliptic’s northern transition from Enlil to Anu?

2. Why is there no mention at all of the fourth such solar “gate,” at the sun’s transition from Anu to Enlil between the signs of Taurus and Gemini?

3. How, finally, do we reconcile the fact that while the boundary separating the Ways of Anu and Ea does intersect the ecliptic at the precise point where the *sign* of Scorpius borders on that of Sagittarius, Heraclides clearly refers to the first “gate” as near the *constellation* of Scorpius (see p. 171, below)?

For the Procrustes-minded, of course, none of these difficulties are insurmountable: the first and second may be healed by emendation; the third, by a (see below). Still, it seems safer to construe all three of the “routes” at issue neither as the diurnal arcs of the zodiacal “gates” identified nor in terms of the

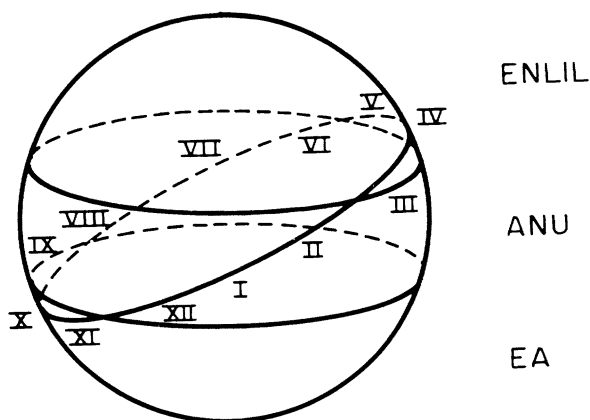


Fig. 1: The zones of Ea, Anu, and Enlil, and the path of the sun according to *mulAPIN*.

Babylonian Three Ways but in a sense at once more traditional and without a necessary connection to the three zodiacal "gates." The first of these three "routes," then, would be the Galaxy, traditionally the path of souls. The second would be the zodiac, path of the five naked-eye planets and the two great lights. The third would be the meridian, ascending path of gods and souls in the *Phaedrus*.

VI. Interconstellational Gaps in the Zodiac

What then were the zodiacal objects which Empedotimus' preternaturally enhanced vision enabled him to see at high noon? Heraclides' mention of Pluton had already been seen to imply a reference to Plato's reception of the twelve equal zodiacal months and the corresponding monthly signs (not constellations) as early as the *Phaedrus*.¹⁵ At the same time, all three of the "gates" listed by Heraclides as "among" (*inter cetera*) Empedotimus' sights are located between zodiacal constellations (not signs). Witness the standard constellational meaning of *signum* (as in *ad signum scorpionis*, the location of the first "gate"), promptly confirmed by the subsequent reference to Hercules' posthumous entry there into the company of the gods. Yet if the first of the three "gates" is constellational, so by analogy must be the other two. By the same token, the expressly *inter*-constellational location of the second and third of the "gates" retroactively applies to the first also, a conclusion which accords with the frequent portrayal of Scorpius and Sagittarius as scorpionomorphic twins on Babylonian boundary-stones (Boll 1903: 195-96). In sum, we have here Heraclides' equivalent of what already in *mulAPIN* and *Enuma Elish* (5.3) is the coexistence of unequal zodiacal constellations and equal, divinely sanctioned, segments of the ecliptic (Reiche 1989: 43 n. 12), well summarized by Manilius (2.699 ff.) as "his finibus ecce/ dodecatemorium constans, bis senaque tanta/ omnibus in signis; quae mundi conditor ille/ attribuit totidem numero fulgentibus astris."

What, finally, of the second and third of the interconstellational "gates" identified as such and named in Varro's summary of Heraclides? They are located at either end of what in point of astronomical fact is a whole string of interconstellational gaps in the zodiac. For whereas the six constellations from Leo to Aquarius are contiguous or overlapping, (except for the 5° gap between Scorpius and Sagittarius), the remaining five from Pisces to Cancer are all

¹⁵On the difference between, and the original overlap (never coterminousness) of the 11, later 12, unequal constellations and the 12 equal signs, see H. G. Gundel, *RE X A* (1964), s.v. "Zodiakos" 481, 490, 493.

separated from their neighbors on either side by gaps varying in width from 1° to 8°. So notorious was and is this fact that just naming the two gaps at either end of this six-gap series would suffice, to any seasoned skywatcher and, of course, to astronomers, to evoke the rest of the series included between them. Witness Figure 2. This explanation well accords with the absence, in the case of the two “gates” here at issue, of calendric, Galactic (i.e., eschatological), or planetary significance (see above, p. 162).

There remain two questions. Why, in a list of sights bearing on “the whole truth concerning souls,” does Heraclides cite only the souls’ Galactic entrance-“gate” *ad signum scorpionis* but not also their corresponding Galactic exit-“gate” in or near Gemini? The omission is only apparent. For the exit-“gate” is in fact part of the six-member series of consecutive interconstellational gaps evoked by the mere mention of the two “gates” bracketing it. Far weightier is another question. Why does Heraclides care to evoke that six-member series at all? Not surely for calendric reasons. For interconstellational gaps in the zodiac would defy translation into point-like astral rising and setting “gates” on the horizon, even if the latter had not been reduced to mere metaphors by the advent of the two-spheres cosmology.

Instead, it is Heraclides’ doctrine of infinite κόσμοι (fr. 113) which seems capable of supplying the missing answer. For given his atomistic epistemology, our awareness of infinite κόσμοι requires openings in the celestial envelope sufficiently numerous and large for ethereal effluences from outer space to be able to draw forth corresponding effluences from our souls. In short, the *moenia mundi* must be sufficiently permeable in both directions to allow for such interaction. Deemed insufficient for that purpose, by contrast, was evidently the single, self-opening “gate” in the polar region of the sky, by which Hera’s and Athena’s chariots had descended in Homer (*Il.* 5.749 = 8.393), by which the goddess’ own chariot had brought Parmenides to her house to learn the truth (*DK* 28 B 1, 14), and by which the procession of souls and monthly gods in the *Phaedrus* had passed into the hyperouranic “plain of truth” (247B-C). Evidently, this single gate sufficed no more for Heraclides’ purpose than such intermolecular pores, if any, as might be thought to have pierced Plato’s celestial envelope.¹⁶ He himself had been reluctant to allow for

¹⁶Ostensibly, Plato’s four regular—like any straight-edged—solids are bound to leave empty interstices between them (so Aristotle, *De Cael.* III viii 306 b 3 ff, with Taylor 405; the more so (so also Zeller II ii 806 note 2)) once they dissolve into their constituent triangles. Yet it is the express variations in triangular size which enable Plato to keep his cosmos, at least virtually, a *plenum* (cf. Cherniss 1944: 154).

such permeability, i.e., for what alone could account, in terms of atomistic epistemology, for our awareness of infinite κόσμοι.

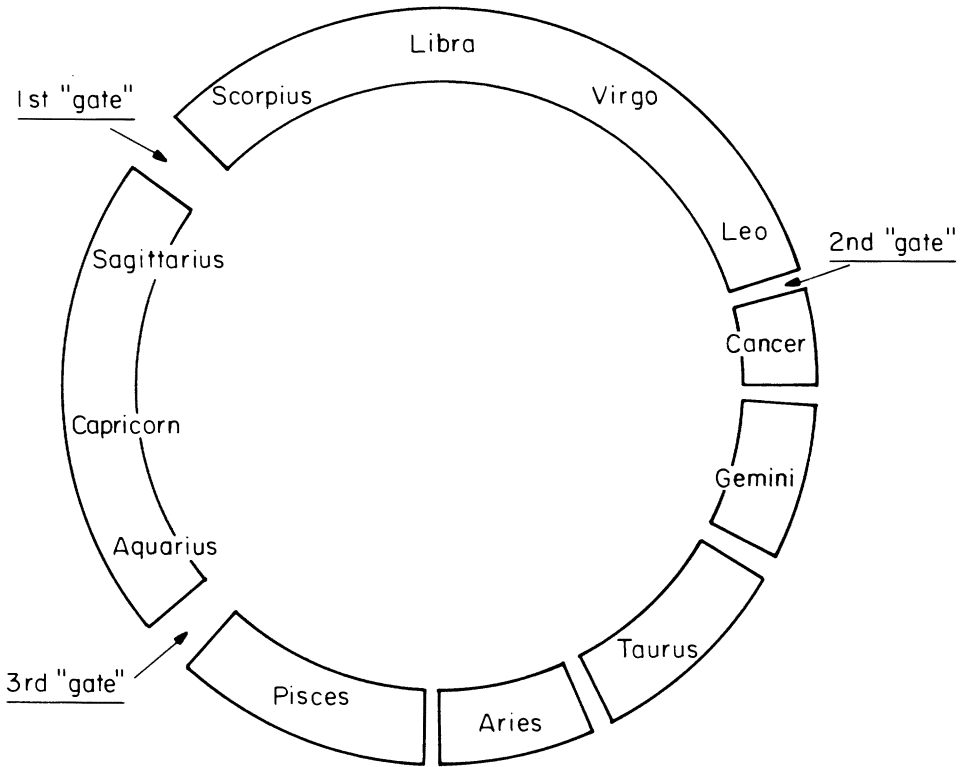


Fig. 2: The Gapped Portion of the Zodiac of Constellations as Framed by the Second and Third of Heraclides' "Gates."

"Unlinked" (ἄναρμοι, cf. above, n. 7) though were the ethereal molecules of our celestial envelope, they apparently were not sufficiently unlinked to account for the ability of ethereal effluences—whether drawn out from our psyche toward, or reaching it from, the infinite κόσμοι beyond our cosmos—to connect with those κόσμοι by passing through our celestial envelope in either direction. Only a large number of macrocosmic, not merely inter-

molecular, gaps along a great circle in the sky, (past which, on Heraclides' hypothesis, we rotate once every twenty four hours) would suffice to account for that awareness. Hence the relevance of the seven interconstellational gaps in the zodiac. Only one of these—that *ad signum scorpionis*—is not a part of a consecutive series, while no fewer than six, viz., those included between (and thus symbolized by) Aquarius and Leo, are consecutive. Heraclides' own, original version of Empedotimus' vision may or may not have made express reference to the astronomical identity and epistemological function of all seven (i.e., 1 + 6 consecutive) gaps. What is clear is that Varro's paraphrase definitely omitted all but the names of the two bracketing, whence defining, constellations.

Now of the three "gates" actually named by Varro only the first (the souls' Galactic entrance—"gate" *ad signum scorpionis*) is overtly part of what Proclus identifies as the subject of Empedotimus' vision, "the whole truth concerning souls" (fr. 93). Yet why, then, is there no comparably overt reference to Gemini, the souls' Galactic exit—"gate," and what do the second and third of the "gates" named have to do with "the whole truth concerning souls?"

The answer to the first question is implicit in the fact (see Figure 2 on preceding page) that the second and third of the "gates" named really stand for all six of the interconstellational "gates" which they bracket and so do include, among others, Gemini, the souls' Galactic exit—"gate." The answer to the second question is implicit in Heraclides' atomistic epistemology, psychology, and eschatology. If soul and mind, like astronomicals, consist of luminous ether—and knowledge of astronomicals (both within and outside our cosmos) is part of the soul's proper business—then there are indeed psychically relevant "gates" other than (but of course including) the two Galactic ones, viz., all seven interconstellational gaps in the zodiac. Given the rather technical character of this astronomico-atomistic background, Varro may be forgiven for neglecting it in favor of the ostensible anomaly of Heraclides' three soul "gates."

Subsequent attempts to account for Heraclides' three "gates" of the soul without recourse to his atomistic epistemology, psychology and eschatology have fathered some bizarre hypotheses. Commonly, the notion of three "gates" has simply been decreed older than that of only two gates, both of them Galactic,¹⁷ while two crucial points have gone neglected. The first is that the

¹⁷Dieterich 120-21, 131-32, followed by Daebritz, *RE* VII (1912), s.v. "Herakleides" 488, and by Wehrli, ed. *Herakleides* (1953) 92-93; *RE Suppl.* XI (1968) s.v. "Herakleides" 680, held that Empedotimus' three "gates" reflect Pindar's locating three morally distinct categories of souls in three different zodiacal locations, all of them outside of the Galaxy. Rohde II 213 n.

most ancient and widespread notion of soul-“gates” (albeit unattested, it so happens, before Numenius) places them at the two intersections of zodiac and Galaxy, i.e., in or near the constellations of Gemini and Scorpius/Sagittarius respectively. The second point is that, when Macrobius and contemporaries refer to the souls’ “gates” as “Cancer” and “Capricorn,” they are really referring to the constellations of Gemini and Scorpius/Sagittarius. For when, owing to precessional drift, these happened to have become the temporary locations of the solstices, they also acquired the fixed solstitial labels mandated by the fixed nomenclature of signs, viz., “Cancer” and “Capricorn.” Thus, the true, Galactic, identity of the souls’ two “gates” was merely overlaid, not cancelled, by the nomenclature of fixed signs.

Neglect of these points accounts for the mistaken impression that the souls’ “gates” were originally identified not with the two constellations common to zodiac and Galaxy but with the sun’s four cardinal “gates,” (i.e., the two solstices and the two equinoxes), and that the three mentioned by Empedotimus consisted of one of the two equinoctial “gates”¹⁸ (viz., the autumnal “gate,” Libra, supposedly implied by that *ad signum scorionis*¹⁹) plus the two solstitial “gates” (the midsummer one, Cancer, as represented by that between Leo and Cancer; and the midwinter one, Capricorn, as represented by that between Aquarius and Pisces). Apart from the difficulties already cited, this theory is also internally flawed. For why, if solar cardinal “gates” had indeed been meant, is there mention of three only and not of all four? Why, moreover, is Capricorn supposedly represented not by the “gate” between Capricorn and Aquarius but by that between Aquarius and Pisces? One scholar even sought to explain the odd threeness of Empedotimus’ zodiacal

2 had denied that Pindar could have located any of these in the Galaxy—as if the “Ocean” were not celestial as well as terrestrial, the Isles of the Blessed and Kronos’ Tower not near the celestial south pole, and access to them not by way of the invisible portion of the Galaxy—long before Heraclides fr. 96. Cf. DeSantillana–Von Dechend 209–11, 258, 261, 265. W. Gundel, *RE* VI (1910), s.v. “Galaxias” 563 still concurred with Rohde. Yet two of the souls’ zodiacal “gates” had to be Galactic—a fact ostensibly at variance with Heraclides’ mention of three zodiacal “gates” only one of which is Galactic.

¹⁸Thus, in *RE* VI (1910) s.v. “Galaxias” 566, W. Gundel held that all three of Empedotimus’ soul-“gates” (i.e., not only the first but also the notoriously un-Galactic second and third) provide access to the Galaxy. In *RE* XIII (1926), s.v. “Libra” 128, by contrast, he tried to force all three “gates” into a solar mold; so also H. G. Gundel in *RE* X A (1964), s.v. “Zodiakos” 546. In Roscher (1936) s.v. “Sternbilder” 1027–28, W. Gundel simply declared the three “gates” older than the two solstitial ones.

¹⁹W. Gundel, *RE* XIII (1926), s.v. “Libra” 128, on the ground, presumably, that originally the Scales had been, and been named, Scorpius’ Claws, i.e., to the west of Scorpius. This interpretation looks suspiciously like an unconscious echo of Verg. *G.* 1.32 (cf. above, n. 2).

soul-“gates” in terms of contamination with the Iranian notion of three successive geocentric tiers of stars, moon, and sun (Bidez 57-58). On that view, then, the zodiac would have to be conceived as radially linking these three geocentric tiers. Two other statements attributed to—or extracted from—Heraclides’ Empedotimus-myth present us with comparable difficulties. One is Olympiodorus’ identification of Hades with the sublunary realm (fr. 95); the other, Damascius’ report that the souls cross the “celestial Hades” by way of the Galaxy (fr. 96). When combined with the former statement, this “crossing” means “bridging.” In other words, the Galaxy is conceived as a celestial bridge which overarches the earth by resting on two zodiacal foundations (viz., Gemini and Scorpius/ Sagittarius) that seem to adjoin the terrestrial horizon on those days of the soli-stellar year when they appear in one of four heliacal phases.²⁰ Astronomically, of course, such a view is incompatible with the Pythagorean-Platonic two-spheres cosmology, not to mention the astronomical expertise of someone like Heraclides (above, n. 4).

Small wonder that in 1953, Wehrli tried to cut the Gordian knot by disclaiming the very need of making astronomical sense both of Heraclides’ presentation and of Varro’s transmission of the Empedotimus-myth, on the grounds that the former wrote dialogues, the latter a satire featuring Empedotimus.²¹ Yet a less drastic alternative suggests itself. For pedagogical reasons of the sort which induced Plato, say in the *Timaeus*, deliberately to invert in his exposition what he himself declared the correct sequence, Heraclides distinguishes between the modes of exposition appropriate to technical astronomy, on the one hand, and to eschatological topography on the other. The former conforms to “reality” as defined in terms of Pythagorean-Platonic astronomy; the latter, to “appearances” as actually available to the senses of even the most critical observer. It is the reader who is expected to translate sensory appearance into reality, i.e., to recognize that, sensory appearance to the contrary notwithstanding, the Galaxy is coplanar with zodiac and fixed stars, the planetary realm actually intermediate between earth and Galaxy, and the “celestial Hades” therefore not bridged by the Galaxy but identical with its southernmost portion and therefore reachable only by way of the planetary realm. Olympiodorus’ claim (fr. 95) that, according to Em-

²⁰Cf. W. Gundel, *RE* VI 1 (1910), s.v. “Galaxias” 563-64 and *Sterne und Sternbilder im Glauben des Altertums und der Neuzeit* (Leipzig 1922) 50.

²¹Wehrli 100 “von strikter Einheitlichkeit seiner Theorien ist H. schon durch die dialogische Form dispensiert,” yet *RE Suppl.* XI (1968), s.v. “Herakleides” 685 “Die...dialogische Form erlaubte es...verschiedene Erklärungsversuche gegeneinander abzuwägen” (which is not quite the same thing). On Varro, see Wehrli 92.

pedotimus, Pluton–Hades was allotted the sublunary realm in the course of a “cosmic” (κατὰ τὸ πᾶν) tripartition of “earth” merely reflects Neoplatonism’s attempt to discover Academic doctrine in Homer (Buffière 438–99).

Even so, however, (as already hinted above) at least one question still remains, the answer to which we are not likely to know for certain without fuller evidence than what is presently available from at least two excerptors with agendas of their own, very different from that of Heraclides. On what grounds, so one is bound to ask, did Heraclides include knowledge of the existence of the infinite κόσμοι among “the whole truth concerning souls”? How specifically was θεωρία of those κόσμοι (whose effluences concurred with ours by way of the inter-constellational gaps in the zodiac) thought to enhance the souls’ destiny in this and/or the next world?²² Does such θεωρία entail the benefits of psychological unification (as claimed in *Epinomis* 991D–992C) or of joyful liberation from cosmic claustrophobia and the fear of death (as claimed by Lucretius, *DRN* 1.70–79, 3.14–30)?²³

²²For Plato, after all, as presumably also for Heraclides, the souls’ successive incarnations are predicated not on ethico-religious but on intellectual lapses. Cf. Kerényi 247 and Rohde II.270 on the “Sturz in die Geburt” in *Phaedrus* (247A) as “notwendige Folge eines intellektuellen Sündenfalls, der sich in der Seele selbst vollzieht.” The souls choose the god they wish to follow.

²³Heraclides (like later Posidonius) is likely to have sided with Eudoxus in rejecting Speusippus’ (like later Chrysippus’) opposition of θεωρία and pleasure. Cf. Frank 148–54 and Edelstein 315.

Appendix

Texts are cited in accordance with the edition of F. Wehrli, *Die Schule des Aristoteles, Texte und Kommentare VII: Herakleides Pontikos* (Basel 1953), each followed by my own English translation.

(fr. 91) Proclus, *In Platonis rem publicam comment.* II. p. 121, 26 Kroll: εἰσὶν καὶ ἔσονται πολλαχοῦ γῆς τῶν θείων καὶ ταῖς αἰθήσεσιν ἡμῶν ἀλήπτων ἐξηγηταὶ κατὰ τινὰς θείας τε καὶ δαιμονίας ἐπιπνοίας· οἱ μὲν μετὰ τοῦ σώματος τῶν τοιούτων ἱστορεῖς, ὥσπερ Ἐμπεδοτίμον λόγος, οἱ δὲ ἄνευ σώματος, ὥσπερ τὸν Ἀθηναῖον Κλεώνυμον· καὶ πλήρεις αἱ παραδόσεις τούτων. εἰ δὲ <μὴ πλείονες> εἰσὶν αὐτοπτικά τῶν ὄντων <έν> ἡμῖν καταλήψεις, οὐδὲν θαυμαστόν· <σώμα>σι γὰρ χρώμενοι καὶ τούτοις ἐνύλο<ις> ὀλίγοι καὶ ἐν πολλῷ χρόνῳ τούτων ἀπολαύειν ἄνθρωποι δύνανται,...

There are and will be those in many places of the earth who interpret matters divine and inaccessible to our senses in accordance with inspirations both divine and demonic. These interpreters fall into two groups: those who recount what they have physically experienced, as is reported of Empedotimus, and those who recount what they have learned without benefit of their own bodies, as is reported by Cleonymus of Athens. Concerning each group, moreover, there exist full-bodied traditions. Not surprisingly, there are fewer reported instances of the first kind. For human beings who can experience matters divine through their bodies, i.e., their physical selves, are few and chronologically far in between.

(fr. 93) Proclus, *In Platonis rem publicam comment.* II. p. 119, 18 Kroll: οὔτε τὸ θείας ἀλ(η)θείας τυχεῖν ἀδύνατον ψυχὴν ἀνθρωπίνην τῶν ἐν Αἴδου πραγμάτων καὶ ἀγγεῖλαι τοῖς ἀνθρώποις. δηλοῖ δὲ καὶ ὁ κατὰ τὸν Ἐμπεδοτίμον λόγος, ὅν Ἡρακλείδης ιστόρησεν ὁ Ποντικός, θηρῶντα μετ' ἄλλων ἐν μεσημβρία σταθερᾷ κατὰ τινὰ χώρον αὐτὸν ἔρημον ἀπολειφθέντα λέγων τῆς τε τοῦ Πλούτωνος ἐπιφανείας τυχόντα καὶ τῆς Περσεφόνης καταλαμφθῆναι μὲν ὑπὸ τοῦ φωτὸς τοῦ περιθέοντος κύκλῳ τοὺς θεούς, ἰδεῖν δὲ δι' αὐτοῦ πᾶσαν τὴν περὶ ψυχῶν ἀλήθειαν ἐν αὐτόπτοις θεάμασιν.

It is not impossible for the human soul to reach the divine truth concerning its (sc. posthumous) fate in Hades and to report it to its fellow-human beings (sc. while yet alive). Witness the story which Heraclides of Pontus tells of one Empedotimus. While hunting with others he found himself alone at high noon in an empty place and told of witnessing (sc. then and there) an epiphany of Pluton and Persephone which caused him to be illumined by the light revolving in a circle about both deities and through it to see the whole truth concerning (sc. our) souls in the form of sights seen with his own eyes.

(fr. 94) Servius, *In Vergilii Georgica 1.34 comment.*: Varro tamen ait se legisse Empedotimo cuidam Syracusano a quadam potestate divina mortalem aspectum detersum, eumque inter cetera tres portas vidisse tresque vias, unam ad signum scorpionis, qua Hercules ad deos isse diceretur, alteram per limitem qui est inter leonem et cancrum, tertiam esse inter aquarium et pisces.

But Varro reports having read that one Empedotimus of Syracuse, upon finding his merely mortal powers of sight removed (sc. and enhanced) by some divine power, actually saw (sc. in the noonday sky), among other sights, three gates and three routes, viz., one set near and leading toward the constellation of Scorpius, where Hercules' apotheosis had reportedly occurred; a second set along the boundary between (sc. the constellations of) Leo and Cancer; and a third between (sc. the constellations of) Aquarius and Pisces.

(fr. 95) Olympiodorus, *In Platonis Phaedonem comment.* D 131, p. 238 Norvin: ὅτι τριττῇ τῆς γῆς ἡ διαίρεσις, ἡ μὲν κατὰ τοὺς τρεῖς Κρονίδας· 'Ξυνη' γὰρ αὐτῶν καὶ ἡ γῆ καὶ ὁ οὐρανός, φησὶν Ὅμηρος (O 189), εἰ δὲ κοινῇ, δῆλον ὅτι μερίζοιτο ἂν εἰς αὐτούς, καὶ εἴ γε μὴ ὁ Ποσειδῶν ἦν ὁ λέγων καὶ τὴν ἑαυτοῦ ἀρχὴν διαιρῶν, ἀλλ' ὁ Ζεὺς, πάντως ἂν εἰς τρία διένειμεν τὸν οὐρανόν, ὡς ὁ Ἐμπεδοτίμου λόγος, ἑαυτῷ τὴν ἀπλανῆ, τῷ Ποσειδῶνι τὰς μέχρι ἡλίου σφαίρας, τῷ Πλούτωνι τὰς λοιπὰς. ἡ δὲ ἐστὶ διαίρεσις τῆς 'γῆς' κατὰ τὸ πᾶν, εἰς τὸ οὐράνιον καὶ χθόνιον καὶ μέσον· καὶ γὰρ ὀλυμπία γῆ τετίμηται καὶ χθονία, καὶ μέση ἄρα τις ἂν εἴη.

There are two ways of taking the tripartition of the earth. One alludes to its tripartition among Kronos' three sons. For Homer (*Il.* 15.189) speaks of earth and sky as 'jointly' held by them. But if earth and sky were jointly held, it is clear that they had been divided among them, even if Homer had not made Poseidon but Zeus both speaker and divider, the latter—as Empedotimus' account implies—dividing the whole universe into three parts, viz., allotting to himself the fixed stars, to Poseidon the (sc. planetary) spheres (sc. reaching from that of Saturn) to (sc. that of) the Sun, and to Pluton the remainder (i.e., from the Moon's sphere to the Earth). Another way of understanding the three-fold division of the earth is by reference to the whole universe, i.e., into (sc. three concentric zones,) a celestial, a terrestrial, and an intermediary zone. Which implies the triple honor of an "Olympian," an "earthly," and an "intermediary" earth.

(fr. 96) Iohannes Philoponus, *In Aristotelis Meteora 1 8 comment.* p. 117 Hayduck: Δαμάσκιος τὴν Ἐμπεδοτίμου περὶ τοῦ γάλακτος (sc. ὑπόθεσιν) οἰκείουται, ἔργον αὐτὴν οὐ μῦθον καλῶν. φησὶ γὰρ ἐκεῖνος ὁδὸν εἶναι ψυχῶν τὸ γάλα τῶν τὸν Αἴδη τὸν ἐν οὐρανῷ διαπορευομένων.

Damascius appropriates Empedotimus' theory of the Galaxy, terming it fact not myth. For he says that the Galaxy is the route by which (sc. our) souls (sc. posthumously) traverse the celestial Hades.

Works Cited

- Bidez, J. 1945. *Eos*. Brussels.
- BLA = Bouché–Leclercq, A. 1899. *L'Astrologie Grecque*. Paris. (reprt. 1963.)
- Boll, F. 1903. *Sphaera*. Leipzig.
- _____. 1950. *Kleine Schriften*. Leipzig.
- Buffière, F. 1956. *Les Mythes d'Homère et la Pensée Grecque*. Paris.
- Cherniss, H. C. 1944. *Aristotle's Criticism of Plato and the Academy*, vol. I. Baltimore.
- _____. 1945. *The Riddle of the Early Academy*. Berkeley.
- DeSantillana, G. and H. von Dechend. 1969. *Hamlet's Mill*. Boston.
- Dieterich, A. 1893. *Nekyia*. Leipzig.
- Edelstein, L. 1936. "The Philosophical System of Posidonius." *AJP* 57: 286-325.
- Frank, E. 1932. "Die Begründung der modernen Naturwissenschaft durch Eudoxus"=*Wissen, Wollen, Glauben*, ed. Edelstein. Zurich, 1955.
- Gundel, W. 1922. *Sterne und Sternbilder im Glauben des Altertums und der Neuzeit*. Leipzig.
- Guthrie, W. K. C. 1978. *A History of Greek Philosophy V: The Later Plato and the Academy*. Cambridge.
- Heath, T. L. 1913. *Aristarchus*. Oxford. (Dover reprt. 1981.)
- Kerényi, K. 1923-24. "Astrologia Platonica." *Archiv für Geschichte der Religionswissenschaft* 22: 245-56.
- Nilsson, M. 1950. *Geschichte der griechischen Religion*, vol. II. Munich.
- Reiche, H. A. T. 1989. "Fail-Safe Stellar Dating: Forgotten Phases." *TAPA* 119: 37-53.
- _____. 1971. "Myth and Magic in Cosmological Polemics: Plato, Aristotle, Lucretius." *RhM* 114: 296-329.
- Rohde, E. 1921. *Psyche*, 8th ed. Tübingen.
- Taylor, A. E. 1928. *A Commentary on Plato's Timaeus*. Oxford.
- Vlastos, G. 1975. *Plato's Universe*. Seattle.
- Waerden, B. L. van der. 1949. "Babylonian Astronomy II : The Thirty-Six Stars." *JNES* 8: 24-26.
- _____. 1974. *Science Awakening II: The Birth of Astronomy*. Leyden–New York.
- Wilamowitz, U. von. 1959. *Glaube der Hellenen*, 3rd ed. Darmstadt.