



EMMA GEE

MAPPING THE AFTERLIFE

FROM HOMER TO DANTE

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For Robin

no last words, my love
no grave
only my pain
and your absence from it.
may this book be my offering
and your memorial

*beyond all blessings and hymns
praises and consolations
that are ever spoken in the world*

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Preface and Acknowledgments

This book is the slow fruit of almost twenty years of interruptions, with its genesis in Exeter at the beginning of my career, where I was also fortunate to have as a colleague Chris Gill, a shining light of humanity in the murky world of the Academy. Some of the research for the book was completed between the years of 2010 and 2012 with the support of the Leverhulme Trust and the Loeb Foundation. I am grateful to these charitable bodies for recognizing that what is needed for good writing is uninterrupted time.

My thanks in particular to colleagues who have had enough faith in me to help me during my academic career: aside from Chris Gill, I would like to thank Greg Woolf especially; also Frances Muecke, Peter Wilson, Denis Feeney, Richard Hunter, Michael Reeve, Peter and Ann Wiseman. Thanks to those who have encouraged me in recent times, in particular Nicolas Wiater. Thanks to the people who have commented on parts of the manuscript and/or allowed me to read their work, published and unpublished: Chris Gill, Stephen Halliwell, Andrew Barker, Stefan Hagel, Simon Trépanier, Christopher and Adele Rathbone. Thanks to the editors at OUP New York, in particular Stefan Vranka, the world's best editor, and to the readers for the Press; and to Mary Woodcock Kroble, who made the musical diagrams in chapters 5 and 6.

My gratitude and admiration goes to my son Hal, who has survived his childhood against the backdrop of his mother's distraction and who is now happily following his own trajectory in the world of Number. Love and gratitude to my dear friends Gillian and Miranda; to Donald MacEwan; to Jonathan Sperber, my Virgil.

This book is dedicated to the memory of Robin, who passed away on May 18, 2017. Many of the titles and epigraphs littered around in this book (like the found images and words in his work) are mementos of our conversations. He made me understand the connections between things; also that there are some connections that can't be understood.

Note on Translations

This book is for readers both with and without the ability to read Greek, Latin, and Italian. The primacy of the text is the fundamental principle of this book: therefore it presents a great deal of text. This must be accessible. I have used readily available translations to make it easier for readers to calibrate the texts to the translations. Where practical I have used the Loeb translation; if a good, more recent translation is available I have used that (for instance, Zeyl 2000 for Plato's *Timaeus*, with useful notes). The provenance of a translation is always specified at the first appearance of that text. Where there is no translation of a text, I have made my own; where archaisms are so strong in the Loeb text as to render it foreign to contemporary readers, or (rarely) where I want to bring out a particular meaning, I have modified the published translation [with modifications in square brackets]. If I have not followed the Loeb text for the Greek or Latin, I have specified the edition in a note. Where significant I have specified the edition of the original text.

Introduction

The unconscious . . . is universal: it not only binds individuals together into a nation or race, but unites them with the men of the past and with their psychologies.

—C. G. Jung, *Symbols of Transformation*

There are, it seems to me, two contradictory phenomena in relation to death and the afterlife. On the one hand, we deny death: “We ignore the existence of a scandal that we have been unable to prevent; we act as if it did not exist, and thus mercilessly force the bereaved to say nothing.”¹ On the other, efforts to speak about, and therefore control, death surface in the flowering of scholarship on the afterlife, “eschatology.”² It is as though through scholarship we seek to fill a silence we otherwise impose.

A certain hesitancy might also result from the idea that the afterlife is the province of religion. As Western intellectuals, we congratulate ourselves that we have moved on. Those of us who are not theologians (and some who are) tend to regard religion from a great height, as an “area for study,” not as a thing to color our perceptions. To characterize the afterlife as a province of “religion” or “religious history” is to diminish its significance, to exploit it as a statement of our distance from societies and sects that still *have* an afterlife.

But we too have our eschatologies. It’s just that ours are scientific and psychological ones—scientific ones such as “biocentrism”;³ psychological ones which allegorize the underworld as the unconscious.⁴ This is precisely the area that interests me in this book. I frame my inquiry in psychological, rather than religious, terms. At the fundamental level the afterlife is about the nature of the human entity. The afterlife speaks about the nature of the soul—what we call the Self—*now*: it penetrates every moment of life.

¹ Ariès (1983a): 613–14.

² Ratzinger (1988): 2–3 speaks of “the revolutionary invasion of a new eschatological awareness into Biblical studies”; he accounts for it by “the emerging crisis of European civilization.”

³ E.g. Lanza (2009).

⁴ See Gee (2017) on Freud’s assimilation of the underworld to the unconscious.

Constructing a space in which the afterlife is supposed to happen is also a way of thinking about the world. It is a space based on “reality,” but it is also an imaginative zone that can be filled as we wish. The elements in it, while connected to “reality,” can be related to one another in ways that are not possible in the “real” world, even if such relationships seem mutually contradictory.⁵

The afterlife is the fictive space we create for the joining of things. It is the space where we imagine the distillation of many sense-impressions into one abstract truth; it is the opening of the sluice gates between the senses, the telescoping of discursive and summative visions of space, the fitting of soul to universe.

1. First Principles

(i) No Heaven or Hell

There is no “heaven” and “hell” dichotomy in the Classical afterlife: we ought to discard these Christianizing concepts at the outset. They represent “a simplistic and dangerous evaluative schema, . . . a binary move which restricts both inquiry and action.”⁶ There is no terminological or spatial equivalency of “Elysium” and “Tartarus” with “heaven” and “hell”; nor is there, in the Classical tradition and even after, any infallible rule by virtue of which Tartarus as a zone of punishment is always under the ground, with Elysium as a region of happiness its opposite in the heavens above. Tartarus may be the bottom layer of a stratified universe; it may be the center of a spherical earth, the earth itself, or even the sun;⁷ Elysium may be under the ground, at the ends of the earth, or in the moon.

The categories of up and down are labile throughout the afterlife tradition. From the first chapter, we see that it’s possible for Herakles in Homer’s *Odyssey* to be simultaneously *both* “up” and “down.” Even in eschatological myths such as the Myth of Er in Book 10 of Plato’s *Republic*, which incautious

⁵ “Mythical space is an intellectual construct. It can be very elaborate. Mythical space is also a response of feeling and imagination to fundamental human needs. It differs from pragmatic and scientifically conceived spaces in that it ignores the logic of exclusion and contradiction” (Tuan 1977: 99).

⁶ Nightingale (2002): 241.

⁷ In his *Enquiry into the Nature and Place of Hell* (London 1714), Tobias Swinden reproduces the standard diagram of the Copernican (heliocentric) universe—in which, however, the sun is labeled “Tartarus.” His book is devoted to explaining, in highly rational terms, using Copernicus, why the sun is the location of hell.

readers may read as prefiguring a heaven-hell division, the categories of “up” and “down” have no absolute moral authority. Souls congregate first in the “meadow,” whence they are sent according to their acts in life either to a place underground or to a place in the heavens. But these places are permeable. Next time around, the same souls may go to the opposite place; good choices may be followed by bad choices in life, and this may be reflected in an eschatological interchange. In fact, it is more likely that those who’ve chosen a good life previously, and led a sheltered existence, will naïvely choose a bad life next time. The passage of souls between upper and lower destinations is fluid.⁸ This fluidity of movement in space is strikingly exemplified at *Rep.* 621b2–3, where souls dart “upwards to their birth,” ἄνω εἰς τὴν γένεσιν, “like shooting stars” ἄττοντας ὥσπερ ἀστέρας. Plato here creates an extraordinary metaphor of simultaneous rise and fall—the ethical “fall” involved in incarnation, the fall of a star, combined with a stratigraphic movement upward in the universe. In the afterlife, the very idea of “up” and “down” as moral and spatial absolutes is challenged.⁹

(ii) Two Kinds of Space

If there is no heaven or hell in the ancient afterlife, there *is* a spatial dichotomy of a different kind. Afterlife texts contain, as a rule, not one but two kinds of space. The first is linear space—a journey through afterlife terrain, the horizontal progression of the narrative. The second is circular or bounded space, a vision of the universe placed inside such a journey, most often with its emphasis on the vertical disposition of space. The combination of these two kinds of space is what I call the “journey-vision” paradigm of afterlife space. This is a constant element in the representation afterlife space, to be found *mutatis mutandis* across our texts. It is a *defining feature* of the afterlife.

Scholars characteristically work on one part of the afterlife tradition. From this perspective, the presence of two different models of space in an individual text can look like an anomaly. So for instance Austin, commenting on the vision presented in the Speech of Anchises in Virgil, *Aeneid* 6, complains: “Virgil, through Anchises’ exposition, has deliberately

⁸ Cf. Nightingale (2002): 228, vis-à-vis Plato’s *Phaedo*: “Although Plato clearly privileges the high over the low, his insistence on the variegation of the regions on the surface of the earth and in its hollows disrupts, to some extent, this rigid hierarchy.”

⁹ On the categories of up and down, see pp. 285–89.

questioned, even perhaps rejected, the whole conception of the world of the dead through which Aeneas has been led by the Sibyl, making the very notion of a *κατάβασις* [*katabasis*, i.e. descent to the underworld] seem incongruous”.¹⁰ Austin’s is a standard commentary on a seminal afterlife text: his verdict gives the impression to a wide audience that the presence of different modes of space—afterlife journey, cosmological vision—is an “incongruity”. Once you look across the whole tradition, however, you find that this is not the case. The combination of the two modes of spatial representation, far from being incongruous, is *characteristic* of the tradition. Once we have established this, we have to ask why.

(iii) The Afterlife and the Universe

The underworld is the world of the soul; the cosmos, the world of “science.”¹¹ In afterlife narratives, the journey represents the underworld as the space of the *soul*. The vision, on the other hand, appertains to the *cosmos*. The journey-vision paradigm of afterlife space is present throughout the tradition. In Virgil’s *Aeneid*, Anchises expounds the nature of the cosmos in a revelation (see chapters 2 and 4); in Claudian’s *De raptu Proserpinae* (chapter 3), the vision of the universe is expressed in the form of an *ekphrasis* (description of a work of art). In the *Somnium Scipionis* (*Dream of Scipio*, chapter 5) Cicero provides us with a twofold revelation: a visual one (the zones of the earth) and an auditory one (the harmony of the spheres). We see the vision of the True Earth in Plato’s *Phaedo* (chapter 8), the vision of the Spherical Universe in Plato’s *Phaedrus* (chapter 7), and the “Spindle of Necessity” in Plato’s *Republic* (chapter 6). In Plutarch’s *De facie in orbe lunae* (*On the Face in the Moon’s Disc*, chapter 9) the vision of the moon takes the role of Plato’s vision of the True Earth; and in Dante’s *Paradiso* (chapter 10), we see the universe in its medieval totality, a complete but problematic vision.

The vision is not static: it absorbs “scientific” developments. Each of the visions just mentioned reflects the state of cosmological knowledge of its time. The vision is where the afterlife narrative expands to accommodate more and more ambitious and complex ways of thinking about the world.

¹⁰ Austin (1977): Introductory note on *Aeneid* 6.724–51, p. 221.

¹¹ The terms “science” and “scientific” are always placed in quotation marks to indicate their anachronism in the ancient context: see further Gee (2011). By “science” I mean here, broadly speaking, speculations pertaining to the structure and makeup of the natural world.

All of these visions have a parallel function in the afterlife context. What, then, is the function of the vision? In my view it speaks to the desire to accommodate the afterlife to the universe of “science.”

(iv) Psychic Harmonization

If an evolutionary model made sense when applied to afterlife space, the linear journey would have become gradually attenuated until it dwindled out of sight. It does not do this: it endures. The conceptual obsolescence of the mythical model of the universe does not mean the end of the idea of an afterlife. Why this stubborn desire to retain, in the afterlife tradition, both the epic journey of the soul and the cosmological vision of the universe? First, because it's necessary, at any point, to construct the afterlife as a plausible world. In constructing imaginative space, you have to take the known world as your starting point: “The visible and known allows the poet to frame a conception of the invisible and unknown.”¹² Scientific paradigms of the world are therefore adapted to the afterlife journey. But that's not to say the world of the afterlife should be read as “real.” The afterlife is, and is not, like the world we know. It walks the line between real and imaginary. The afterlife is the shadowland where science and soul meet.

The arc of continuity across the texts studied in this book, from Homer to Dante, is the creative and ongoing process of interaction between the journey and vision in afterlife space. Looking right across the tradition, we begin to realize that what has been read as the occurrence of two disharmonious types of space in these accounts is really a harmonization, a bringing into line of the physical world as understood at any given time, with the achronological world of the soul, represented by the afterlife landscape. The afterlife journey becomes an attempt to harmonize the soul with the universe, as understood through the vision.

The need to construct the afterlife using the materials of the cosmos is not unique to a particular group of texts nor to one period, language, or culture. The afterlife is a negative or mirror image of the view of the world available in any particular context. This is because the desire for psychic harmonization is, in my view, a *psychological constant*. The desire to align soul and universe

¹² Clay (1992): 144. Cf. Nightingale (2002): 224: “The eschatological narrative . . . dislocates its audience by revealing an otherworldly reality which is, in some way, linked to human life.”

is a human, not just a Classical or medieval, desire. In this book, I explore the soul-universe nexus through Classical and Medieval afterlife texts; there are, potentially, many other texts that could be drawn in to the inquiry, and many other ways of conducting it.

2. Old Wineskins

Meanwhile it's time for some "bursting of old wineskins," to borrow a phrase from a pope.¹³ The oldest, fattest, and most enduring wineskin in afterlife scholarship is Christianity. With few exceptions, from the beginning to the end of the period I will survey, afterlife scholarship is bedeviled by an approach to the subject that places it in a genealogical relationship with Christian ideas of the afterlife. Explicitly or implicitly, Classical ideas of the afterlife are read as "leading up to" Christian ideas of the afterlife that are also, in many cases, assumed to be "ours."

The roots of the science of eschatology lie among the humus and debris of nineteenth-century philology. This was an era in which biblical studies provided a starting point for explorations of the origins of Christianity that often ranged far outside the Christian context. Dieterich (1893) exemplifies the beginning of our tradition. Dieterich's is a study of an early Christian text, the *Apocalypse of Peter*, which takes the form of a Classical *katabasis*, or descent to Hell.¹⁴ He constructs a history for the *Apocalypse of Peter* through the compilation of earlier sources thought to have influenced it; in so doing, he writes a history of the Classical afterlife. Dieterich's history begins with the earliest Greek thought and leads up to the *Apocalypse of Peter* as its point of culmination. The study of Classical afterlife is in this way annexed to biblical studies: the Christian tradition becomes its *telos* (goal). We'll see in a moment that this has not substantially changed in the intervening century or more.

Works of scholarship reflect trends of thought current in their own time. Just as Dieterich reflected biblical studies as the accepted idiom of scholarship, so also Rohde (1925) and Cumont (1949) reflect contemporary ideas.

¹³ Ratzinger (1988): 2.

¹⁴ The *Apocalypse of Peter* is an early apocalypse that survives in Greek and Ethiopic versions. The Greek text was discovered at Akhmim in Egypt in 1886–87, hence it is also known as the Akhmim Apocalypse. It is considered part of the Apocrypha (the "unofficial" Christian scriptures): see further Le Goff (1984): 33–34, and Bremmer (2003). For a translation see James (1924).

Rohde's study of the soul in the Classical tradition covers the period from Homer to Plato. Comparative mythology, that *enfant terrible* of nineteenth-century ethnography, informs the thought-world of the book.¹⁵ Rohde adheres to an evolutionary model of the cult of the soul that moves from primitivism toward a notional high point of civilization. This high point is quite specific. It is, for Rohde, only Christianity that, in the end, can salvage some of the old greatness of Greece—Christianity that becomes the repository of Hellenism: “And yet—was Greece quite extinguished and dead for ever? Much—only too much—of the philosophy of its old age lived on in the speculative system of the Christian faith. And in the whole of modern culture so far as it has built itself upon Christianity or by extension from it, in all modern science and art, not a little survives of Greek genius and Greek inspiration. The outward embodiment of Hellas is gone; its spirit is imperishable.”¹⁶ Having largely avoided Christianizing teleology up to this point in the book, Rohde introduces it at the very end.

Similarly Cumont's *Lux perpetua* (1949). The ambit of Cumont's book is vast, stretching from the earliest Indo-European times to the Neoplatonism of late antiquity. It ends with a flight of oratory: “Beatific vision of the glory of god, simultaneous perception of all truth, mystic love of ineffable beauty: these are the sublime speculations which would be reproduced and developed indefinitely after the fall of Paganism.”¹⁷ We look, here, to what comes after the fall of “Paganism” as the savior of these “sublime speculations”: this can only be Christianity.

However—and herein lies the true value of this book for my own study—Cumont postulates another influence on the development of the afterlife: “On the other hand, this eschatology underwent the influence of scientific theories which were already current: those who subscribed to it sought to make it agree with progress in astronomy.”¹⁸ According to Cumont, ideas of the afterlife were uniquely mixed, in the Greek tradition, with scientific thought, to produce “une eschatologie scientifique” (“a scientific eschatology,” p. 156). In other words, the afterlife is a measure of how we see the upper world: in this sense, Cumont's study remains fundamental.

¹⁵ For instance, Rohde (1925) invokes the Teutonic sagas (p. 93) and a roll call of primitive “medicine men” (p. 262) to shed light on the Classical tradition.

¹⁶ Rohde (1925): 548–9. On the myth of an ideal Hellenism see Hanink (2017).

¹⁷ “Vision béatifique de la splendeur de Dieu, perception immédiate de toute vérité, amour mystique de la Beauté ineffable, voilà les sublimes spéculations qui devaient être indéfiniment reproduites et développées après la chute du paganisme,” Cumont (1949): 386, my translation.

¹⁸ “D'autre part cette eschatologie subit l'influence des théories scientifiques alors admises: ses tenants cherchèrent à la mettre d'accord avec les progrès de l'astronomie,” Cumont (1949): 155.

You might imagine that Christianizing readings of the Classical afterlife would have been superseded in recent scholarship. This is not so, however. Bremmer (2002) demonstrates their tenacity. Bremmer's starting point is Christianity: "*Taking our start from Christian belief in the resurrection of Christ . . .*"¹⁹; in his view, "*Our ideas about the afterlife are part of the legacy of Christianity*" (my emphasis). For him, "the pre-Christian era" is the "necessary background" against which his chapters on Christianity have to be seen.²⁰ Likewise, Casey (2009) draws a line that extends from Homer to Virgil to Christianity; at its end point is the Christian *telos*: "It is with Christianity that the doctrines of heaven and hell reach their full development."²¹ Casey's agenda is apparently to rehabilitate the Christianizing approach to our Classical afterlife texts.

Christianity remains a key point of orientation in contemporary scholarship. For instance, Mihai (2015) is a relentless working out of the theory that there was a "pagan" purgatory that anticipated the Christian one. Throughout the extensive volume, Mihai's agenda is to defend purgatory as a doctrine of the Catholic Church, by arguing that the "doctrine" of purgatory existed in antiquity.²² Mihai's argument is a response to Le Goff (1984).²³ Le Goff argued that the origin of Christian purgatory lay in the twelfth century and that it was invented by the church. In Le Goff's view, the contribution made by Classical accounts of the afterlife was minimal: "The theme of the descent into the underworld is virtually the only contribution to Christian imagery of the hereafter made by the ancient Greeks and Romans."²⁴ For this reason, there are only five pages in his book devoted to the Classical tradition. Mihai, on the other hand, works with a mass of Classical sources. This mass of sources obscures the fact that there *isn't* a "doctrine" of purgatory, as such, in antiquity. If nothing else, Mihai's book illustrates the way in which the Christianizing approach can distort one's argumentation.

Nonetheless, it is a remarkable fact that various forms of Christianizing teleology subsist even in the most recent works. For instance, the collection of Marlow, Pollmann, and van Noorden (2020) is structured around a line of succession from the ancient Near East via the Hebrew Bible and Second Temple period, the Hellenic world and the Roman world, to the late antique world.

¹⁹ Bremmer (2002): 55.

²⁰ Bremmer (2002): 1.

²¹ Casey (2009): 103; cf. p. 21.

²² See Mihai (2015): 397.

²³ For Mihai's analysis of Le Goff see Mihai (2015): 19–20 and 40–42.

²⁴ Le Goff (1984): 20.

It would be only fair to add that there are a few works that are not constructed on the Christianizing paradigm. These, however, tend toward their own methodological obsessions. The theoretical basis of Edmonds (2004), for instance, is Marcel Detienne's idea of cultural *déviance*.²⁵ The roots of his book lie firmly in structural anthropology. Apart from Detienne, Edmonds has recourse to J. Z. Smith, to Mikhail Bakhtin, and to Claude Lévi-Strauss' concept of *bricolage* (*The Savage Mind*, 1966).

I'm sure that my book will not be exempt from charges of monomania or selectivity. But mine is, I hope, a nondogmatic approach to the texts. I recognize the wildly varying nature of my textual material; at the same time, I recognize that the common ideas we find in the texts may be the work of common psychology. As a rule I reject the "comes from" approach of source criticism, and above all, I deliberately eschew the Christianizing approach. I do not believe the Classical afterlife should be interpreted through the lens of Christianity, or the "Judeo-Christian tradition."²⁶ My interest is the *topography* of the afterlife—how you conceive of it as a *space*, to be defined in ways that can be visual, auditory, or intellectual.

3. Route Map

From the earliest times, scholars have complained of "inconsistencies" in the constructions of the afterlife. As we've seen already, representations of afterlife space have often been seen as composed of two (or more) different kinds of space. The problem is not so much spatial inconsistency in representations of the afterlife as the desire of commentators that the afterlife should be one thing rather than a plurality of things. So in Part 1, "Dualities," each chapter focuses on some kind of dichotomy connected with afterlife space.

Chapter 1 focuses the idea of dichotomy through the character of Herakles in Homer's *Odyssey*, Book 11. Herakles has a dual identity: his *eidōlon* ("image") speaks to Odysseus in the underworld, but his "self," his *autos*, he tells us, is with the gods. From the earliest times, scholars have

²⁵ See Detienne (1975).

²⁶ On the "myth" of a Judeo-Christian tradition see Nathan and Topolski (2016): 3. Arthur Cohen asserted that "this term is anti-Semitic" (1971): 9. Moyaert (2016): 160 notes the euphemistic nature of the term: "The notion of a Judeo-Christian tradition seems to express a rather harmonious bond between both traditions that covers up the historical reality of violence against Jews." Any time we come across the phrase "Judeo-Christian tradition" a warning flag should pop up: at the very least it signals a particular type of narrative.

found Herakles' dual existence hard to swallow and have activated various strategies to make it more palatable. But, you could say, Herakles is *revealingly* divided. His two identities rapidly and economically map the extremes of the universe.

Chapter 2 questions the dichotomy between "real" and "imaginary" in afterlife space. We discover that the idioms of mapping space that we see in Virgil, *Aeneid* 6, are common across various textual and artistic representations of space; and, more surprisingly perhaps, across representations of "real" and "imaginary" space. Chapter 3 works with further spatial dichotomies, as they are seen in Claudian's *De raptu Proserpinae* (*The Rape of Proserpina*), a work of the fourth century CE. In the tapestry that the goddess Proserpina is imagined as weaving, we are faced with several simultaneous representations of space: *oikoumene* (inhabited world) and globe, spherical and stratified visions of the world. These ways of seeing space are not necessarily mutually harmonious. But their coexistence makes the tapestry into a nest of spatial possibilities, reflective of the afterlife narrative as a culmination and repository of all available ways of seeing space.

Part 2, "Cosmos," begins in Chapter 4 with another problem of "inconsistency" in Virgil, *Aeneid* 6. It seems on first reckoning that the celestial afterlife which Aeneas' father Anchises expounds from *Aen.* 6.724 onward cannot be reconciled with the underworld setting that precedes it (cf. pp. 3–4). Scholars' strategy has long been to deploy allegory to reconcile the two locations. The same strategy of allegory lies behind interpretations of Dante's *Paradiso*; but in this case Dante systematically builds allegory into his own text. In Dante, it is "as though" souls are seen distributed about the heavens; when, in fact, "in reality" they are all concentrated in one part of the universe, the Empyrean, invisible and intangible. They are shown to be among the stars only for didactic purposes. For Dante, the structure of the universe is, overtly, a way of talking about the nature of soul.

In some afterlife narratives, music, rather than place, appropriately becomes the functional allegory for talking about harmony between soul and universe. The notion of the "harmony of the spheres" is an important element in the eschatological tradition. This involves the *auditory* "map" of the universe, the system of planetary intervals by which it makes its sound. Chapter 5 is the first of two musical chapters that together present a new reading of the harmony of the spheres as an eschatological motif.

What is this universe with which our souls strive to become harmonious? This is the question discussed in the Intermezzo, the theoretical nub of the

book. Regular circular motion is the fundamental principle of the Classical universe.²⁷ Irregularity is ascribed to anything that partakes of the six rectilinear motions, back/forward, up/down, left/right. But these apparent irregularities could be shown to be regular when absorbed into longer cycles. Order ripples out to subsume larger and larger areas of disorder. The soul is implicated in this expansion of order in the universe.

Against this background, Part 3, “Plato’s Soulscapes”, takes three of Plato’s so-called eschatological myths, those of the *Republic*, the *Phaedrus*, and the *Phaedo*. In each of the dialogues studied there’s an interplay of journey and vision. In each case, the vision draws on a particular area of “scientific” knowledge. In each case, too, “scientific” information becomes, when pushed to its limit, a stepping-off point for speculation about the true nature of the connection between soul and universe. Chapter 6 picks up the study of the harmony of the spheres begun in Chapter 5. I suggest a radical new interpretation of the Spindle of Necessity in *Republic* 10. Chapter 7 also suggests a new interpretation, this time of Plato’s *Phaedrus*. Here we see how the “scientific” model of the spherical universe has been incorporated into Plato’s account of the soul and, in addition, how the *Phaedrus* marries the “scientific” idea of the spherical universe with a mystic vision. In Plato’s *Phaedo* (Chapter 8), journey and vision collapse into one another. We’re all on an underworld journey, all the time, since we inhabit the “creases” of the earth; but that underworld journey at the same time takes place around a vision, that of the True Earth. In this dialogue Socrates reworks natural science from the ground up, presenting, in the end, a redefinition of harmony itself, understood in the light of the world structure.

Plutarch’s second-century CE work *De facie in orbe lunae* (*On the Face in the Moon’s Disc*), studied in Part 4, Chapter 9, takes up the blueprint of Plato’s *Phaedo*. Plutarch’s *De facie* takes the form of a deconditioning: Plutarch reorganizes our notion of how the cosmos is structured. Furthermore, the human entity is now eschatologically implicated not only in the structure of the earth but in the whole cosmos.

Dante’s *Commedia* (Chapter 10) gives us perhaps the ultimate deconditioning. Dante explodes the Platonic notion that there is a divine template for the universe as we perceive it. For him, the universe is not a reflection of a more perfect original, as it is in Plato’s *Timaeus*, but its inverse, the inside-out

²⁷ With the exception, of course, of the universe of the atomists and Epicureans, which I treat elsewhere (see Gee 2020).

reflection of that original. Its relationship to the divine cannot be understood through perception. The vision of *Paradiso* XXVIII expresses the difficulty inherent in the human aspiration of harmony between soul and universe. True harmony, for Dante, remains unspeakable. The extended eschatology that is the *Commedia*, is, for him, a didactic vision only; the universe that forms the arena for it is an illusion produced by our inferior understanding.

Dante's poem reaches toward a truth. In this sense it's a true eschatology: a striving toward an end. Its final aspiration is, to borrow Dante's term, "transhumanization" (*Par.* I.70), transcending the human: the arrival at an ideal state of one-from-many, the complete merging of soul and universe.

You might say that this is the aspiration of all afterlife narratives. The transhuman state can be worked toward and explored in afterlife narratives—and *only* in afterlife narratives, since ultimately, it can never be pinned down in "real life." All afterlife narratives succeed, in their different ways, in expressing the *difficulty* of achieving that fundamental aspiration of harmony between soul and universe.

In this book I have chosen my texts to represent particular stations in the period from Homer to Dante, not necessarily in strictly chronological order. The texts presented here are like an island chain formed from the peaks of a submerged mountain range. Our archipelago takes a certain form. It's not the only possible form. Many other texts could have been chosen for this kind of study, and I hope scholars who come after will build further bridges between the islands.

PART 1

DUALITIES

1

The Splitting of Herakles

Logic is not fruitful in the sphere of death.

—Emily Vermeule, *Aspects of Death in Early Greek Art and Poetry*

Introduction: Dialogues of the Dead

The scene is the underworld; dramatic date, outside time; the writer, Lucian, second century CE. The Cynic philosopher Diogenes (c. 412–323 BCE) meets the dead hero Herakles. Diogenes is surprised by what he sees (Lucian, *Dialogues of the Dead*, 11.1.1–5):

οὐχ Ἡρακλῆς οὗτός ἐστιν; οὐ μὲν οὖν ἄλλος, μὰ τὸν Ἡρακλέα. τὸ τόξον, τὸ ῥόπαλον, ἡ λεοντή, τὸ μέγεθος, ὅλος Ἡρακλῆς ἐστιν. εἴτα τέθνηκεν Διὸς υἱὸς ὢν; εἰπέ μοι, ὦ καλλίνικε, νεκρὸς εἶ; ἐγὼ γάρ σοι ἔθυσον ὑπὲρ γῆς ὡς θεῶ.

That's never Herakles!—No-one else, by Herakles! Bow, club, lionskin, bulk—it's totally Herakles! Has he died, then, even though he's the son of Zeus? Tell me, conquering hero, are you a dead person? I used to sacrifice to you on earth above, thinking you a god.¹

Diogenes uses the Homeric word for a dead person, νεκρός (*nekros*).² Diogenes' choice of word makes us think of the underworld in Homer. But Diogenes is astonished to see Herakles in the Homeric underworld. He asks him how this is possible; has he (Diogenes) been deluded all this time,

¹ Hereafter *Dialogues of the Dead* is abbreviated as *DD*. All translations of Lucian in this chapter are from MacLeod (1961), in some cases modified. The numbering is from MacLeod's text. For interpretation, see Relihan (1993): 42, 103–4; Pépin (1971): 173–74; on Lucian's various works concerning the afterlife see Bernstein (1993): 84–87. Cf. my comments on Plutarch's quotation of *Odyssey* 11.601–2 at *De fac.* 944F5–945A8 (p. 295 below).

² E.g., κλυτὰ ἔθνεα νεκρῶν, “the famous tribes of the dead,” *Od.* 10.526; *Od.* 11.475–76, νεκροὶ ἀφραδέες . . . βροτῶν εἰδῶλα καμόντων, “mindless dead, images of toiling mortals.” See further *LSJ*, νεκρός.

thinking Herakles a god? Herakles has a ready reply, straight out of Homer (*DD* 11.1.6–8):

καὶ ὀρθῶς ἔθυες· αὐτὸς μὲν γὰρ ὁ Ἡρακλῆς ἐν τῷ οὐρανῷ τοῖς θεοῖς
σύνεστι “καὶ ἔχει καλλίσφυρον Ἥβην,” ἐγὼ δὲ εἰδωλὸν εἰμι αὐτοῦ.

You’re quite right too. Herakles himself (*autos*) is in heaven with the gods, and “has Hebe of the beautiful ankles for his wife”; I am his image (*eidōlon*).

Herakles, in good antique dialogue style, quotes a line on Hebe from *Odyssey* 11 (line 603). The context is his own encounter with Odysseus in the underworld. This is how Odysseus described that encounter (*Od.* 11.601–4):

τὸν δὲ μετ’ εἰσενόησα βίην Ἡρακληείην,
εἰδωλὸν· αὐτὸς δὲ μετ’ ἀθανάτοισι θεοῖσι
τέρπεται ἐν θαλίῃς καὶ ἔχει καλλίσφυρον Ἥβην
παῖδα Διὸς μέγαλοιο καὶ Ἥρης χρυσοπεδίου.

And after him I became aware of the mighty Herakles—his phantom (*eidōlon*); for he himself (*autos*) among the immortal gods takes his joy in the feast, and has for wife Hebe of the beautiful ankles, daughter of great Zeus and of Hera of the golden sandals. (Murray 1995)³

Lucian’s Homeric quotation means that we are to know straightaway that Diogenes is to be the successor to Odysseus. There’s something special about this encounter in Homer: like a quantum atom, Herakles can be in two places at once.

It’s his *eidōlon* (“image”) that is in the underworld; the “real Herakles” (*autos*, “himself”) is with the gods. This is not an either-or situation: it’s a both-and scenario: Herakles is *both* in the underworld *and* with the gods.

A discussion follows as to which version of Herakles is the more authentic. Diogenes wonders how it came about that Herakles’ “self” is the one in the heaven. He impishly questions the proposition that the “real” Herakles is the one “with the gods.” Perhaps Hebe has really drawn the short straw and got the “fake” Herakles (*DD* 11.2.10–12):

³ All translations of *Odyssey* 11 in this chapter are from Murray rev. Dimock (1995). For commentary on these lines, see Heubeck and Hoekstra (1989): Introd. n. on *Od.* 11.601–27 and nn. on 601–4. For interpretation, see Rohde (1896): 624–31; Norden (1926) on Virgil, *Aen.* 6.477–93; Hooker (1980): 141–46; Crane (1988): 87–91; Sourvinou-Inwood (1995): 86–87; Tsagarakis (2000): 11n5.

ὄρα γοῦν μὴ τὸ ἐναντίον ἐστὶ καὶ σὺ μὲν εἶ ὁ Ἡρακλῆς, τὸ δὲ εἶδωλον
γεγάμηκεν τὴν Ἥβην παρὰ τοῖς θεοῖς.

But perhaps it's the other way round, and you are Herakles, and the wraith
(*eidōlon*) has married Hebe among the gods.

For Diogenes, this is about the body-soul relationship (11.3.4–8):

ἀτὰρ εἰπέ μοι πρὸς τοῦ σοῦ Ἡρακλέους, ὁπότε ἐκεῖνος ἔζη, συνῆς αὐτῷ
καὶ τότε εἶδωλον ὦν; ἢ εἷς μὲν ἦτε παρὰ τὸν βίον, ἐπεὶ δὲ ἀπεθάνετε,
διαίρεθέντες ὁ μὲν εἰς θεοὺς ἀπέπτατο, σὺ δὲ τὸ εἶδωλον, ὥσπερ εἰκὸς ἦν,
εἰς ἄδου πάρει;

But please tell me, in the name of your Herakles; when he was alive, were you
with him there too, as his wraith (*eidōlon*)? Or were you both one during his
lifetime, but split up when you died, Herakles flying off to heaven, while
you, his wraith, came here to Hades, as is only right?

Is the *eidōlon*—which we might think of as tantamount to the soul⁴—part
of the physical body, or is it a separate, surviving entity? Herakles replies,
somewhat testily, at *DD* 11.4.5, ὁ γὰρ αὐτὸς ἄμφω ἤμεν (*ho gar autos amphō ēmen*), “We were both the same person.” This seems to reiterate Homer’s
autos, “self.” The Homeric gesture has become twisted, however. *Autos* here
does not mean what it meant in Homer. There it meant “himself” in the sense
of “the actual one”; Lucian uses ὁ αὐτός (*ho autos*), with the definite article,
which means “the same.” In Lucian, the two aspects of Herakles’ identity are
on a par; they jostle for status.

Because of the simultaneous existence of Herakles’ two parts, Diogenes
compares him to a hybrid such as a centaur (*DD* 11.4.6–8):

οὐκ ἔστι μαθεῖν τοῦτο ῥάδιον, συνθέτους δύο ὄντας Ἡρακλέας, ἐκτὸς εἰ μὴ
ὥσπερ ἵπποκένταυρός τις ἦτε εἰς ἓν συμπεφυκότες ἄνθρωπός τε καὶ θεός.

That’s difficult to understand, two Herakleses fused together in a compound,
unless you were man and god fused together, like horse and man in a Centaur.

⁴ On the meanings of *eidōlon* in Homer, see for instance Rohde (1925): 5–8; Bremmer (1983): 78–82; Casey (2009): 69.

Herakles responds that it's not hard to understand, since in fact everyone is a soul-body hybrid: οὐ γὰρ πάντες οὕτως σοι δοκοῦσι συγκεῖσθαι ἐκ δυεῖν, ψυχῆς καὶ σώματος; “Well, don’t you think everyone is compounded of two parts, soul and body?” (DD 11.4.9–10).

The analogy makes Diogenes even more confused, since clearly neither the Herakles in the underworld nor his celestial avatar has a body (DD 11.5.1–3):

ἀλλ', ὦ βέλτιστε Ἀμφιτρυωνιάδη, καλῶς ἂν ταῦτα ἔλεγες, εἰ σῶμα ἦσθα, νῦν δὲ ἀσώματον εἶδωλον εἶ· ὥστε κινδυνεύεις τριπλοῦν ἤδη ποιῆσαι τὸν Ἡρακλέα.

“But, most excellent son of Amphitryon, you would be right enough, if you were a body, but in fact you are a bodiless wrath (*eidōlon*).

Herakles has no body in the present context: therefore there must in fact be *three* Herakleses (DD 11.5.3–4): one in the sky, one in the underworld (the *eidōlon*), and the body (σῶμα, *sōma*) that died on Mt. Oeta (DD 11.5.6–8).

Diogenes is justified in tripling Herakles on a Platonic analogy. In Plato's *Republic*, the soul is a hybrid (*Rep.* 588c2–5):⁵

τῶν τοιούτων τινά, ἣν δ' ἐγώ, οἷαι μυθολογοῦνται παλαιαὶ γενέσθαι φύσεις, ἣ τε Χιμαίρας καὶ ἡ Σκύλλης καὶ Κερβέρου, καὶ ἄλλαι τινὲς συχναὶ λέγονται συμπεφυκυῖαι ἰδέαι πολλαὶ εἰς ἓν γενέσθαι.

“One of those like the creatures whose nature is recorded in ancient myth,” I said, “such as Chimera, Scylla, and Cerberus, and the numerous other cases where many forms are said to have grown together (*sumpephukuiai*) into one.” (Emlyn-Jones and Preddy 2013)

Lucian seems to be supplementing his Homer with Plato. Diogenes' word for “compound” at DD 11.4.7 was συμπεφυκότες (*sumpephukotes*), “fused together,” like plants engrafted. This is the very same word Plato used for the parts of the soul at *Rep.* 588c5, there also in the perfect participial form συμπεφυκυῖαι (*sumpephukuiai*). By echoing the verb and its grammatical form, Diogenes gestures toward a picture of the soul in which Plato goes on to describe it as a three-part entity.

⁵ On Plato's soul see Howland (1993): 154.

Diogenes, in the time-honored way of scholars, combines more than one area of knowledge. His division of Herakles is influenced not just by the Plato's three-part analogy for the human soul, but also by what he's read in the Homeric scholia (the ancient commentaries on Homer).⁶ Here's what the scholia say about the divisions of Herakles, on line 602 of the Homeric passage:

ὅτι εἰς τρία διαιρεῖ, εἰς εἶδωλον, σῶμα, ψυχὴν. τοῦτο δὲ οὐκ οἶδεν ὁ ποιητής.
ὅτι αὐτοὺς τὰ σώματα αὐτῶν φησιν Ὅμηρος, οὐκ ἂν δέοι σώματος ἐν θεοῖς.

That [the individual] is divided into three—the *eidōlon*, the body and the soul—of this the poet was not aware. Homer says that their bodies are themselves, so there is no need of the body among the gods.⁷

The scholia second-guess, as it were, the original text. Like Lucian's Diogenes, the scholia seem to claim to know more than Homer himself. They add to the Homeric foundation a categorization of the human entity foreign to the original. According to the scholia, Herakles' place among the gods is problematic. If the *autos* is the same as the body, then what is it doing among the gods?

In fact, the Homeric concepts of *eidōlon* and *autos* are not at all straightforward. So at *Iliad* 23.103–4, Achilles remarks (vis-à-vis Patroclus' spirit):

... ἢ ῥά τις ἐστι καὶ εἰν Ἀΐδαο δόμοισι
ψυχὴ καὶ εἶδωλον, ἀτὰρ φρένες οὐκ ἐνὶ πάμπαν.

Even in the house of Hades there is something—spirit (*psyche*) and phantom (*eidōlon*)—though there is no mind at all (Murray rev. Wyatt 1999).⁸

Commentators gloss ψυχὴ (*psyche*) in this instance as “breath,” εἶδωλον (*eidōlon*) as “bodily form.”⁹ But how do these relate to the *autos* we've seen in the Herakles passage? At *Il.* 1.3–5, Achilles' anger “sent down to Hades many

⁶ On the ancient scholia as informing the views of ancient writers, see Hexter (2010): 28–30.

⁷ Homeric scholia on *Od.* 11.602, Dindorf (1855) vol. 2, 524–25, with my trans. On this passage of the scholia see further Pépin (1971): 168. Compare the Verona scholia on *Aen.* 6.81, Thilo (1887): 432: *in tria hominem dividit: animam, quae in caelum abit, umbram, quae ad inferos, corpus qu[od traditur] sepulturae*. The Homeric original was, of course, not meant to be understood in this way (see Pépin 1971: 183–85).

⁸ All translations of Homer's *Iliad* in this chapter are from Murray rev. Wyatt (1999).

⁹ Monro (1897) on *Il.* 23.103. On the concept of ψυχὴ see Albinus (2000): 41.

valiant souls (*psychai*), and made the men themselves (*autous*) to be the spoil for dogs and birds of every kind” (πολλὰς δ’ ἰφθίμους ψυχὰς Ἄϊδι προΐαψεν / ἡρώων, αὐτοὺς δὲ ἐλώρια τεῦχε κύνεσσιν / οἰωνοῖσι τε πᾶσι). In this case, *autos* surely means the body or corpse.¹⁰ On this precedent we would be led to interpret Herakles’ *autos* as his “corpse”; but there is no record elsewhere in Homer for the survival of the “corpse” in the heavens.¹¹

In *Od.* 11, then, his *autos* must be his “self” in the sense of his “true” soul. In fact, this is how it’s used by another author contemporary with Lucian, namely Plutarch, in his afterlife text, “On the Face in the Moon’s Disc” (*De fac.* 944F8–945A1; see pp. 294–95 below):

αὐτός τε γὰρ ἕκαστος ἡμῶν οὐ θυμός ἐστιν οὐδὲ φόβος οὐδ’ ἐπιθυμία,
καθάπερ οὐδὲ σάρκες οὐδ’ ὑγρότητες, ἀλλ’ ὃ διανοούμεθα καὶ
φρονοῦμεν . . .

In fact the self (*autos*) of each of us is not anger or fear or desire just as it is not bits of flesh either, but is that with which we reason and understand . . .

You might think of Plutarch’s use of *autos* to describe the “better part” of us as a product of the evolution of the concept of the self between the Homeric text and Plutarch’s time of the second century CE.¹² A term that meant “corpse” in Homer comes, over time, to mean “soul.” But this leaves us, still, with the problem of what it is that is in the heavens in Homer himself. Is the *autos* the body, or the soul?

1. Questions of Identity

The question of Herakles’ *autos* is a question of eschatology, not merely of language. Which parts of us are thought to survive? Where are they envisaged as going? Does this change over time? If Herakles is split between the underworld and the heaven, which one is “right”? What is more authentic, more “real”? What do we do with things that don’t “fit”?

Although these questions have emerged in the context of Lucian’s clever little satire, they are not child’s play. The questions Diogenes raises are the

¹⁰ Albinus (2000): 44.

¹¹ See Albinus (2000): 79–81, who describes the description of Herakles in *Od.* 11 as “astonishing.”

¹² On the evolution of the concept of the “self” see Gill (1996).

same ones that inform modern scholars' discussion of the afterlife. Although Herakles may be exceptional in Homer, duality is not merely a characteristic of him alone—it is a universal feature, in one form or another, of afterlife literature—but this is perhaps the first appearance of it. How Herakles' dual identity is seen as having entered Homer's text is a fascinating way into the question of the nature of the Classical afterlife, our ideas of which have been formed as much by interpretative scholarship as by the texts themselves.

The afterlife has become a divided country. Certain things are characterized as real, others unreal or spurious. Scholars tend, even now, to fix the idea of what is authentic, and then to account for what is deviant. The present chapter will exemplify this in terms of Homer's Herakles episode; but in one way or another, questions of "fit" or otherwise will be at play in all our chapters.

In Lucian's dialogue, it was the *underworld* Herakles that didn't fit with Diogenes' preconceptions. In modern explorations of *Od.* 11, it's the *celestial* Herakles that doesn't fit. It's traditionally said that the Homeric afterlife is primitive, unsophisticated, monochrome, or uniform. In it, it's said, souls have little identity other than as bloodless likenesses of those who've lived.¹³ Rohde referred to the "*usual* Homeric belief . . . [that] the souls resemble shadow—or dream-pictures, and are impalpable to human touch. They are without consciousness when they appear."¹⁴ The idea of Homeric souls being "without consciousness" continues in the standard work of Kirk, Raven, and Schofield (1983), hereafter *KRS*, who characterize "the Homeric idea of the *psyche* or breath-soul as an insubstantial image of the body, giving it life and surviving it in a wretched, bloodless existence in Hades."¹⁵ A negative view of the Homeric afterlife is tenacious even in more recent scholarship. For instance, Edmonds (2004): 14 refers to "the somber picture of mindless shades in the gloom that the Homeric epics present"; Casey (2009): 14 states that "the Homeric Greeks, if they thought of survival after death, imagined a half-life, a barely conscious existence in a place of darkness"; and Tzifopoulos (2010): 124 remarks, "The Homeric view of the afterlife in the *Iliad* and *Odyssey* is rather gloomy and pessimistic, as the Underworld is portrayed in unflattering terms."

¹³ "The dead do certainly not lead an active life in the Homeric underworld. On the contrary, they are frozen pictures of the persons they once were in life" (Albinus 2000: 27).

¹⁴ Rohde (1925): 35–36.

¹⁵ *KRS* p. 8. Cf. Hussey (1999): 101.

But in fact the concept of the Homeric “norm” rarely works in practice. There’s always a list of “exceptions”. Afterlife space in the *Odyssey* is not a simple thing. If we thought we might start by looking to Homer’s underworld as a ground zero for afterlife representations, a simple plane surface on which primitive “witless shades” mutely wander in a scorched-earth landscape, that would be delusional. Homer’s afterlife is already a complex place, varifocal and manifold. We will not find in it the kind of primeval uniformity we might expect. In fact, “There is no good reason for expecting uniformity in death mythology.”¹⁶

Od. 11 is only one of a number of afterlife settings in that work, the coexistence of which may already point the way, to some extent, toward Herakles’ bilocation. There are three main visions of the afterlife in the *Odyssey*: the vignette of Elysion at *Od.* 4.561–69; the underworld journey of Odysseus in *Od.* 11, and the so-called “Second Nekyia” at *Od.* 24.1–204.¹⁷ These accounts give varying impressions of where the afterlife is situated and the vantage point from which it is seen, covering between them upper and lower locations for postmortem existence. In *Od.* 4 Menelaus will go “to the Elysian plain and the bounds of the earth” (ἐς’ Ἠλύσιον πεδῖον καὶ πείρατα γαίης, *Od.* 4.563); the afterlife of *Od.* 11 and 24 is situated under the ground; Herakles’ location in *Od.* 11 directs the eye of the reader upward.

So also, Rohde notes that the funeral of Patroclus in *Il.* 23 is an exception to the “usual” Homeric picture: “Here we have a picture of the funeral of a chieftain which, in the solemnity and ceremoniousness of its elaborate detail, is in striking conflict with the normal Homeric conception of the nothingness of the soul after its separation from the body.”¹⁸ This leads Rohde to posit a different *source* for it. We’ll see that Herakles’ double identity is most often explained by the intrusion of a later element into the Homeric text. But the compromise between the old and new elements must have been an imperfect one, in that the “old” Herakles remained in the text, at the same time as the new one was introduced.¹⁹ Hence his dual identity in *Od.* 11.

¹⁶ M. Clarke (1999): 228.

¹⁷ On the problems inherent in the pictures of Elysion and the second Nekyia (*Od.* 24.1–204), see Dieterich (1893): 19–45; Rohde (1925): 55–87; Sourvinou-Inwood (1995): 17–56 and 94–107; Albinus (2000): 82–89; M. Clarke (1999): 225–28. On the picture of Hades in the other Homeric epic, the *Iliad*, not treated here, see for instance Bremmer (2002): 4–5.

¹⁸ Rohde (1925): 13.

¹⁹ Cumont (1949): 11: “Dans la paganisme, qui ne connaît point d’orthodoxie théologique, une nouvelle croyance n’élimine pas nécessairement une croyance antérieure” (In paganism, which knew nothing of theological orthodoxy, a new belief didn’t necessarily eliminate an older belief.) Eschatological beliefs are more than usually tenacious, resulting in stark juxtapositions of apparently incompatible ideas.

2. Not(e) Really There: Homer's Herakles and the Textual Tradition

What is the “new” element in *Od.* 11, and how is it imagined to have got there? Let's look a bit more deeply into the book. In *Od.* 11 Odysseus, having arrived at the western edge of the world and beached his ship, sits by a pit he's dug, through which the souls of the dead rise up. He encounters, first, his unburied comrade Elpenor (*Od.* 11.51–83); he meets his mother Anticleia (84–89), but he defers this conversation until he has spoken with Teiresias, whose prophecy about Odysseus' return is the manifest reason for the journey (90–149). Relieved of the responsibility of consulting with Destiny, Odysseus turns at last to speak to his mother (150–224). This episode leads into a catalog of the souls of famous women (225–332).

The book is then divided by an “Intermezzo” (333–84), lifting us for a moment out of the underworld scene to its framing narrative, the banquet at which the story is being told. Afterward, Odysseus' narration resumes in a series of encounters with heroes of the Trojan War (Agamemnon, 385–464; Achilles 465–540; Ajax 543–65). This section ends jaggedly, with Ajax's decision to remain silent (566–67). The spotlight then passes to a pair of ill-matched underworld judges, Minos and Orion (568–75). There follows a catalog of sinners (Tityos, Tantalus, Sisyphus, 576–600), and finally Odysseus meets Herakles (601–27).

Ancient readers, like Diogenes, and like us, had to get around the problem that Herakles both was and was not in the underworld. The easiest solution is to do away with the problem. So the ancient commentators on *Od.* 11.604 mark the passage for deletion, on the following grounds: τοῦτον ὑπὸ Ὀνομακρίτου ἐμπεποιησθαί φασιν. ἡθέτηται δέ (“They say this was spliced in by Onomakritos. It was athetized”).²⁰ According to this explanation, this line (or lines—the supposed compass of the inauthentic passage is not clear) was first put there by someone who was not Homer (i.e. one Onomakritos). They were later cut. Modern scholars add the conjecture that the cutting was probably done by the Hellenistic Homeric critic Aristarchus.²¹ The lines should

²⁰ Dindorf (1855) vol. 2 p. 525, with my translation.

²¹ For the attribution of the original *athetesis* to Aristarchus (second century BCE) see Wilamowitz (1884): 199–226; Rohde (1896): 614–24 and (1925): 32–43; Pépin (1971): 169–70n4; Hooker (1980): 139–41; Crane (1988): 87–91 and 109n4; Heubeck and Hoekstra (1989): on *Od.* 11.547 and introd. n. on 568–627; Sourvinou-Inwood (1995): 84–89; Tsagarakis (1995): 127; Tsagarakis (2000): 11, 11n2, and 94. Aristarchus is named by the scholia on *Od.* 11.547 (ἀθετεῖ Ἀριστάρχος); his role in excising lines 568–627 is inferred from there.

not, therefore, be there at all in our text, yet they hang on. Herakles becomes a near-transparent textual ghost—a textual *eidōlon*.

Lines 601–4 are not the only bone of contention in *Od.* 11. A larger passage was early marked for disposal. This is because Odysseus' viewpoint apparently changes during the course of *Od.* 11. For most of the book, he has been sitting on the brink of the pit he dug at *Od.* 11.36. From this vantage point, through which the souls have up until now come to meet him ὑπὲξ Ἑρέβους (“up out of Erebus,” 37), Odysseus should not be able to see the internal topography of the underworld. But suddenly it is as though he has moved inside it. After the disappearance of Ajax at *Od.* 11.567 he appears to observe the underworld at closer quarters, a move signaled by many verbs of seeing: ἶδον, 568; εἰσενόησα, 572; εἶδον, 576; εἰσεῖδον, 582. A *nekuomanteion* situation, a calling up of souls, has become a *katabasis*, a descent to meet them.²²

The ancient scholia at 568 already pointed to the inconsistency in viewpoint, asking πῶς οἶδε τούτους ἢ τοὺς λοιποὺς ἔσω τῶν Ἄιδου πυλῶν ὄντας καὶ τῶν ποταμῶν (“how does he know about these people, or those who follow, who are within the gates and rivers of Hades?”).²³ On these grounds, the whole passage, lines 568–627, have been deemed “inauthentic.”²⁴ The lopping off of textual limbs doesn't end with antiquity. It's an operation performed, with varying degrees of brutality, by modern scholars. According to Rohde, “The journey to the land of the dead was . . . unnecessary, and there can be no doubt that originally it had no place in the poem.”²⁵ In other words, the *whole* of Book 11 is inauthentic. Page concurs: “The visit to the underworld was originally independent of the *Odyssey*, and . . . it has been *artificially* inserted into its present place” (my emphasis).²⁶ On this reading the underworld journey was a whole separate work, grafted into the *Odyssey* from elsewhere. A slightly different version of the same kind of reading is exemplified by Sourvinou-Inwood: “It cannot be doubted that the *Nekuia* [*Od.* 11] is an organic part of the *Odyssey*. But this does not mean that we

²² See West (2014): 123: “The episode is a hybrid of two disparate things: (a) a necromantic ritual summoning up a dead seer or family member, (b) a descent to the world of the dead with a survey of what is to be seen there.” Cf. Tsagarakis (2000): 12–13; Crane (1988): 88; Hooker (1980): 141.

²³ Dindorf (1855) vol. 2 p. 521, with my translation. The sentiment is echoed by modern scholars: “The overall objection to the passage is simple: Odysseus never goes into Hades and thus cannot see its inner recesses” (Crane: 1988: 87; cf. Hooker 1980: 139).

²⁴ The latest advocate of this view is West (2014): pp. 127, 222–23. Crane (1988): 87–88, however, sees the inconsistency between Odysseus' initial position and his subsequent location in the underworld as a “deliberate effect,” by which an episode may follow one tradition whilst at the same time pointing to others. On the history of the interpolation debate in general see Heubeck and Hoekstra (1989): p. 111.

²⁵ Rohde (1925): 33.

²⁶ Page (1955): 32. See the comments of West (2011): pp. 122–3.

should not consider its compositional prehistory, ask whether there are reasons for thinking that it may have redeployed and reshaped material from a *Nekuia* that had not belonged to the same position as *Od.* 11.²⁷ Sourvinou-Inwood argues that the *position* of the Nekyia of *Od.* 11 would originally have been different, probably at the end of the work, where the “second Nekyia” (*Od.* 24) now stands. To make room for the restored *Od.* 11 at the *end* of the *Odyssey*, she argues for the “inauthenticity” of the second Nekyia in *Od.* 24. The knock-on effect of including the *katabasis* of *Od.* 11 is the deletion of another passage, the second Nekyia!

I wonder why, though, it is assumed that a work should *end* with a *nekyia*. There might be a certain narrative satisfaction when a description of death is also the end of a text. Or Sourvinou-Inwood might have been, perhaps unconsciously, influenced by the later tradition, as we see it in, say, Plato’s *Republic*, Cicero’s *Republic*, or Plutarch’s *De facie in orbe lunae*, where a work ends with an eschatological myth. However, there are also instances in the tradition where this does not happen: some we’ll see in this book are Plato’s *Phaedrus* and *Phaedo*, Virgil’s *Aeneid*, and Claudian’s *De raptu Proserpinae*. A cadential correspondence of textual death and narrative death is no more satisfying an argument for altering the text of Homer’s *Odyssey* than the opposite argument would be, in which the hero describes a parabolic journey from upper world to underworld, life to death, and then back again. Such textual arguments may be based on ideas of narrative satisfaction that are subjective.

The lines marked for deletion, like the character Herakles, have a double life—they are both there and not there. The scholiasts argue, as we’ve seen, for the later intrusion of at least some of lines 568–627. In this sense they seem to “accept” the interpolation, i.e. the fact *that* these lines are interpolated. Simultaneously, however, they seem to ratify the presence of the lines in the text by virtue of the very fact of commenting on them. The lines still exist as part of the text. Even scholars who are agnostic seem sometimes to espouse this kind of view. For instance, Michael Clarke says, “No great weight can be placed on 11.602–4, *since* very many ancient and modern scholars have condemned them as an interpolation” (my emphasis), before going on to assert that there is actually no good reason to strike the lines on the grounds that early epic was incapable of putting someone in two places at once.²⁸ He

²⁷ Sourvinou-Inwood (1995): 73. Cf. M. Clarke (1999): 225–28.

²⁸ M. Clarke (1999): 223–24 n15. Crane (1988): 90–91 gives several exempla of this device in early epic.

concludes, “It is easy to see how an interpolator *might* have inserted these lines as an answer to objections prompted by knowledge of the story of Herakles’ ascent to Olympus, but it remains equally possible that Homer is himself seeking to reconcile that tradition with stories in which Herakles descended to the underworld after his death” (his emphasis).²⁹ After all, it seems, then, that he is happy to accept these lines are part of the text, thereby placing some weight upon them.

Whatever the nuance of the individual view, the idea persists in scholarship that multiplicity or varifocality has to be accounted for in some way: that you cannot have two inconsistent things that coexist. The temptation has long been to interpret “inconsistency” through the lens of “earlier” and “later.” Chronological sequencing has the advantage that we are able to clean up the messiness of the text. The job of the critic becomes the teasing out of material that is earlier (and therefore more authentic) from that which is later (therefore able, if necessary, to be purged). The membrane that separates what is authentic and what is not is usually formed from a combination of chronological and subjective arguments.

Chronologically, we’ve already seen that inconsistencies in Homer’s after-life have been characterized as a function of textual stratification, of earlier and later layers of composition and insertion. The difficulty is compounded by the fact that the nature and date of whatever the “original” is, is not clear. Whether or not the oral composition of the *Iliad* and *Odyssey* may go back to the Bronze Age, arguably the works were not “composed” before the arrival of a written text, in the seventh century at the earliest, when the poems were “fixed in writing,” i.e. written *down*.³⁰ The other end of the question, at which date the “original” composition may be said to have ended and “interpolations” begun, is also a matter for dispute. Nagy’s “evolutionary model” is, *pace* West, helpful.³¹ Nagy gives five periods in the textual evolution of Homer: in period 1, which goes from the second millennium BCE to the middle of the eighth century BCE, there are no written texts. In period 2 (mid-eighth to sixth century BCE) the text begins to be standardized. Period 3 (mid sixth to late fourth century BCE) is “a definitive period” centralized in Athens, characterized by “potential texts in the sense of transcripts”, i.e. of oral

²⁹ M. Clarke (1999): 224n15.

³⁰ West (2011): 392; cf. West (2014): 391–93. West dates the *Odyssey* to the last third of the seventh century BCE.

³¹ West (2011): 390.

performances.³² Somewhere near the start of this period there was a reform of the performance tradition in Athens. This is the time of the Panathenaic recension of Homer (named for the first Panathenaic festival in 566 BCE, at which the text of Homer was recited), also known as the “Peisistratean recension.” The latter term refers to the first compilation of a definitive written text of Homer undertaken by Peisistratos and his successors. The idea of the Peisistratean recension seems to originate with Cicero, *De oratore* 3.137: *quis doctior eisdem illis temporibus aut cuius eloquentia litteris instructor fuisse traditur quam Pisistrati? qui primus Homeri libros confusos antea sic disposuisse dicitur ut nunc habemus* (“Who is recorded to have been more learned in those times, and whose eloquence more informed by literature, than Peisistratus? He is said to have been the first to sort out the books of Homer, confused up to that point, as we now have them”, my trans.). The idea has always had its defenders and critics; modern scholars such as Nagy generally adhere to it: “It is, then, in this period of the Peisistratids that we may imagine a plausible historical occasion for the transcription of the Homeric poems in manuscript form.”³³ Period 4 (fourth century to mid-second century BCE) was a homogenizing period, with written texts. In period 5, from the middle of the second century BCE onward, starting with the work of the Homeric critic Aristarchus of Samothrace, c. 150 BCE, the text becomes “scriptural,” i.e. authoritative. Lucian postdates this period: Lucian is having fun questioning the gospel.

However one proceeds in terms of absolute or relative dating, the criterion for distinguishing what is earlier, or authentic, from what is not, is often made on thematic grounds, i.e. *subjectively*. On the assumption that such and such a view is standard, anything that does not accord with it is most often seen as spurious. Further, notions of authenticity and inauthenticity in such readings are most often predicated on an idea (stated or otherwise) that the “primitive” or “authentic” afterlife should be *one* thing, rather than a plurality of things. The judgment as to what fits and doesn’t fit is the prerogative of the critic.

³² Nagy (2009): 1–72, especially the “periods” given on pp. 4–5; cf. Nagy 1996a and 1996b.

³³ Nagy (1992): 42. Homer and the Orphic texts both received editorial attention at this time: see Albinus (2000): 102: “The same group of people contributed, it seems, to the textual fixation of Homeric and of Orphic traditions”; cf. Schwartz (1960): 495–98; Nagy (1992): 47; West (1966): Introduction pp. 49–50.

3. The Orphic Interpolation

So, in the case of Herakles' presence in the heavens, we're told, "This passage [*Od.* 11.602–4] looks like a late construction, set up in order to explain the different traditions about Herakles, and can hardly be considered as an expression of *original soul belief*."³⁴ On this rubric, you have to look for an explanation for Herakles' presence in the heavens extraneous to the "original" text. In other words, these lines must have been interpolated. If so, how did they get there, and where did they come from? There are two theories: (1) that they were part of a so-called Orphic interpolation, and (2) that they were influenced by a "*Katabasis* of Herakles." Let's look at these theories.

(i) Orphic Interpolation

The "Orphic interpolation" theory was a candle in the wind of Classical scholarship. Wilamowitz proposed it, although he afterward recanted.³⁵ On this theory, lines 568–627 of the *Odyssey* were interpolated by a pioneer of the "Orphic" cult who was also a critic of Homer, namely Onomakritos.³⁶ The prompt for his identity as the putative interpolator was the passage of the Homeric scholia on *Od.* 11.604 (see p. 23 of this chapter). Who was Onomakritos, and why was he credited with inserting these lines into the text? Onomakritos was connected with the Orphic cult in Peisistratean Athens in the sixth and fifth centuries BCE.³⁷ He was said to have compiled Orphic prophecies; perhaps he was also a collector of Orphic rites.³⁸

³⁴ Bremmer (1983): 81 (my emphasis).

³⁵ Wilamowitz (1884): 199–226; palinode in Wilamowitz (1932), vol. 2: 200n2. On Wilamowitz's recantation, see Crane (1988): 110n15.

³⁶ The connection with Onomakritos has largely been written off in modern scholarship. Crane (1988): 87 maintains that "no cogent evidence supports the conclusions of ancient scholarship, and more recent scholarship has wisely skirted the issue"; cf. Crane (1988): 88, "The mention of Onomakritos may be quickly dismissed." Hooker (1980): 142 speaks of the "absence of any plausible motive" that might have induced the addition of the verses. M. Clarke (1999): 223–4n15 characterizes the ascription to Onomakritos as a "late guess."

³⁷ The main source for Onomakritos is Herodotos 7.6, on which see Graf (1974): 147. For testimonia and fragments of Onomakritos see Kern (1922): test. 182–95; on Onomakritos and Orphism more generally, see Dieterich (1893): 75; Guthrie (1952): 13–14, 107–8, 217; Schwartz (1960): 495–98; Graf (1974): 147–150; Smith (1976): 107; Graf and Iles Johnston (2007): 70; Tzifopoulos (2010): 132–33. Tzifopoulos sees Onomakritos primarily as a rhapsode, who incorporated "Orphic" materials in his performances of epic poetry.

³⁸ See Smith (1976): 101.

Orphism was a religious cult that arose around the sixth century BCE. It allegedly proposed a differentiated afterlife: no longer the Homeric monochrome, but a better fate for some souls. Such differentiation, though incompatible with the supposedly original “witless shades” of Homer’s underworld, *was*, however, deemed compatible with the judges of the underworld (Minos and Orion), who appear after *Od.* 11.568, since the job of judges is to differentiate between souls. Such differentiation is also seen as compatible with Herakles’ deification. It might have been under the influence of Orphism (the theory goes) that the idea of a divinized Herakles makes its way into the text of lines 601–4. But the erasure of the earlier idea by the later one is incomplete: “It is . . . possible that the poet did not wish to suppress the idea of Heracles’ divine status, which had gained widespread currency . . . but was unwilling to forego the scene planned for lines 601–27, and so attempted a (strictly speaking, illogical) compromise between the popular belief about the hero, and the εἰδωλον [*eidōlon*] concept fundamental to the rest of the book.”³⁹ So the “old” idea of Herakles in the underworld still lurks in the text: hence his bilocation.

Herakles’ afterlife thus becomes evidence of two competing religious discourses, one traditional and “Homeric,” one later, Orphic.⁴⁰ The underworld Herakles would represent the first, the “survival” of the primitive idea of the underworld shade; the celestial one would represent the second.

To understand what this means, we need to grasp the salient characteristics that have been given to “Orphism.” Orphism is often described as a personal, soteriological religion that sprang up in opposition to “mainstream” religion. Orphism developed its own literature, which was predominantly cosmogonic (about the creation of the world) and theogonic (the origin of the gods). This cosmogony-theogony is said to have formed the sacred text—*hieros logos*—of Orphism.⁴¹ Much of what we know about Orphism is based on a few sources, key among which is Plato, *Rep.* 364e3–365a3:⁴²

³⁹ Heubeck and Hoekstra (1989): on *Od.* 11.601–27.

⁴⁰ “By reference to the authorities of ‘Homer’ and ‘Orpheus’ two orders of religious discourse established themselves in opposition to each other,” Albinus (2000): 14. Cf. Tzifopoulos (2010): 131–32, “The Homeric and the Orphic views on afterlife competed through mutual and dynamic interaction, a process that eventually led to two distinct discourses on death and the afterlife, but not without discordant voices within them.”

⁴¹ See Albinus (2000): 101–4 on the Orphic theogony that formed the main stem of the tradition. Albinus sees this poetic tradition as having been established by the sixth century BCE, possibly even as early as the seventh century. Cf. Rohde (1925): 335: “They cannot have come into existence before the last decade of the sixth century.” On the idea of an *hieros logos* see p. 229 below.

⁴² On the sources for Orphism, including the Gold Leaves, see among others Graf (2011): 54–7; Tortorelli Ghidini (2006): 11–23; Albinus (2000): 103; 141–52. Arguably Otto Kern’s collection of 1922, *Orphicorum fragmenta* (Berlin) both created and defined what we now call “Orphism” from a mélange of sources.

βίβλων δὲ ὄμαδον παρέχονται Μουσαίου καὶ Ὀρφέως, Σελήνης τε καὶ Μουσῶν ἐκγόνων, ὥς φασι, καθ' ἃς θυηπολοῦσιν, πείθοντες οὐ μόνον ιδιώτας ἀλλὰ καὶ πόλεις, ὥς ἄρα λύσεις τε καὶ καθαρμοὶ ἀδικημάτων διὰ θυσιῶν καὶ παιδιᾶς ἡδονῶν εἰσι μὲν ἔτι ζῶσιν, εἰσὶ δὲ καὶ τελευτήσασιν, ἃς δὴ τελετὰς καλοῦσιν, αἱ τῶν ἐκεῖ κακῶν ἀπολύουσιν ἡμᾶς, μὴ θύσαντας δὲ δεινὰ περιμένει.

And they produce a babble of books by Musaeus and Orpheus, descendents, as they claim, of Selene and the Muses, and using these they make sacrifices, and persuade not only individuals but cities that they really can have atonement and purification for their wrongdoing through sacrifices and playful delights while they are still alive and equally after death. These they actually call initiations (*teletas*), which free us from evils in the next world, while terrible things await those who neglect their sacrifices.⁴³

This tells us that many “books” were attributed to Orpheus and (the equally mythical) Musaeus and that the “cult” of Orphism prescribed atonement through sacrifices and “purifications” (*katharmoi*).⁴⁴ This idea of the power of purification seems to have extended into eschatology—life after death.

Orphism’s main claims seem to lie, then, in the sphere of eschatology—the fate of the soul after death. Orphic eschatology was based on the principle that the human soul is immortal and divine. The soul is subject to a cycle of transmigration, after which the soul if purified and initiated can be liberated from the cycle.⁴⁵ Albinus has defined Orphic eschatology as “basically positive” in the sense that immortality of soul and world beyond are privileged over the here and now. This (it’s said) is in opposition to the perspective of Homeric eschatology which was basically negative (in that all true value is ascribed to *this* life).⁴⁶ Albinus sees a split between Homer and Orphism, in which Orphism becomes a driving force for change: “Under the sway of Homeric discourse, the fate of mortals was regarded, with only a few exceptions, as a departure for the House of Hades, inhabited by the

⁴³ On the “rites” cf. Aristophanes, *Frogs* 1032, Ὀρφεὺς μὲν γὰρ τελετὰς θ' ἡμῖν κατέδειξε, “Orpheus showed us the rites (*teletas*).”

⁴⁴ Cf. Albinus (2000): 103.

⁴⁵ See Albinus (2000): 117–30 on Orphic metempsychosis and immortality.

⁴⁶ Albinus (2000): 17.

ghost-like images of former lives. However, a specific interest in the hereafter, representing a continuation of individual existence in its own right, developed from Archaic to Classical times, much under the influence of Orphic discourse.”⁴⁷

On this rubric, then, we might see the double identity of Herakles in *Od.* 11 as a result of the superimposition of an “Orphic” view of the afterlife (his *autos* living on in the heavens) onto a Homeric one—his “shadow” continuing to exist in the underworld. And in fact, it would be possible to interpret his fate in the light of the fate of the elect in the so-called Orphic gold leaves. The soul in the Hipponion gold leaf (see further pp. 229–32 below), the soul in the underworld is instructed (in line 10) to proclaim “I am a son of Earth and starry Sky” (*GII* no.1, line 10). The self-proclaimed identity of Homer’s Herakles combines similar polarities. And in a gold leaf text found at Thurii (*GII* no. 3, line 4), the soul is informed, *θεὸς ἐγ|ένου ἐξ ἀνθρώπου*, “You have become a god instead of a mortal.”

(ii) *Katabasis of Herakles*

Supposing, then, that Herakles represents a tendency of “Orphic” material to trickle into Homer’s text, whence was such material drawn? Our second theory proposes that the incongruity between the entire section of *Od.* 11 composed of lines 568–627, and what went before, is the result of a splicing into the Homeric text of another text, the “*Katabasis* of Herakles.”⁴⁸ Like many theories with long tentacles into Classical scholarship, the theory originates, perhaps, with Eduard Norden.⁴⁹ According to this theory, the discrepancy in Odysseus’ viewpoint from 568 onward is a product of a different source—a *katabasis*—coming into play in the construction of the text at this point, and that is why the scene appears to change from Odysseus sitting

⁴⁷ Albinus (2000): 16. Cf. Tzifopoulos (2010): 128, “It is safe to assume . . . that, in the Archaic period, two views on the afterlife competed for attention. The ‘Homeric/Hesiodic’ one presented a gloomy and pessimistic outlook on the hereafter.”

⁴⁸ On the history of the theory see in particular Crane (1988): 100–108.

⁴⁹ See Norden (1926): p. 5n2, and nn. on *Aen.* 6.131–32, 260, 309–12, 384–416, 477–93, 548–627. The “*Katabasis* of Herakles” idea was taken up by von der Mühl (1938), Lloyd-Jones (1967), Graf (1974): 142–50, Boardman (1975), Clark (1979): 211–24, and Robertson (1980) among others. See also Heubeck and Hoekstra (1989) on *Od.* 11.601–27; Sourvinou-Inwood (1995): 84n208; Tsagarakis (1995); Tsagarakis (2000): 26–37.

at the edge of the pit, calling up the spirits, to a descent to the underworld (*katabasis*), which begins with the Minos-Orion scene.

Although in our particular epic narrative Odysseus is the protagonist, the presence of Herakles might be one “clue” that signifies that the *katabasis* story originally belonged to a Herakles epic. Lines 601–4 have been seen as representing an “acknowledgment” of the Heraklean source by giving a vignette devoted to its original hero.⁵⁰ On this theory, an earlier, preexisting “*Katabasis* of Herakles” was a source for the “original” composer of *Od.* 11. So for instance West says, “Later it occurred to [the poet of the *Odyssey*] to import a group of older figures whom he found together in another poetic account of the underworld, perhaps an account of Herakles’ descent to Hades to capture Cerberus.”⁵¹ The interpolated lines might be seen as spliced into the text of Homer during its initial formation, from a poem that *predates* that formation.⁵² Or there may conceivably have been an earlier *and* a later *katabasis* of Herakles, with the sequence of influence between these and the Homeric text becoming occluded.⁵³ To add to the complexity, there is a loop back to the Orphic interpolation theory. The putative later *katabasis* has been characterized as “Orphic.”⁵⁴ The intrusion of Orphic ideas, then, is, by a series of convolutions, said to be an explanation of why Herakles looks different from the other shades in the Homeric underworld.

4. Homer’s Herakles, and Hesiod

An “Orphic interpolation” is only one explanation, if an influential one, of Herakles’ double presence in the underworld and in the heavens. It’s worth looking, though, at some other factors. It’s notable, in this connection, that our Herakles passage shares a line with another early epic poem, Hesiod’s *Theogony*.

⁵⁰ Heubeck and Hoekstra (1989) on *Od.* 11.601–27, “It is tempting to suppose . . . that the *Katabasis* of Heracles inspired the poet to make Odysseus undertake a journey to the underworld; thus, at the end of the *Nekuia*, he may be supposed to cite his ‘source.’”

⁵¹ West (2014): 223. On the theory of an older *katabasis* of Herakles cf. Albinus (2000): 68n4, 79.

⁵² Lloyd-Jones (1967) and Boardman (1975) date the hypothetical later *katabasis* of Herakles to c. 550 BCE.

⁵³ See Robertson (1980): 295.

⁵⁴ For example, by Lloyd-Jones (1967): 227. Cf. Bernabé and Jiménez san Cristóbal (2011): 71n19, with bibliography.

The texts of Homer and Hesiod intersect at the precise point of Herakles' deification. Here are the relevant lines of Hesiod, *Theog.* 950–55:

Ἡβην δ' Ἀλκμήνης καλλισφύρου ἄλκιμος υἱός,
 Ἴς Ἡρακλῆος, τελέσας στονόνοντας ἀέθλους,
 παῖδα Διὸς μεγάλοιο καὶ Ἥρης χρυσοπεδίου,
 αἰδοίην θέτ' ἄκοιτιν ἐν Οὐλύμπῳ νιφόνετι·
 ὄλβιος, ὃς μέγα ἔργον ἐν ἀθανάτοισιν ἀνύσας
 ναίει ἀπήμαντος καὶ ἀγήραος ἥματα πάντα.

The strong son of beautiful-ankled Alcmene, Heracles' strength, made Hebe, the daughter of great Zeus and of golden-sandaled Hera, his reverend wife on snowy Olympus, after he had completed his painful tasks—happy he, for after having accomplished his great work among the immortals he dwells unharmed and ageless for all his days. (Most 2006)

You'll see that *Od.* 11.604 is the same as *Theog.* 952. The *Theogony* is traditionally said to be later than Homer. Is Hesiod echoing Homer? Or could a line from Hesiod have been extrapolated back into the Homeric text? Or, alternatively, are the passages on Herakles “anomalous,” and therefore putatively interpolated or later, in both epic texts?

In fact, the Hesiod scholia say that lines 947–55 of the *Theogony* were, like our passage on Herakles in *Od.* 11, athetized.⁵⁵ West (1966) comments, “The deification of Herakles is indeed an indication of lateness.”⁵⁶ The text of Hesiod, like that of Homer, was standardized in the sixth century BCE. The sixth century “seems to have been a period of editorial activity, largely agglutinative in character, and grandiose in conception.”⁵⁷ We might wonder whether the two passages—*Od.* 11.602–4 and *Theog.* 950–55—were interpolated into their respective texts not only at the same time (the sixth century BCE) but even, perhaps, by the same person. If we accept the attribution of the Homeric scholia (n.20 above), Onomakritos may have inserted the deification of Herakles into both texts, Homer and Hesiod, in the sixth century.

⁵⁵ West (1966): Introd. n. on *Theog.* 947–55; cf. Schwartz (1960): 496.

⁵⁶ West (1966): loc. cit.

⁵⁷ West (1966): p. 49. On the possibility of a “Peisistratean recension” of Hesiod, parallel to that of Homer, see West (1966): p. 50.

If it's the case that both the Herakles passage and much of the cosmology we've seen in this section is the work of "interpolators" (i.e. editors), and that the most likely date for such interpolations is the sixth century, this brings us to wider considerations about the vision of the world in that period. What was it about the sixth century that could have implanted the double Herakles in Homer's text?

Not only Hesiod's passage on the deification of Herakles, but much of his "cosmology" in the *Theogony*, as well as matching "cosmogonic" passages in Homer, has been considered spurious, possibly the product of the textual overhaul of the sixth century. The shadow of "interpolation" hangs over both Hesiod's description of the House of Styx (which I will argue is cosmological in some sense) and Homer's description of the layout of the universe in *Il.* 8. West for instance questions the authenticity of *Theog.* 720–819: "It is possible to impugn the passage on grounds of structural and conceptual contradictions, and we must consider whether any major interpolations are detectable".⁵⁸ He believes these lines to be earlier than the passage of cosmology at Homer *Il.* 8.13–16, which, in that case, is late.⁵⁹

Here is the first of these "dubious" passages (*Theog.* 720–25):

τόσσον ἔνερθ' ὑπὸ γῆς ὅσον οὐρανός ἐστ' ἀπὸ γαίης.
 τόσσον γάρ τ' ἀπὸ γῆς ἐς τάρταρον ἡερόεντα.
 ἑννέα γὰρ νύκτας τε καὶ ἡμέατα χάλκεος ἄκμων
 οὐρανόθεν κατιών, δεκάτῃ κ' ἐς γαῖαν ἵκοιτο·
 ἴσον δ' αὖτ' ἀπὸ γῆς ἐς τάρταρον ἡερόεντα·} (723a)
 ἑννέα δ' αὖ νύκτας τε καὶ ἡμέατα χάλκεος ἄκμων
 ἐκ γαίης κατιών, δεκάτῃ κ' ἐς τάρταρον ἵκοι.

. . . as far down beneath the earth as the sky is above earth. For it is just as far from the earth to murky Tartarus: for a bronze anvil, falling down from the sky for nine nights and nine days, on the tenth day would arrive at the earth; [and in turn it is the same distance from the earth to murky Tartarus;] and again, a bronze anvil, falling down from the earth for nine nights and days, on the tenth would arrive at Tartarus. (Most 2006)⁶⁰

⁵⁸ West (1966): Introd. n. on *Theog.* 720–819, at p. 357. The note in Most's 2006 Loeb translation reads, succinctly and with full appeal to the commentator's mystique, *interpolatoribus pluribus trib. L Dindorf, Hermann, alii . . .* ('Dindorf, Hermann and others have attributed this to various interpolators . . .')

⁵⁹ See West (1966): p. 358 ("possibly an attempt to outdo Hesiod").

⁶⁰ The textual issues of lines 720–25 are summarized by West (1966): on *Theog.* 721–25. On this passage cf. *KRS*, pp. 9–18.

KRS (p. 9) comment that this passage is characterized by a symmetry between the underworld and upper world.⁶¹ It is a development of the equally proportional, although less numerically precise, cosmology at Homer, *Il.* 8.13–16 (another of West’s “interpolations”):

ἧ μιν ἐλὼν ῥίψω ἐς Τάρταρον ἡρόεντα,
τῆλε μάλ’ ἤχι βάθιστον ὑπὸ χθονός ἐστι βέρεθρον,
ἐνθα σιδήρειαι τε πύλαι καὶ χάλκεος οὐδός,
τόσσον ἔνερθ’ Αἴδεω ὅσον οὐρανός ἐστ’ ἀπὸ γαίης.

I shall take and hurl him into murky Tartarus, far, far away, where is the deepest gulf beneath the earth, where the gates are of iron and the threshold of bronze, as far beneath Hades as heaven is above earth. (*Il.* 8.13–16, Murray 1999)⁶²

A quality of reflection between underworld and upper world is characteristic of early cosmologies. Consider further Hesiod’s description of the House of Styx at *Theog.* 775–806. The House of Styx gestures toward the configuration of the upper world. It has a columnar structure that πρὸς οὐρανὸν ἐστήρικται (“reaches toward the sky,” 779). West, with uncharacteristic literal-mindedness, observes of Styx, “It seems impossible for such columns to rise straight from the underworld to the sky. It might be that Hesiod was unable to imagine even an infernal landscape with anything but a sky above.”⁶³ Rather, I think the function of the columns in Styx’s house is calculated to force the reader to envisage momentarily the whole world. Styx’s pillars recall those of Atlas in the *Odyssey*, who ἔχει δέ τε κίονας αὐτὸς / μακράς, αἱ γαῖάν τε καὶ οὐρανὸν ἀμφὶς ἔχουσι, “himself holds the tall pillars that keep heaven and earth apart”, *Od.* 1.53–54). The columns of Styx’s house mean that there is a reflexivity between upper and lower worlds. The reciprocity between the underworld and the upper world manifests itself in other ways too. Styx takes a tenth of the waters of Ocean; the other nine flow around the earth (*Theog.* 789–92).⁶⁴

⁶¹ Cf. Clay (1992): 143, “The world beneath the earth . . . was a realm of conjecture, and the conjecture recognised by both Homer and Hesiod was that it bore an exact proportion to the visible and bounded world.”

⁶² On this passage of Homer, see KRS p. 9; Clay (1992): 134–36; Sourvinou-Inwood (1995): 66n165.

⁶³ West (1966): p. 358.

⁶⁴ For the interpretation, cf. West (1966) on *Theog.* 790.

The Herakles vignette in *Od.* 11 rapidly and economically maps the two extremes of the world. It could be seen as a reminder of the layout of the universe within which the human narrative operates. Herakles is like the mutually reflecting polarities of underworld and upper world in Homeric and Hesiodic cosmology. Herakles is both “in the underworld,” as far down as you can go, and “with the gods,” as high up as you can go. He acts as a ligature between the extremes of the universe; from the vantage point of heaven, he sees the reflection of himself in the underworld, and vice versa. His locations could be related to Homeric and Hesiodic cosmologies, in which the extent of the universe is visualized vertically from the heavens to the underworld, and where the underworld is the mirror image of the heavens.

5. The Sixth-Century Connection

To summarize the argument so far: in *Od.* 11, Herakles is split between two locations. His *eidōlon* is in the underworld, while his “self” (or “he himself,” *autos*) is “with the immortal gods.” Because of the perceived inconsistency of Herakles’ celestial manifestation, scholars since antiquity have marked these lines for deletion.

If you take something out of a text, you have to explain how it got in. We’ve seen two theories: the so-called Orphic interpolation theory, and the related “*Katabasis* of Herakles” theory. These theories tend to converge at a point: the sixth century BCE, when the texts were standardized. This is also the period at which scholars have speculated that various passages of cosmography, both underworld and upper world, were incorporated into the texts of Homer and Hesiod. If we see all of these phenomena as a product of the sixth century BCE, what is it about that time which would result in such a coalescence?

In the sixth century BCE, a new type of speculation about the world began to emerge, with a developing “science” of cosmology, in which the world was seen, broadly speaking, as abstract and schematic.⁶⁵ This new type of speculation is embodied in the so-called Presocratic philosophers.⁶⁶ At one time the Presocratics were enrolled in the nineteenth-century triumphalist view of “progress”: “Only in the sixth century did the defiant speculation of a few

⁶⁵ On Presocratic “naturalism” (the absence of divine causality) see Gregory (2013): 1–22.

⁶⁶ For the term “Presocratics” for the sixth-century thinkers, see Warren (2007): 1.

bold spirits begin to seek a way of escape from the thralldom of the Homeric poems which still lay over the whole of Greece";⁶⁷ and further, "All the more serious knowledge and study . . . of 'Nature,' the earth, and the heavenly bodies, was gathered together in the intelligence of those ever-memorable spirits who at that time were laying the foundations of natural science, and of all science in general."⁶⁸ Even now there's a broad consensus that the advent of the first Presocratics in the sixth century did eventually give rise to new ways of seeing the world.⁶⁹

The Herakles passage is strikingly simple, yet puzzling: one entity (Herakles) takes two positions, at the apex and the nadir of the universe. Whoever was responsible for the Herakles vignette sees universe in starkly linear terms—a line between two (in this case) vertical points, the underworld and the abode of the gods. At the same time this is a universe unified by the presence of the single entity who occupies its two extremes. This Herakles, it seems to me, is in harmony with two of the objectives usually ascribed to the Presocratics, holism and reductionism: the desire to describe the whole universe, but as economically as possible.⁷⁰ It's possible to speculate that the Herakles interpolation and the Presocratic world view flower from the same psychological stem, the need to reduce the world in its totality to simple, almost diagrammatic form. As we'll see, the goal of eschatology is to straddle the universe, to see it as a whole. Herakles, whatever the provenance of his parts, represents a fundamental characteristic of the after-life: universality. In this sense, Herakles sets the scene for this book.

⁶⁷ Rohde (1925): 89.

⁶⁸ Rohde (1925): 362.

⁶⁹ Long (1999): 12, "What *will* become a quite new intellectual tradition is in the making" (my emphasis). It used to be thought that the advent of the first Presocratics, the Milesian philosophers Thales, Anaximander, and Anaximenes, brought about a revolution, tantamount to the scientific revolution of the twentieth century (for instance, Sambursky 1956: 4). Kahn (1960): 133 marked a watershed in the changing of this view: "The idea of Greek rationalism suddenly bursting forth from sixth-century Ionia, like Athena from the brain of Zeus, is one of those historical naïvetés which are no longer very much in fashion." Nonetheless, there's still a tendency in some scholarship to think in terms of a paradigm shift; for instance Graham (2006): 6 refers to a sixth-century "rupture" in ways of seeing the world.

⁷⁰ E.g., "Presocratic thought was holistic: it was an attempt to give a systematic account of the whole known universe" (Waterfield 2000: xx); "We now find a more reductive approach" (Algra 1999: 48, of the "first philosophical cosmology," that of Anaximander).

Conclusion

The Herakles passage has been seen as problematic precisely because it is not *one thing*: the vision it gives is double—the *eidōlon* and the *autos*, the underworld and the heavens. Should the afterlife be one thing rather than a plurality of things? Should we mark out as “anomalous” what we think doesn’t “fit”? On what criteria should this be done? The spatial problem of Herakles in *Od.*11 has been interpreted through a series of oppositions: earlier or later, authentic and inauthentic, Homeric and “Orphic,” “negative” and “positive” eschatologies. In fact, though, Herakles can be interpreted as a force for unity. In one brief moment he maps the extremes of the universe with radical economy. If it’s the job of eschatology to encompass the world, then far from striking out one Herakles and keeping his twin, we *need* both Herakleses, the Herakles of the underworld and the Herakles of the heavens.

2

The Road Map

[Maps'] apparent stability and their aesthetics of closure and finality dissolve with but a little reflection into recognition of their partiality and provisionality, their embodiment of intention, their imaginative and creative capacities, their mythical qualities, their appeal to reverie, their ability to record and stimulate anxiety, their silences and their powers of deception.

—Denis Cosgrove, *Mappings*

Introduction

Homer's Herakles doesn't die. Reincarnated in the form of no less important a character than Dardanus, the founder of Troy, Aeneas' city of origin, he plants his literary footsteps in Virgil's *Aeneid*. Aeneas sees his ancestor among the Trojan heroes in the underworld in *Aen.* 6.648–50. But in the next book, in the narrative told by King Latinus, Dardanus is with the gods in the heaven (*Aen.* 7.210–11):

aurea nunc solio stellantis regia caeli
accipit et numerum divorum altaribus auget.

Now the golden palace of the starry sky admits him to a throne, and he increases the number of altars of the gods. (Fairclough rev. Goold 2000)

The fourth-century CE commentator on Virgil, Servius, invokes Homer's double Herakles, in explanation: *Homerum sequitur, qui inducit simulacrum Herculis apud inferos visum*, "[Virgil] follows Homer, who suggests that a *simulacrum* (i.e. *eidōlon*) of Hercules appeared in the underworld."¹ On this reckoning, the

¹ Servius on *Aen.* 6.650, in Thilo and Hagen (1881–84), vol. 2 p. 91 (with my translation).

Dardanus that Aeneas saw in the underworld must be the *eidōlon* of Dardanus, not Dardanus “himself,” who, like the “real” Herakles, is with the gods.

In chapter 1, we learned that afterlife space was never just one thing. From the beginning of the tradition it encompasses horizontal and vertical axes, the underworld and the upper world. This is possible, indeed necessary, because the afterlife is an arena for exploring the intersection between the world and the human entity.

It should not surprise us, then, that space is slippery in *Aen.* 6. It can’t be pinned down or explained in any one way by any one model. There is no straightforward linear geography. The extremes of vertical and horizontal space are involved in Virgil’s underworld too. The description of Tartarus at *Aen.* 6.577–79 has the same effect as Homer’s sudden upward gesture in respect of Herakles in *Odyssey* 11 (discussed on p. 36 above). It wrenches the observer’s eye upward, displaying momentarily the full extent of the cosmos:

tum Tartarus ipse
bis patet in praeceps tantum tenditque sub umbras
quantus ad aetherium caeli suspectus Olympum.

Then Tartarus itself yawns sheer down, stretching into the gloom twice as far as is the upward view of the sky toward heavenly Olympus (Fairclough rev. Goold 1999).²

With his *tantum . . . quantus* correlative, Virgil imitates the proportional description of the world in the Homeric and Hesiodic cosmographies of *Iliad* 8.13–16 and *Theogony* 720–25 (see pp. 34–35).³ As in the case of Homer’s Herakles, the afterlife mirrors cosmology.

Inside this space, temporal patterns, too, are not linear or “historical”: characters from different epochs, different aspects of Aeneas’ past and future, rub shoulders with promiscuous abandon, like characters from an individual’s past during an analytic session.⁴ This is a landscape of the mind: hence its freedom from strict spatial and temporal ordering.⁵

² All translations of *Aen.* 6 in this chapter are from Fairclough rev. Goold (1999).

³ Compare Virgil’s *tantum . . . quantus* . . . with Homer’s and Hesiod’s τόσσον . . . ὅσον (*Il.* 8.16 and *Theog.* 720).

⁴ “The events of an analysis, spread out over what to the analyst are many years, are to [the analyst] but the fragments of a moment dispersed in space” (Bion 1970: 12–13).

⁵ In a previous work, Gee (2017): 268–69, I characterized Virgil’s construction of space in *Aen.* 6 as “layered,” on the analogy of “layered” mapping. By this I did not mean a stacking of strata, but rather the simultaneous coexistence of different concepts of space, like transparent stencils placed one on

At the same time, however, it cannot be completely divorced from ways of envisaging geographic space of the period, otherwise it would be incomprehensible. In Gee (2017) I gave brief consideration to some parallels that might help us understand space in *Aen.* 6. I will attempt a fuller treatment here, experimenting with a number of models to help us understand how space is constructed and perceived. The models I consider move outward from imaginary to “real” landscapes. I begin with Pausanias’ second century CE account of the Classical Greek painter Polygnotus’ painting of the underworld. From there I move to a depiction of a “real” landscape, the Nile Mosaic from Praeneste. This forms the fulcrum between imagined and real geographies. From these I pass to geographic writings.

We might expect technical writings on geography to display different idioms in representing space from purely artistic works; surprisingly this is not the case. There are many instances, even in the most technical geographies, where conventions of spatial representation appear to cut through considerations of accuracy. We’ll consider a number of geographical writings between Eratosthenes (third century BCE) and Ptolemy (second century CE) with particular emphasis on those close in date to Virgil, namely Strabo’s *Geography* (written around the year 7 BCE⁶) and Pomponius Mela’s *Chorography* (44 CE).

Finally, it’s impossible to omit the so-called Map of Agrippa from a discussion of space in the first century BCE, problematic though it is. The identity of this map is much contested. The debate centers on the questions of whether it was map or text; whether it was a “chorography” (a local topography⁷) or a geography (a holistic representation of the world).

We’ll see that our geographical works share ways of mapping space both with *Aen.* 6 and with artistic representations of fictional space. I believe it is legitimate to deploy models of “real” space as ways of understanding imaginary (afterlife) space. There is a reciprocity between the landscapes of fact and imagination. Afterlife space cannot be constructed *ex nihilo*: it must rest on a foundation of recognizable characteristics of the physical world.

top of another. I have since discovered that Gill (2006): 438 similarly describes Virgil’s approach to *emotions* in the *Aeneid*: “The poem, typically, deploys a ‘layered’ mode of presentation.”

⁶ On the date of Strabo there is some dispute: see for instance Dueck (2000): 146–51 (who places the date between c. 18 and 24 CE) and Brodersen (2003): 280–84 (who argues for a date before 7 BCE).

⁷ For the term, see Nicolet (1991): 107; Romer (1998): 4–9. For the distinction between chorography and geography, see p. 54n38 and pp. 83–86 below.

Conversely, the description of “real” space will always contain imaginative components. No map can be objective, for the simple reason that if we could see all the territory it covers, we would not need a map at all. Maps deal with the compression and schematization of an extent of space impossible to encapsulate visually: “Maps simplify and organize what otherwise would be too large or small, too distant or too complex to be seen. Making maps requires ingenuity and imagination.”⁸ This goes for verbal as well as visual maps.

Ptolemy—the Classical world’s definitive geographer—points out the illusory nature of maps in the very first chapter of his work (*Geography* 1.1.9):

ἃ τῆς ἀνωτάτω καὶ καλλίστης ἐστὶ θεωρίας, ἐπιδεικνύντα διὰ τῶν μαθημάτων ταῖς ἀνθρωπίναις καταλήψεσι τὸν μὲν οὐρανὸν αὐτόν, ὡς ἔχει φύσεως, ὅτι δύναται φαίνεσθαι περιπολῶν ἡμᾶς, τὴν δὲ γῆν διὰ τῆς εἰκόνης, ὅτι τὴν ἀληθινὴν καὶ μεγίστην οὖσαν καὶ μὴ περιέχουσιν ἡμᾶς, οὔτε ἀθρόαν, οὔτε κατὰ μέρος, ὑπὸ τῶν αὐτῶν ἐφοδευθῆναι δυνατόν.

These things [i.e. geography] belong to the loftiest and loveliest of intellectual pursuits, namely to exhibit to human understanding through mathematics [both] the heavens themselves in their physical nature (since they can be seen in their revolution about us), and [the nature of] the earth [*through an image*] (since the real [earth], being enormous and not surrounding us, cannot be inspected by any one person either as a whole or part by part). (Berggren and Jones 2000, slightly modified, with my emphasis)⁹

As Ptolemy says, we can only understand the whole earth “through an image” (*dia tēs eikonos*), i.e. by an imaginative leap, a “vision.” Therefore it is likely that some aspects of that image will be imagined, or “fictional,” since our ability to see as a whole is an ideal.¹⁰

⁸ Fellowes (1994): 9.

⁹ Where Ptolemy is quoted in this book, translations are from Berggren and Jones (2000), text from Nobbe (1843-5). In this passage, square brackets are as in Berggren and Jones (2000) p. 59, with my addition ‘[i.e. geography]’ and modification ‘[*through an image*]’, which replaces Berggren and Jones’ translation ‘through a portrait.’

¹⁰ On cases in Ptolemy where “incomplete and incoherent groups of places are systematically mislocated and thus bear no relation to geographical reality” see Stückelberger (2004): 39.

The idea that we can only grasp the world through the imagination is not new. Plato's *Timaeus* prefaced his account of the universe with the qualifier that it was a “likely story,” εἰκότα μῦθον (*eikota muthon*, *Tim.* 29b2). In fact, the universe in the *Timaeus* is conceived as an *objet d'art*. Plato uses artistic terms to describe its making, as when, at *Tim.* 40a5–7, the god “spread the [stars] throughout the whole heaven to be a true adornment for it, an intricately wrought (*pepoikilmenon*) whole,” νείμας περὶ πάντα κύκλῳ τὸν οὐρανόν, κόσμον ἀληθινὸν αὐτῷ πεποικιλμένον εἶναι καθ’ ὅλον.¹¹ This is to recognize something fundamental about our constructions of the universe: it is a landscape created by human art—just as the underworld is.

Notes towards the Definition of Space

Virgil's underworld book is much more concerned with topography, with “map reading” as it were, than *Od.* 11: “The Sibyl turns Aeneas from sight-seeing into action.”¹² The verbs of spectating we saw in the *Odyssey* in chapter 1 (p. 24) are replaced in the *Aen.* by terms indicating progress through and orientation in space: for example, *ibant*, “they went” (*Aen.* 6.268); *uestibulum ante ipsum*, “before the very threshold” (273; cf. *vestibulum* in 556); *in medio*, “in the middle” (282); *hinc via Tartarei quae fert Acherontis ad undas*, “next is the road which leads to the waters of underworld Acheron” (295); *trans fluvium*, “across the river” (415); *continuo*, “straight forward” (426); *hos iuxta*, “next to these” (430); *proxima . . . loca*, “in the adjoining place” (434); *hic locus est, partis ubi se via findit in ambas*, “this is the place where the road divides itself into two parts” (540); *hac iter Elysium nobis*, “this is our way to Elysium” (542); *deuenerē*, “they arrived” (638). “The itinerary Aeneas follows itself imposes a structure on the space he traverses: the poem presents the

¹¹ Zeyl (2000). For the artistic terminology cf. Plato, *Rep.* 529c7–8, where the stars are ταῦτα μὲν τὰ ἐν τῷ οὐρανῷ ποικίλματα, . . . ἐν ὁρατῷ πεποικίλται, “these stars that adorn the heavens (lit. “decorations,” *poikilmata*), since they ornament (lit. “are painted on,” *pepoikiltai*) the visible sky”; and *Rep.* 616e9, where the outermost whorl of the Spindle of Necessity, which represents the sphere of the fixed stars, was described as ποικίλος, *poikilos*, “painted,” “variegated”; and *Phaedo* 110b7, where the earth is described as ποικίλη (*poikile*). On these passages see p. 175 and pp. 261–66 below.

¹² Fitzgerald (1984): 58. Cf. Feldherr (1999): 94.

geographical features of the underworld in the order Aeneas encounters them.”¹³

The journey is articulated largely through groups of figures. First the travelers pass a gaggle of personified evils—Grief, Worry, Disease, Old Age, Destitution, Death, and the rest—who guard the entrance hall to the House of Dis (273–81). These are followed by bestial hybrids (Centaurs, Scyllas—i.e. girl/dogs); Briareus—a polycephalic giant—the Hydra, Chimaera, Gorgons, and Harpies) which stand *in faucibus Orci* (“in the jaws of Orcus”), the entranceway to the House of Orcus (line 286), which itself has theriomorphic qualities.¹⁴

From here, the road leads to the river Acheron and its tributaries (295–97). Having crossed the Styx (415) the travelers must pass Cerberus (417–25) and the various categories of untimely dead (426–534), before arriving at a fork in the road, one branch of which goes to Tartarus, one to Elysium (540–43).¹⁵ Aeneas is not, in the end, faced with a choice: his view will encompass both Tartarus and Elysium: the totality of the underworld.

The journey of Aeneas is a linear progression marked by a series of staging points in the form of figures. I will argue that this technique of describing space reflects a common idiom. Let’s consider some possible parallels, working out from imaginary to “real” space.

(i) Pausanias’ Description of Polygnotus’ Underworld Painting

At *Description of Greece* 10.28–31 Pausanias describes a painting of the underworld by the Classical Greek painter Polygnotus. His description has much in common with the ways in which Virgil leads the reader through the underworld. It begins with a landform, the river Acheron: ὕδωρ εἶναι

¹³ Feldherr (1999): 87.

¹⁴ The *fauces*, “jaws,” are the narrow entrance-passage [as into a house] (LS *fauces* definition II.A). On the traditional presence of hybrids in the underworld, see Gee (2016). In Jungian psychoanalysis they signal the contents of the unconscious (see for instance Jung 1956: 180). On the genealogy of the Chimera, Scylla, Cerberus, the Gorgons, etc., see Jung (1956): 182.

¹⁵ Compare descriptions of the afterlife in Platonic eschatologies, such as *Gorgias* 524a2–4: ἐν τῷ λειμῶνι, ἐν τῇ τριόδῳ ἐξ ἧς φέρετον τὸ ὁδὸν, ἡ μὲν εἰς μακάρων νήσους, ἡ δ’ εἰς Τάρταρον, “in the meadow at the dividing of the road, whence are two ways leading, one to the Isles of the Blest, and the other to Tartarus” (Lamb 1975).

ποταμὸς ἔοικε, δῆλα ὡς ὁ Ἀχέρων, “There is water like a river, clearly intended for Acheron” (10.28.1, trans. Jones 1935).¹⁶ Right away, we know this is a representation of a landscape, but of an imaginary landscape (“like a river, clearly intended”). Pausanias’ dominant mode of progressing through space is by moving between figures or groups of figures. He lists these visual “events” in order, as though walking through the picture. The figures are defined in spatial relation to one another.¹⁷ The first figure described is that of Odysseus (28.1): τὸ δὲ ἕτερον μέρος τῆς γραφῆς τὸ ἔξ ἀριστερᾶς χειρός, ἔστιν Ὀδυσσεὺς καταβεβηκὼς ἐς τὸν Ἄϊδην ὀνομαζόμενον, ὅπως Τειρεσίου τὴν ψυχὴν περὶ τῆς ἐς τὴν οἰκείαν ἐπέρηται σωτηρίας, “The other part of the picture, the one on the left, shows Odysseus, who has descended into what is called Hades to inquire of the soul of Teiresias about his safe return home”. It’s natural that Pausanias’ description should begin with Odysseus, the epic underworld character par excellence. And we are constantly drawn back to the Homeric text through the many references Pausanias gives. For instance, at 29.3–7 there is a section on various figures of women, parallel to Homer’s catalogue of the souls of famous women at *Od.* 11.225–332 (see p. 23 above). The three Homeric *exempla* of postmortem punishment (*Od.* 11.576–600) are also in the painting, according to Pausanias.¹⁸

Each scene in Pausanias’ description is constructed around groups of figures. So for instance at 28.4, ἐπὶ δὲ τοῦ Ἀχέροντος τῇ ὀχθῇ μάλιστα θεᾶς ἄχιον, ὅτι ὑπὸ τοῦ Χάρωνος τὴν ναῦν, “On the bank of the Acheron there is a notable group under the boat of Charon.” Figurative groups are made of the friends (29.1) and the enemies (31.2) of Odysseus. In the case of the latter, a comment is made on the painter’s way of proceeding: ἐς δὲ τὸ αὐτὸ ἐπίτηδες τοῦ Ὀδυσσεύως τοὺς ἐχθροὺς ἤγαγεν ὁ Πολύγνωτος, “Polygnotus has intentionally gathered into one group the enemies of Odysseus.” This is also a comment on the writer’s way of articulating his spatial narrative.

¹⁶ All translations of Pausanias in this chapter are from Jones (1935).

¹⁷ So for instance πλησίον, “nearer,” 10.28.5; ἀνωτέρω, “further up,” 28.7, cf. 29.1 and 31.10; μετὰ δὲ αὐτοῦς, “after them,” 29.1, and cf. 29.8; ἐπιόντι δὲ ἐφεξῆς τὰ ἐν τῇ γραφῇ, “progressing through the elements of the picture,” 29.3, and cf. 30.1 and 30.5; παρ’ αὐτήν, “by her,” 29.7, ὑπὲρ τούτους, “above them,” 30.5; ἀποβλέψαντι δὲ αὐθις ἐς τὰ κάτω τῆς γραφῆς, “looking again to the lower field of the picture,” 30.6; εἰ δὲ ἀπίδοις πάλιν ἐς τὸ ἄνω τῆς γραφῆς, “If you look again to the upper field of the image,” 31.1, and so on.

¹⁸ Tityos is mentioned at 10.29.3, Sisyphus at 31.10, and Tantalus at 31.12.

The postures and relative positions of the figures in the groups is important. So for example at 30.3:

μετὰ δὲ τοῦ Πανδάρεω τὰς κόρας Ἀντίλοχος τὸν μὲν ἕτερον ἐπὶ πέτρας τῶν ποδῶν, τὸ δὲ πρόσωπον καὶ τὴν κεφαλὴν ἐπὶ ταῖς χερσὶν ἀμφοτέραις ἔχων ἐστίν, Ἀγαμέμνων δὲ μετὰ τὸν Ἀντίλοχον σκῆπτρῳ τε ὑπὸ τὴν ἀριστερὰν μασχάλην ἐρειδόμενος καὶ ταῖς χερσὶν ἐπανεύχων ῥάβδον.

After the daughters of Pandareus is Antilochus, with one foot upon a rock and his face and head resting on both hands, while after Antilochus is Agamemnon, leaning on a sceptre beneath his left armpit, and holding up a staff in his hands.¹⁹

Similarly, Orpheus “sits on what seems to be a sort of hill” (ἐπὶ λόφου τινὸς Ὀρφεὺς καθεζόμενος) and holds his lyre in his left hand (30.6).

Pausanias’ is not just a verbal account of a painting but a verbal map of the underworld it depicts, and as such, it is a literary construction. Pausanias frequently cites supposed literary sources for the images in Polygnotus’ picture. So he attributes Charon, for example, to the *Minyad*, a poem of the epic cycle (28.2): ἐπηκολούθησε δὲ ὁ Πολύγνωτος ἐμοὶ δοκεῖν ποιήσει Μινυάδι, “Polygnotus, it seems to me, followed a poem, the *Minyad*.”²⁰

Fostering our awareness of the literary hinterland has the advantage that Pausanias’ descriptions can become a vehicle for questioning tradition. At times Pausanias cites the epic tradition only to disagree with it, as in his description of the demon figure Eurynomus at 28.7, where he notes that neither the *Odyssey* nor the poems of the epic cycle contain any such figure, which, nevertheless, Pausanias goes on to describe.

Other times, Pausanias uses individual figures in the painting as a starting point for pitting different accounts against one another, as in the case of Meleager at 31.3:

¹⁹ See p. 50 below on the use of “props” in the Nile Mosaic. Such “props” are also seen on the Underworld Vase (discussed at pp. 48–49 below).

²⁰ On the grounds that the *Minyad* is possibly “Orphic,” Albinus (2000): 133 posits that Polygnotus includes both Homeric and Orphic elements in his underworld: “Perhaps Polygnotus thus, side-by-side with the negative eschatology of Homer, addressed the Orphic issue of soteriology” (Ibid., p. 134).

ἐς δὲ τοῦ Μελεάγρου τὴν τελευτὴν Ὀμήρῳ μὲν ἔστιν εἰρημένα ὡς Ἐρινὺς καταρῶν ἀκούσαι τῶν Ἀλθαίας καὶ ἀποθάνει κατὰ ταύτην ὁ Μελέαγρος τὴν αἰτίαν, αἱ δὲ Ἥοιαι τε καλούμεναι καὶ ἡ Μινυὰς ὠμολογήκασιν ἀλλήλαις.

As to the death of Meleager, Homer [*Il.* 1.566] says that the Fury heard the curses of Althaea, and that this was the cause of Meleager's death. But the poem *Eoeae*, as it is called, and the *Minyad* agree in giving a different account.

Often, too, Pausanias comments on Polygnotus' imagery as a sequel to earlier tradition. In particular we might be titillated by the fate of Tityos at 29.3: γέγραπται δὲ καὶ Τιτυὸς οὐ κολαζόμενος ἔτι, ἀλλὰ ὑπὸ τοῦ συνεχοῦς τῆς τιμωρίας ἐς ἅπαν ἐξανηλωμένος, ἀμυδρὸν καὶ οὐδὲ ὀλόκληρον εἶδωλον, "Tityos is in the picture; he is no longer being punished, but has been reduced to nothing by continuous torture, an indistinct and mutilated phantom." Here, not only is Tityos the successor to Homer's Tityos but also to Homer's *Herakles*, as an εἶδωλον (*eidōlon*) in the underworld. He's also an actual *eidōlon*—an "image" in a picture.

At 29.10 Theseus and Perithous are given a Homeric tag, taken from *Od.* 11.630–31 (from Odysseus' peroration at the end of *Od.* 11):

καὶ νῦν κ' ἔτι προτέρους ἴδον ἄνδρας οὓς ἔθελόν περ,
Θησέα Πειρίθοόν τε, θεῶν ἐρικυδέα τέκνα.

And now I should have seen more men of former days, whom I wished very much to see, Theseus and Perithoüs, renowned children of the gods.

Pausanias has just described those very figures *not* seen by Odysseus. We as viewers and readers have a more privileged viewpoint than even the hero of Homer's underworld. In this sense, Polygnotus' painting becomes a device that allows Pausanias to rewrite epic tradition, just as Lucian did in respect of Herakles (pp. 15–20 above). Pausanias' is a critical ethnography of the underworld.

We can see the points of contact between Pausanias' description of the underworld painting and Aeneas' journey through the underworld. The way in which Pausanias' description is structured takes the reader through

the underworld scene by scene, much as Aeneas' itinerary imposes a structure on the underworld. Like Pausanias' description of the underworld painting, Aeneas' underworld journey in Virgil is constructed around groups of figures. Virgil's underworld is populated by a gallery of characters; we are led sequentially from group to group: "The underworld's regions are determined by their inhabitants."²¹ These present a kind of "ethnography" of the underworld. At this point, we might take a glance at a surviving work of visual art, the so-called Underworld Vase, dating to about 350 BCE.²²

This Apulian funerary vase, shown in Figure 1, seems to speak to similar conventions of representing space as we've seen in Pausanias' description of Polygnotus' painting, and it may in fact be close to the arrangement of the original painting itself. The decorative field is constructed in registers, around groups of figures with Pluto and Persephone enthroned under a columned edifice, or *aedicula*, in the middle. The other figures, which include the judges of the underworld, Orpheus, Herakles and Cerberus, the Furies, sinners, Hermes *psychopompos*, Theseus and Perithous, etc., are arranged across three registers (of which Pluto and Persephone's *aedicula* occupies two levels).²³ There is no sense of perspective; the figures clearly form a *narrative* landscape. According to Schmidt (1975), this landscape is not just a frozen image. It contains within it a temporal narrative: "I singoli personaggi vanno dunque visti in una doppia prospettiva – sincronica e diacronica" ("Each character should thus be seen in double perspective—synchronic and diachronic"), (my trans.).²⁴ The pattern of figures in the landscape also tells a story with extent over time. It looks as though the conventions of spatial representation we've seen so far are more constant across time and genre than you might expect, and that the method of description in Virgil's underworld landscape reflects these conventions.

²¹ Feldherr (1999): 91.

²² For illustrations of the Underworld Vase see Guthrie (1952): 188; Trendall (1991): 268 and pl. 209; Smith (1976) pl. 1(a). On the Underworld Painter see Trendall (1991): 90–92. On the connection between Apulian pottery, including the Underworld Vase, Orphism, and the so-called Orphic gold leaves, see Schmidt (1975): 121–23; Schmidt, Trendall, and Cambitoglou (1976): 32–33; Pensa (1977); Bernabé (2009); Olmos (2008): 288–91; Bernabé and San Cristóbal (2011): 96; Olmos (2011): 288–91; Cabrera (2011).

²³ On the figures see especially Olmos (2008): 290.

²⁴ Schmidt (1975): 123.



Figure 1 The Underworld Vase, Munich 3297, by permission of the Staatliche Antikensammlungen und Glyptothek, Munich.

(ii) The Nile Mosaic

Another artistic work, the Nile Mosaic from Palestrina (ancient Praeneste), shown here in Figure 2, was made perhaps in the second century BCE and shows a “real” landscape, a Nilotic scene.²⁵

Its craftsmen use the same technique of representing space as our underworld representations. This is what we might call a “narrative landscape”: the artists chose a narrative style of representation over one that employed perspective.²⁶ Groups of figures punctuate the space—an armed group in the bottom field, temple groups to the left and right, a canopied group in the middle (recall the central canopied group in the Underworld Vase), a gladiatorial group on the right of the center field, the hunting group at the top—with the eye being led between them. Characteristically, a rock is used as a sort of plinth for a figure. There is a hunting group composed of men, a dog, and birds at the very top of the mosaic, supported by a rock formation—literally, a prop. We recall Orpheus “sitting on what seems to be a sort of hill” (ἐπὶ λόφου τινὸς Ὀρφεὺς καθεζόμενος) in Pausanias 30.6. This is clearly a convention in landscape art.

It isn’t important that what the Nile Mosaic represents is “real,” whereas Polygnotus’ painting and the Underworld Vase are underworld scenes: all draw on the technique of spatial articulation by group. The technique can be shared because the imaginary landscape is less than wholly imaginary, having features derived from the real; and the real is less than wholly real: because of our limited purview, we must supply many of its features by imagination.

²⁵ For a synopsis of arguments as to its dating, see Meyboom (1995): 217–18 n.58. Older scholarship, such as Dilke (1985): 149, tended to assign a later date, such as the second century CE. The present consensus on the date of the Nile Mosaic is that it is earlier rather than later. Meyboom (1995): 8–19, especially p. 19, argues for the last quarter of the second century BCE.

²⁶ Perspective was available at least by the first century BCE. Cicero refers to perspective in his passage on architectural memory at *De oratore* 2.358, where he says that one word may convey the sense of a whole sentence (*unius verbi imagine totius sententiae informatio*), just as a skilled painter can distinguish the position of things in space by modifying their shapes (*pictoris cuiusdam summi ratione et modo formarum varietate locos distinguentis*). Vitruvius 6.2.2 also shows that a sophisticated understanding of perspective was available by at least the first century BCE (referring to *trompe l’oeil* fresco painting): *non enim veros videtur habere visus effectus, sed fallitur saepius iudicio ab eo mens. quemadmodum etiam in scenis pictis videntur columnarum proiectiones, mutulorum ecforae, signorum figurae prominentes, cum sit tabula sine dubio ad regulam plana*, “For the eyes do not appear to bring accurate results, but the judgement is often deceived by it: just as when, in the paintings of dining rooms, there seem to be projecting columns, corbelled mutules, outstanding shapes of statues, although the picture is undoubtedly vertical and regular” (Granger 1931–34).



Figure 2 The Nile Mosaic from Palestrina, by permission of Museo Archeologico Nazionale di Palestrina and the Ministry of Culture, Heritage, and Tourism (MiBACT, Soprintendenza per i beni culturali di Lazio).

(iii) Geographical Writings

It's sometimes said that Aeneas' journey follows the conventions of the *periplus* ("sailing around") and/or military itinerary, familiar geographical genres in antiquity, which give routes of journeys by sea or land respectively. So Feldherr asserts that "the way the poet constructs his description of the underworld mirrors the techniques by which the Romans produced their 'Inventories of the World.'"²⁷ He likens the construction of space in *Aen.* 6 to the structure of Caesar's *Commentarii*: "[In Caesar's *Commentarii*] Gaul is reduced to a sequence of individual destinations following one after the other without reference to the cardinal points that could relate this itinerary to a two-dimensional map. . . . Within this schema, the individual nations of Gaul become beads on the string of Caesar's progress."²⁸ Caesar's *Commentarii* fall into the itinerary genre. In the *periplus* tradition too, "places were sited largely in relation to each other rather than to an externally imposed grid."²⁹

The "string of beads" technique is a much wider phenomenon in the ancient representation of space. We've seen that Pausanias moves through his imaginary landscape via groups of figures, and that the visual works of art exemplified by the Underworld Vase and the Nile Mosaic employ a similar technique.

You might imagine there would be different strategies for representing space in "geographical" works than in poetic or artistic works. But if we go back to the beginning of the tradition of technical geography, Eratosthenes (third-second centuries BCE), we find an unexpected affirmation of the principles of spatial organization we've seen in our poetic and artistic geographies. Scholars present a picture of Eratosthenes as "the brilliant founder of mathematical geography who made the first precise measurement of the earth's circumference and invented the system of charting locations by means of a grid of longitude and latitude."³⁰ In practice, though, things may have been a little different from what we expect of a technical geographer. Strabo's description gives a flavor of how Eratosthenes proceeds in his *Geography* (Strabo, *Geog.* 1.4.2):³¹

²⁷ Feldherr (1999): 87. On the *periplus*, see K. Clarke (1999): 37; Salway (2004): 43. The earliest *periplus* of the Roman period was Menippus of Pergamum's *Periplus maris interni*, which dates from triumviral or early Augustan period (i.e. contemporary with Virgil). The Latin land itinerary tradition is somewhat later, with the *Itinerarium Antonini* in the third century CE.

²⁸ Feldherr (1999): 91.

²⁹ K. Clarke (1999): 9–10.

³⁰ Moynihan (1985): 154.

³¹ On Eratosthenes' *Geography* see Geus (2004) and Geus (2002): 260–88.

ἐξῆς δὲ τὸ πλάτος τῆς οἰκουμένης ἀφορίζων φησὶν ἀπὸ μὲν Μερόης ἐπὶ τοῦ δι' αὐτῆς μεσημβρινοῦ μέχρι Ἀλεξανδρείας εἶναι μυρίους, ἐνθὲνδε εἰς τὸν Ἑλλήσποντον περὶ ὀκτακισχιλίους ἑκατόν, εἴτ' εἰς Βορυσθῆνη πεντακισχιλίους, εἴτ' ἐπὶ τὸν κύκλον τὸν διὰ Θούλης (ἣν φησι Πυθέας ἀπὸ μὲν τῆς Βρεττανικῆς ἕξ ἡμερῶν πλοῦν ἀπέχειν πρὸς ἄρκτον, ἐγγὺς δ' εἶναι τῆς πεπηγυίας θαλάττης) ἄλλους ὡς μυρίους χιλίους πεντακοσίους. ἐὰν οὖν ἔτι προσθῶμεν ὑπὲρ τὴν Μερόην ἄλλους τρισχιλίους τετρακοσίους, ἵνα τὴν τῶν Αἰγυπτίων νῆσον ἔχωμεν καὶ τὴν Κινναμωμοφόρον καὶ τὴν Ταπροβάνην, ἔσεσθαι σταδίους τρισμυρίους ὀκτακισχιλίους.

Next, in determining the breadth of the inhabited world, Eratosthenes says that, beginning at Meroë and measuring on the meridian that runs through Meroë, it is ten thousand stadia to Alexandria; and thence to the Hellespont about eight thousand one hundred; then to Borysthenes five thousand; then to the parallel circle that runs through Thule (which Pytheas says is a six days' sail North of Britain, and is near the frozen sea) about eleven thousand five hundred more. Accordingly, if we add three thousand four hundred stadia more to the South of Meroë, in order to embrace the Island of the Egyptians, the cinnamon-producing country, and Taprobane, we shall have thirty-eight thousand stadia (Jones 1917).³²

This is “hodological” (“road map”) measurement, the adding up of distances between points. No external structure such as a mathematically determined grid is applied.³³ In Eratosthenes’ “map” (*pinax*, Strabo *Geog.* 2.1.1), parallels and meridians run through notable cities; “They did not form a completely abstract and geometrical set of co-ordinates.”³⁴ The lines that articulated Eratosthenes’ “map” were determined by *places*, forming a “complicated and arbitrary framework,” according to Geus.³⁵ Geus’ view is that this is a result of inadequate data; my own view is that it reflects the culturally accepted way of proceeding through space.

We are met with a similar *modus operandi* in Hipparchus (second century BCE). Hipparchus’ procedure in mapping the zones of the earth, Strabo tells us, is not to begin with an abstract framework but to use inhabited

³² All translations of Strabo in this chapter are from Jones (1917).

³³ At 1.4.1 Strabo has just noted the mismatch (in his view) between this point-by-point technique and Eratosthenes’ abstract discussion of the sphericity of the earth as a whole, which Strabo takes as foreign to his geographical way of proceeding.

³⁴ Geus (2004): 18.

³⁵ Geus (2004): 19.

places as markers. Hipparchus begins with the *inhabitants* of the equator (ἄρχεται ἀπὸ τῶν ἐν τῷ ἰσημερινῷ οἰκοῦντων) and “proceeding along the said meridian to the *inhabited places*, one after another, with an interval each time of 700 stadia, he tries to give the celestial phenomena for each place” (αἰὲ δι’ ἑπτακοσίων σταδίων τὰς ἐφεξῆς οἰκήσεις ἐπιὼν κατὰ τὸν λεχθέντα μεσημβρινὸν πειράται λέγειν τὰ παρ’ ἐκάστοις φαινόμενα).³⁶

How authentic Strabo’s interpretations are to their original contexts is open to question. But even if Strabo suits himself in the information he gives as to Eratosthenes’ and Hipparchus’ ways of proceeding, at the very least he tells us what the expectations of a first-century BCE geographer were about methods of proceeding though space, i.e. landmark by landmark.³⁷

Pomponius Mela’s *De chorographia* (*Chorography*), published 44 CE, also proceeds landmark by landmark.³⁸ Mela starts at *Chor.* 1.1.1 by defining his task as consisting mainly of the names of peoples and places:

orbis situm dicere aggredior, impeditum opus et facundiae minime capax—constat enim fere gentium locorumque nominibus et eorum perplexo satis ordine . . .

A description of the known world is what I set out to give, a difficult task and one hardly suited to eloquence, since it consists chiefly in the names of peoples and places in their fairly puzzling arrangement . . . (Romer 1998)³⁹

His narrative is a “*periplus* . . . of the known world.”⁴⁰ Movement between landmarks is articulated, as in *Aen.* 6 and in Pausanias’ description of Polygnotus’ painting, by words of spatial and temporal progression; like *Aen.*

³⁶ Strabo, *Geog.* 2.5.34.

³⁷ These expectations are widespread: another instance is Menippus of Pergamum, the earliest *periplus* from the Roman period (c. 30 BCE), whose coastal itinerary is interrupted by a section on “distances between cities by land” (see Salway 2004: 54).

³⁸ Chorography can be defined as the study of the topography of the *oikoumene*—the inhabited world—as opposed to the world-as-a-whole. For the definition see Strabo, *Geog.* 1.1.1; Ptolemy *Geography* 1.1. Romer (1998): 21 believes that the so-called Map of Agrippa, which he identifies with “Augustus’ Chorography” (on which, cf. Nicolet 1991: 172) may underlie Mela’s conception: “It is hard to imagine that the most scientifically up-to-date and politically important world map of the early imperial era did not play some part in Mela’s conception.” On the Map of Agrippa, see the discussion later in this chapter.

³⁹ All translations of Mela in this chapter are from Romer (1998). The Latin text is from Silberman (1988).

⁴⁰ Romer (1998): 11.

6 and Pausanias, Mela proceeds from landforms to ethnography. A random selection from Book 2 will demonstrate these features:

subit tum ripam mare, et donec quinque milium passuum spatio absit a Maeotide, refugientia usque subsequens litora, quod Satarchae et Taurici tenent paene insulam reddit . . .

Then the sea encroaches on the bank, and it follows all the way along the receding coastlines until it is five miles distant from the Maeotis, where it renders them into a peninsula. One of these coasts the Satarchae occupy, the Taurici the other. (*Chor.* 2.1.4)

silvae deinde sunt quas maximas hae terrae ferunt, et Panticipes qui Nomadas Georgosque disterminat . . .

Then come the vast forests that these lands bear, as well as the Panticipes River, which separates the Nomads and the Georgians. (*Chor.* 2.1.5)

tum Borysthenes gentem sui nominis adluit . . . diu qualis natus est defluit. tandem non longe a mari ex parvo fonte, cui Exampaeo cognomen est, adeo amaras aquas accipit, ut ipse quoque iam sui dissimilis et non dulcis hinc defluat.

Then the Borysthenes River washes up on the territory of the nation that bears its name. . . . For a long while it flows down exactly as it was born. Finally, not far from the sea, it takes in from a small spring (the name of which is Exampaeus) waters so bitter that from this point on the river continues to flow but is now changed completely [and is not sweet]. (*Chor.* 2.1.6-7).

at ille qui Scythiae populos a sequentibus dirimit, apertis in Germania fontibus, alio quam desinit nomine exoritur.

The river that separates the peoples of Scythia from their neighbors, however, begins—its sources in Germany are known—with a name different from the one with which it finishes. (*Chor.* 2.1.8)

ingenia cultusque gentium differunt.

The temperaments and cultures of the nations differ. (*Chor.* 2.1.9)

Mela's is a repetitive way of moving through space—each place he mentions has topographical features (rivers, seas, woods, etc.) and resident peoples—but Mela picks out the features he finds interesting.⁴¹

As well as listing landforms and peoples, Mela locates places using a mental geography—that of mythology. Quite often he will vary the progression by including “a nontopographic, nongeographic criterion, fame or memorability.”⁴² For instance at 2.1.5 he gives a mythological *aition* for a place name:

Achilles infesta classe mare Ponticum ingressus, ibi ludicro certamine celebrasse victoriam et, cum ab armis quies erat, se ac suos cursu exercitavisse memoratur. ideo dicta est Dromos Achilleos.

Achilles entered the Pontic sea with a hostile fleet, and it is remembered that he celebrated his victory there with competitive games and that there he routinely exercised himself and his men when there was a respite from the fighting. Therefore the land is called Dromos Achilleos.

While his referencing of mythology is less specific than Pausanias' dialogue with his literary sources, we might note Mela's nod to tradition in “it is remembered.”⁴³ In this way Mela draws on a landscape of *memory* in his reader: “Mela played on his readers' mental images of persons, places and things.”⁴⁴ Without the role of the mental image, Mela's description of the physical world would be monotone, a catalog merely. Again, “the practice of using the geographical associations of historical narrative to define place and space”⁴⁵ is a widespread phenomenon, one that Mela shares with Virgil, and others.

According to Romer, “The *Chorography* integrates geographical, historical, cultural, and mythological information, and lets the modern reader appreciate the intellectual, as well as the physical, shape of the ancient world as the Romans experienced it.”⁴⁶ Mela's is an “intellectually multidimensional view

⁴¹ On Mela's selectivity see Romer (1998): 11–12n21.

⁴² Romer (1998): 20.

⁴³ On references to tradition, “they claim,” etc., see Romer (1998): 24n35. In general Mela expresses less skepticism vis-à-vis tradition than Pausanias: of the fourteen instances cited by Romer, only one notes conflicting claims (1.92); two provide rationalistic explanations of myth (3.19 and 3.66) and, interestingly, in one case Mela notes that the rivers Scamander and Simois are “more important because of tradition [i.e. Homer] than because of their physical character” (1.93).

⁴⁴ Romer (1998): 22.

⁴⁵ K. Clarke (1999): 96.

⁴⁶ Romer (1998): 31.

of the world.”⁴⁷ In this sense also he is close to Virgil, whose underworld geography too is many-layered and alive with mnemonic components.

Likewise the work of Strabo, the geographer closest in time to Virgil, integrates different aspects: “[His] geography is neither especially practical nor theoretical (mathematical), neither public nor private, but rather all of these together.”⁴⁸ The elements Strabo and Virgil use to define space are comparable. In an earlier work (Gee 2017: 251–52) I compared Virgil’s description of Elysium at *Aen.* 6.703–6,

interea uidet Aeneas in ualle reducta
seclusum nemus et uirgulta sonantia siluae,
Lethaeumque, domos placidas qui praeonat, amnem.
hunc circum innumerae gentes populiue uolabant.

Meanwhile, in a retired vale, Aeneas sees a sequestered grove and rustling forest thickets, and the river of Lethe drifting past those peaceful homes. About it hovered peoples and tribes unnumbered.

with Strabo, *Geog.* 2.5.17:

πλείστον δ’ ἡ θάλαττα γεωγραφεῖ καὶ σχηματίζει τὴν γῆν, κόλπους ἀπεργαζομένη καὶ πελάγη καὶ πορθμούς, ὁμοίως δὲ ἰσθμούς καὶ χερρονήσους καὶ ἄκρας· προσλαμβάνουσι δὲ ταύτη καὶ οἱ ποταμοὶ καὶ τὰ ὄρη, διὰ γὰρ τῶν τοιούτων ἡπειροὶ τε καὶ ἔθνη καὶ πόλεων θέσεις εὐφυνεῖς ἐνενοήθησαν καὶ τᾶλλα ποικίλματα, ὅσων μεστός ἐστιν ὁ χωρογραφικὸς πίναξ.

It is the sea more than anything else that defines the contours of the land and gives it its shape, by forming gulfs, deep seas, straits, and likewise isthmuses, peninsulas, and promontories; both rivers and mountains assist the sea in this. It is through such natural features that we gain a clear conception of continents, nations, favorable positions of cities, and all the other details with which our [chorographic] map (*pinax*, lit. ‘painted panel’) is filled.

Virgil’s region of Elysium has its own landmarks: a valley, woods, a river, and peoples—following the principles of spatial description laid out by Strabo

⁴⁷ Romer (1998): 23.

⁴⁸ Nicolet (1991): 73.

and exemplified by Mela. Virgil begins with geographical features—*in valle, nemus, virgulta, amnem*—and moves to ethnography—*gentes populi*que. This is not a question of ancestry or “common sources” but rather of cultural climate and convention: all three authors follow the wider conventions in representing space that we have seen consistently exemplified across artistic and technical works.

(iv) The Map of Agrippa⁴⁹

According to Feldherr, “the map of the world, on which [the] mosaic of provinces and *regiones* is represented and articulated, becomes the ultimate manifestation of the breadth of Rome’s imperial sway. *The connections between Virgil’s poetic project and the construction of such representations of space are profound* (my emphasis).”⁵⁰ That Virgil was influenced by contemporary maps is an attractive idea. The problem is, we don’t have any.⁵¹ The closest thing we have to a record of Augustan cartography is Pliny’s account at *Naturalis historia* 3.17 (written about a century after the supposed map it describes) of the map of the world designed in the closing years of the first century BCE by Augustus’ heir Agrippa:

Agrippam quidem in tanta viri diligentia praeterque in hoc opere cura, cum orbem terrarum urbi spectandum propositurus esset, errasse quis credat et cum eo divum Augustum? is namque complexam eum porticum ex destinatione et commentariis M. Agrippae a sorore eius inchoatam peregit.

Agrippa was a very painstaking man, and also a very careful geographer; who therefore could believe that when intending to set before the eyes of Rome a survey of the world he made a mistake, and with him the late lamented Augustus? For it was Augustus who completed the portico containing a plan of the world that had been begun by his sister in accordance with the design and memoranda of Marcus Agrippa. (Rackham 1937–52)

We are told that Agrippa began the map, which was completed after his death in 12 BCE by Augustus himself. But the only evidence for the Map of Agrippa is

⁴⁹ See also the more curtailed treatment of the Map of Agrippa in Gee (2017): 254.

⁵⁰ Feldherr (1999): 86.

⁵¹ Moynihan (1985): 153.

this passage of Pliny, together with about thirty other geographical references in Pliny and two late geographical texts, the *Dimensio provinciarum* and the *Divisio orbis terrarum*.⁵² Some in addition take Strabo 2.5.17 (p. 57 above) to be a reference to the map of Agrippa but this is disputed; Agrippa is not named.⁵³

The completed version of the map is usually dated to c. 7 to 2 BCE,⁵⁴ too late for Virgil to have seen it before his death in 19 BCE, but much of the preparatory work must have been done prior to the map's "publication," and in any case, the first century BCE was a prolific period of cartography in Rome: "Precisely in the Augustan period there was a series of undertakings of geographic, cartographic and administrative nature."⁵⁵ Virgil was working in this climate. Even before the work of Agrippa himself, Julius Caesar is reported to have undertaken a survey of the world.⁵⁶ It is highly plausible that contemporary ways of expressing space would have found their way into both the map and into Virgil's account of traversing space in the underworld.

The problem is, again, that we are unsure exactly how these contemporary ways of expressing space would have been carried out in practice. There has been debate about the identity of the Map of Agrippa since Ritschl (1842). The main recent protagonists are Nicolet (1991) and Brodersen (2003): 268–87.⁵⁷ The debate focuses on whether the map was a graphic or textual representation of space. With the expression *cum orbem terrarum urbi spectandum propositurus esset*, "when intending to set before the eyes of Rome a survey of the world," Pliny seems to be telling us it was a *visual* work. The majority of scholars take Pliny at face value. Thus, for example, Nicolet: "The map of Agrippa located in the Porticus Vipsania in the Campus Martius . . . certainly existed, Pliny saw it and said so."⁵⁸ This view is accepted by Feldherr: "Two of the great monuments of Augustan imperialism would take the form of

⁵² Moynihan (1985): 153; Nicolet (1991): 98; Brodersen (2003): 273.

⁵³ See especially Bowersock (1983): 164n3 and 165; see also K. Clarke (1999): 312–14; Nicolet (1991): 100–1; Dueck (2000): 128; contra, Brodersen (2003): 281–84.

⁵⁴ Nicolet (1991): 99.

⁵⁵ Nicolet (1991): 95.

⁵⁶ On Caesar's survey see Feldherr (1999): 89; Nicolet (1991): 95–98; Wiseman (1987). For a contrasting view, see Brodersen (2003): 262–67.

⁵⁷ See also, among others, Brodersen (2012): 108–9; Scott (2002): 12–17; K. Clarke (1999): 8–9, 103, 333–34; Troussset (1993); Dilke (1985): 41–53; Moynihan (1985); Bowersock (1983): 164–67.

⁵⁸ Nicolet (1991): 100, arguing (pp. 99f) that Pliny's expression *cum orbem terrarum urbi spectandum propositurus esset* can only refer to a *visual* work. See, again, Nicolet (1991): 98, "Pliny twice mentions in an incontestable fashion a map-like work—the famous map in the Porticus Vipsania," the other reference being Pliny 6.139, which Nicolet (p. 99) takes as a "direct verification" of the idea of a map; but cf. Brodersen (2003): 279–80 on the same passage.

representations of the world: Agrippa had such a world map erected in the Porticus Vipsania and produced written commentaries elucidating it.”⁵⁹ Brodersen, however, put the cat among the pigeons by arguing strongly that any so-called “Map of Agrippa” must have been text-only, a list of places and the distances between them. The basis of his argument is the idea that the ancient Romans had no “map consciousness.”⁶⁰

If that is so, one then has to account for apparent references to maps in other first century BCE sources. So, for instance, Livy tells us that Sempronius Gracchus placed a *forma* (large-scale map) of Sardinia in the Temple of Mater Matuta in 174 BCE;⁶¹ Varro that there was an *Italia picta* (“painted Italy”) on a wall in the sanctuary of Tellus;⁶² and Vitruvius, *De architectura* 8.2.6, seems to refer to both “painted and written maps”: *capita fluminum quae orbe terrarum chorographiis picta itemque scripta plurima maximaque inveniuntur*, “the sources/titles of rivers, as found in painted and also written chorographies” (my trans.).⁶³ My own view is that it is counter-intuitive, on the basis of what evidence we have both for the map itself and for other visual works of the same period, to deny that the Map of Agrippa was a visual map of some kind.

Assuming, then, that the Map of Agrippa was a visual map, can we speculate as to what it would have looked like? Theories are many. Its material is variously given as mosaic, fresco, bronze, marble, or tapestry;⁶⁴ its shape as discoid, oval, or rectangular.⁶⁵ There are inconsistencies within these arguments. So Nicolet maintained that “it is clear that Agrippa’s map was oblong (“in the shape of a *chlamys* [cloak]”), a shape well attested since

⁵⁹ Feldherr (1999): 89.

⁶⁰ For the argument about “map consciousness” see Brodersen (2003) 15–25; cf. Talbert (2004): 116; Scott (2002): 15; Moynihan (1985). K. Clarke (1999): 9, believes that an awareness of abstract space is widely attested in antiquity. Nicolet also (1991): 71 believes that “the ‘map’ existed from the beginnings of Classical civilization.” The Milesian philosopher Anaximander is often credited with having drawn the first world map: see Scott (2002): 182n36; K. Clarke (1999): 212; Brodersen (2003): 16; Romm (1992): 14; Nicolet (1991): 59.

⁶¹ Livy 41.28.10; see Nicolet (1991): 99.

⁶² Varro, *Res rustica* 1.2.1, *spectantes in pariete pictam Italiam*, “looking at a representation of Italy on the wall”; Nicolet (1991): 99 believes “it really was a map” (like Pliny in 3.17, Varro uses the verb *spectare*). In my view this doesn’t have to be a map: it could be a narrative landscape like the Nile Mosaic (discussed at pp. 50–51 above); even so, the point stands.

⁶³ Romer (1998): 4 asserts that Vitruvius “used the plural [*chorographiis*] to include maps.” For Nicolet (1991): 172 the term “clearly indicates a map.”

⁶⁴ On the various guesses as to materials, see Brodersen (2003): 269. For the idea of a tapestry map see Scott (2002); Talbert (2010): 144 does not rule out tapestry as a medium for the later Peutinger Map (on which see Chapter 3, p. 88, below).

⁶⁵ See Brodersen (2003): 269 for the arguments and their proponents.

Eratosthenes.”⁶⁶ But no one who has ever worn or made a cloak would argue that a cloak is rectangular: to be wearable it must be roughly trapezoidal, and it is shown very clearly in Nicolet’s own fig. 24 that this is also the shape of the northern temperate zone (a section of a sphere) onto which the northern *oikoumene* is drawn. So too, Scott’s “disc-shaped” representation of the *oikoumene* is based on medieval *mappaemundi* and coin iconography.⁶⁷ But there is a confusion in his argument between globe and *oikoumene*: for instance, the Pompeian coin of Faustus Cornelius Sulla he cites on p. 16 shows a *globe*. This is *not* evidence for a disc-shaped *oikoumene*.⁶⁸ This is by no means the last time we’ll meet this particular confusion (see the following chapter).

Perhaps the most interesting part of the debate is the theory that the Map of Agrippa is related to the Peutinger Table, part of which is shown in Figure 3.⁶⁹ The Peutinger Table, about which more will be said in the next chapter, is a medieval road map that is generally taken to be a recension, in varying degrees, of an ancient map. The surviving map dates to the twelfth or early thirteenth centuries. It consists of eleven parchment leaves longer than they are wide, which together present “a squashed and elongated depiction of the entire known world.”⁷⁰ Scholars show varying degrees of conviction as to its relationship to the Map of Agrippa. Harvey for instance cautiously characterizes the Peutinger Table as representing “a fairly accurate Roman map” of the world as surveyed by an imperial authority of the first century BCE.⁷¹ Bowersock is the most emphatic proponent of the theory that it is a recension of the Map of Agrippa specifically: “There is no alternative to connecting the origin of the Peutinger Table with the maps that were available to Pliny as copies of the Great Map of Agrippa displayed in the Porticus Vipsania.”⁷² If this is so, then the Map of Agrippa showed a version of space

⁶⁶ Nicolet (1991): 104; cf. p. 77 below.

⁶⁷ Scott (2002): 16. Scott is seemingly unaware of the debate about the map’s possible relationship with the Peutinger Table, on which see further below.

⁶⁸ On the coin, see Weinstock (1971): 38–39 and pl. 3.6.

⁶⁹ See Moynihan (1985): 153–54 Nicolet (1991): 102 and Brodersen (2003): 270n6 for a bibliography of the argument.

⁷⁰ Salway (2004): 86. The facsimile is now available online at <http://data.onb.ac.at/rec/AL00161171>. There are some good reproductions in Virga (2007): 24–25. For a discussion of the map see Salway (2004): 86–92.

⁷¹ Harvey (2006): xvii–xviii. Cf. Nicolet (1991): 103 (cautious) and Dilke (1985): 112 (agnostic).

⁷² Bowersock (1983): 170. There are many views contra. Salway (2004): 44 refers to the Peutinger Table as a “graphic itinerary collection . . . in its current form no earlier than the second half of the fourth century [CE].” Likewise, Talbert (2010): 136 believes the theory about Agrippa’s map is “wishful thinking” and that the Peutinger Table derives from “the adaptation and mosaicing of an indeterminate number of detailed maps.” Albu (2005) goes further: she thinks the Peutinger Table is a copy of a map arising from the Classicizing trends of the Carolingian period.

that was, like the Peutinger Table, relentlessly linear: a dendritic mass of routes stretching along a line from east to west. Nicolet (1991) disagrees that the elongated shape of the Peutinger Table derives from the fact that Agrippa's map was set up on the wall of a portico: "The dimensions and appearance of the Peutinger Table should not be taken as indications that the table is an exact replica of Agrippa's map." However, "This said, it is probable that certain characteristics or details of this great chorographic compilation (dated certainly from the fourth or fifth century CE) could be traced back, through many intermediaries, to the map of the Porticus."⁷³

If we provisionally run with the argument that the Peutinger Table does indeed represent Agrippa's map in some form, is this image an attractive analogy for space in *Aen.* 6? In some ways, yes. Most notable in respect of the Peutinger Table is the linearity of space: the eye is led remorselessly from one staging post to the next, along the east-west axis. Scale does not apply for anything that lies along the route from one "symbol" (i.e. settlement) to the next.⁷⁴ This "creates a very distorted representation," with (for instance) Pergamum and Alexandria being in almost vertical alignment on sheet 8.⁷⁵ There is a near loss of the two compass points of the north-south axis. The map's format may really be a text format, either modeled on or imitating a papyrus roll, involving a "deft elimination of most open water and a subtle moulding of land masses."⁷⁶

Likewise, we've seen the linear quality of Aeneas' journey, broken up by staging posts in the form of landforms, architectural forms, and (predominantly) figurative groups. This way of representing space is the "string of beads" technique, to borrow Feldherr's phrase (see p. 52 above).

Looking more closely at fig. 3, we might also note the same kinds of chorographic features as those that structure Virgil's underworld—rivers, mountains, seas, edifices, figures (in particular the grandiose figure on the left of the image representing Constantinople).

This does not mean, however, that there is a direct line of ancestry between any prototype Map of Agrippa Virgil may have seen (whatever form it took) and space in *Aen.* 6. What it does mean is that we can see in the Peutinger Table and (if we accept the theory) in its ancestor, the

⁷³ Nicolet (1991): 103.

⁷⁴ Talbert (2004): 125; cf. p. 129.

⁷⁵ Talbert (2004): 126.

⁷⁶ Talbert (2004): 129. Nicolet (1991): 103 also believes the shape of the Peutinger Table is accounted for by the medium of the papyrus roll.



Figure 3 The Peutinger Table, Codex Vindobonensis 324, Österreichische Nationalbibliothek, Vienna, sheet 15; by permission of the Österreichische Nationalbibliothek, Vienna.

Map of Agrippa, the same idiom at work as in our other instances of spatial representation, namely Pausanias' description of Polygnotus' picture, the Underworld Vase, the Nile Mosaic, our geographic texts—and *Aen.* 6. On the map, we've seen, space may have been represented by a series of staging posts on linear routes. This technique mirrors the Nile Mosaic and Polygnotus' painting as described by Pausanias—as well as Virgil's underworld, with its staging posts of figurative groups and features of landscape both natural and manmade.

It's notable that, yet again, we've progressed from imaginary (underworld) space to a representation of space in the Peutinger Table that is as "real" as it can be—a map of roads across space; and yet, across the spectrum, we've discovered a constant idiom: a movement across space that is not neutral but instead beaded along the way with places inflected with their own histories and characters. This holds, whether it is "real" space that is being represented or imaginary space. It also holds across works of visual art and literary texts. In this sense we have done away with the need for that particular side of the debate. It is not important whether the Map of Agrippa was a visual or a text-only geography. It is not important whether it finds an exact analogy in the Peutinger Table. Textual geographies and visual maps in antiquity worked on this same principle of spatial representation, in which the objectivity or "accuracy" of the map was never, even in the most technical geographies, the only consideration, and often not the primary one. The same idioms of space are present in poetry and geography, artifact and text. The underworld is as "real" as the "real" world is.

Conclusion

In this chapter we have examined the dichotomy between geographical and afterlife—respectively "real" and "imaginary"—landscapes. In *Aen.* 6, Virgil constructs an imaginary underworld landscape. Yet that landscape shares, in fact rests upon, features of the "real." By studying various *exempla* of space—poetic, technical, and artistic—we come to the conclusion not only that Virgil draws on concepts and idioms pertaining to "real" space in the construction of his underworld but also that there is a *reciprocity* between landscapes we call "real" and those that we think of as "imaginary." The real is informed by the imaginary, as well as vice versa.

We have examined a series of possible models for afterlife space in *Aen.* 6, working outward from imaginary space to real. We've seen that idioms of spatial expression are constant across representations of imagined and real space, and across image and text. It is perfectly possible for Virgil to use the components of a "real" geography to construct his imaginary world. The afterlife is modeled on our concept of the "real" world—what else could possibly be modeled on?—but in turn the "reality" we model it on is in large part a construct of the human artistic imagination, of our propensity for simplification and schematization, of viewing things as a whole, when in fact we only ever see in part—as Ptolemy points out; the trees, never the wood, are all that is really visible. Like a map, the afterlife landscape allows us to simplify and schematize our environment, because it imposes no limits: it is imaginary. This is not to say that the "real" is its *inverse*.⁷⁷ Every representation of space, real or unreal, is a projection of psyche.

⁷⁷ Hiatt (2008): 11: "To mark unknown land on the map was to use a different order of representation. It is not simply that such representation was fictive, or imaginative, since elements of fiction and imagination were to be found also within *terra cognita*."

3

Proserpina's Tapestry, Strabo's Cloak

This is not a composition. It is a place where things are, as on a table
or a town seen from the air . . .

—John Cage, *Silence*

Introduction

In the previous chapter we looked at the underworld journey of *Aeneid* 6 in the light of the *periplus* and itinerary traditions, in which “places were sited largely in relation to each other rather than to an externally imposed grid, and where the experienced nature of space was paramount.”¹ We learned that the point-by-point idiom of representing space was much more widespread than you might imagine. It's found across many different genres, involving real and imagined space: geography, poetry, and art. There is no strict dichotomy between real and imagined space; instead there is a continuity between the “imagined” space of Virgil's underworld and the “real” space of geographical accounts.

In this chapter we will look at the *De raptu Proserpinae* (*On the Rape of Persephone*, henceforward the *DRP*) by the fourth century CE poet Claudian.² The *DRP* contains both movement and structure: movement out of and into underworld space, set against the structure of the world as a whole.

The structure of the world is set out in an *ekphrasis*, a description of a tapestry made by the future queen of the underworld, Proserpina, just before her abduction by the god the the underworld, Pluto. This tapestry is a kind of “map”; but it is not a straightforward account of the world's structure;

¹ K. Clarke (1999): 9.

² On the date of the work, see Gruzelier (1993): xvii (c. 395 CE). Cameron (1970): 465 posits that the work was unfinished at Claudian's death in 404 CE (Ibid. p. 418); Guipponi-Gineste (2010): 18 that Book 1 was composed in 395, Books 2 and 3 in 396–97. For editions and commentaries, see Hall (1969); Tardioli (1971); Potz (1985); Charlet (1991); Gruzelier (1993). This last is the edition used here.

rather it is a shorthand representation of several different kinds of space. Proserpina's tapestry gestures toward the *oikoumene* (inhabited world), the globe, and stratified representations of the world.

Proserpina's tapestry, like *Aen.* 6, works with spatial paradigms legible to a contemporary audience. There are parallels for how Proserpina's tapestry plays with space, chief among them, perhaps, a fourth-century CE map, of which the Peutinger Table (pp. 61–64 above) may be a recension. Proserpina's tapestry bears resemblance to idioms of representing "real" space; yet these idioms begin to look less "real" the more we scrutinize them.

1. *Katabasis*

Proserpina's vision of the world is placed in an *afterlife* setting. We must ask why it belongs there and, more, how it has come about that there so much about geography—the upper world—in a book on the afterlife.

Claudian's poem is not strictly a *katabasis* in the epic sense: there is no hero who, Odysseus- or Aeneas-like, journeys through the underworld. Instead, the poem explores the notion of relationship between the underworld and the upper world. It works around motifs of *katabasis* and ascent, order and disorder, the violation of boundaries.³

The poem itself *is* an underworld, which draws the reader in. At the very opening of Book 1, describing his poetic undertaking, Claudian picks up the thread of Aeneas' underworld descent in *Aen.* 6 (*DRP* 1.1–4):⁴

infernī raptoris equos adflataque curru
sidera Taenarīo caligantesque profundae
Iunonis thalamos audaci promere cantu
mens concussa iubet. gressus removete, profani.

My inspired mind bids me bring forth in bold song the horses of the robber from the underworld, the stars' infection by the breath of his Taenarian chariot-team, and the dark burial chamber of the queen of the lower regions. Withdraw your steps, you who are uninitiated. (Gruzelier 1993)⁵

³ On the violation of boundaries in Claudian's poem, see Newbold (1979).

⁴ On the opening of the poem see Wheeler (1995): 113–14.

⁵ Translations and text of Claudian in this chapter are from Gruzelier (1993).

The poet's program and address to the reader is marked by recall of Aeneas' entry point into the underworld. Line 4, *gressus removete, profani*, "withdraw your steps, you who are uninitiated," echoes the admonition of the Sibyl at *Aen.* 6.258, *procul, o procul este, profani*, "stay far, far away, you uninitiates," at the beginning of the underworld journey. From the beginning, we know we are experiencing a kind of *katabasis*: we ourselves, the readers, are the epic heroes, about to descend.

In the *Aeneid*, an invocation of the infernal gods came after the Sibyl's warning (*Aen.* 6.264–67):

*Di, quibus imperium est animarum, umbraeque silentes
et Chaos et Phlegethon, loca nocte tacentia late,
sit mihi fas audita loqui; sit numine vestro
pandere res alta terra et caligine mersas.*

Gods who rule over souls, tacit shades, and Chaos and Phlegethon, places which lie under night's wide blanket of silence: let it be sanctioned for me to tell what I have heard and, with your help, to lay open things deep hidden by dark earth (Fairclough rev. Goold 1999).⁶

Claudian follows Virgil, calling on the infernal gods at *DRP* 1.20–26. Claudian's invocation begins with an echo of the Virgilian formula:

*Di, quibus innumerum vacui famulantur Avernī
vulgus iners, opibus quorum donatur avaris
quidquid in orbe perit, quos Styx liventibus ambit
interfusa vadis et quos fumantia torquens
aequora gurgitibus Phlegethon perlustrat anhelis:
vos mihi sacrarum penetralia pandite rerum
et vestri secreta poli . . .*

O gods, who are served by the numberless and sluggish crowd of empty Avernus, to whose greedy coffer is granted whatever perishes in the world, whom the barrier of Styx flows round with livid-grey shallows, and past whom Phlegethon proceeds with panting eddies, whirling his smoking

⁶ All translations of *Aen.* 6 in this chapter are from Fairclough rev. Goold 1999.

waters: disclose to me the mysteries of sacred matters and the secrets of your world.

This passage of Claudian is bursting with allusions to *Aen.* 6.⁷ *Vacui* (*DRP* 1.20) recalls *domos Ditis vacuas* ("the empty dwellings of Dis") at *Aen.* 6.269; *Styx . . . interfusa* ("Styx flowing around," lines 22–23) echoes the collocation at *Aen.* 6.439, *novies Styx interfusa coerchet* ("Syyx, flowing around nine times, encircles it"); *liventibus . . . vadis* ("livid shallows") in the same lines of Claudian echoes Virgil's *vada livida* at *Aen.* 6.320; *ambit* ("flows around") recalls this verb at *Aen.* 6.550–51 *quae [moenia] rapidus flammis ambit torrentibus amnis, / Tartareus Phlegethon*, "a swift river with crackling flames, Phlegethon, river of Tartarus, flows around these [walls]"; Claudian's *gurgitibus* ("eddies") in line 24 reminds us of Virgil's *gurgēs* ("whirlpool") at *Aen.* 6.296. At the beginning of the *DRP*, we are plunged verbally into Aeneas' journey into the underworld, the descent into the deep.

The other end of the *katabasis* is present in Claudian too. Pluto's ascent at the end of Book 1 (*iamque viam Pluto superas molitur ad auras*, "already Pluto was beating his way to the upper air," *DRP* 1.278) mirrors Aeneas' ascent as anticipated by the Sibyl at *Aen.* 6.126–29:

facilis descensus Averno:
noctes atque dies patet atri ianua Ditis;
sed revocare gradum *superasque* evadere *ad auras*,
hoc opus, hic labor est.

The descent to Avernus is easy: the door of dark Dis lies open night and day; but struggle and effort is required to retrace your step and emerge in the air above.

In Virgil, Aeneas' ascent *superas ad auras* is the natural return of the living from the land of the dead; in Claudian the ascent *superas ad auras* is the unnatural ascent of the god of the dead from his proper domain.

At either end of Book 1, we are placed firmly within the territory of *katabasis* narrative, even while Claudian varies its motifs to suit his vision of interchange between underworld and upper world. Within the structural pattern of *katabasis* and return is set a world icon, a holistic image of the world.

⁷ On Virgilian allusion see also Gruzeliier (1989): 15–18.

2. The Tapestry of Proserpina as Image of the World

Pluto's ascent from the underworld is preceded by an image of world order, in the form of an *ekphrasis*: a detailed description of a work of art, in this case a tapestry that was being made by Proserpina just before her abduction. It is the orderly image of the world on the tapestry that is ruptured by Pluto's incursion. The tapestry is described at *DRP* 1.246–72:

ipsa domum tenero mulcens Proserpina cantu
 inrita texebat rediturae munera matri.
 hic elementorum seriem sedesque paternas
 insignibat acu, veterem qua lege tumultum
 discrevit Natura parens et semina iustis
 discessere locis: quidquid leve, fertur in altum;
 in medium graviora cadunt; incanduit aer;
 egit flamma polum; fluxit mare; terra pependit.
 nec color unus inest: stellas accendit in auro,
 ostro fundit aquas. attollit litora gemmis
 filaque mentitos iamiam caelantia fluctus
 arte tument. credas inlidi cautibus algam
 et raucum bibulis inserpere murmur harenis.
 addit quinque plagas: mediam subtegmine rubro
 obsessam fervore notat; squalebat inustus
 limes et adsiduo sitiebant stamina sole;
 vitales utrimque duas, quas mitis oberrat
 temperies habitanda viris; tum fine supremo
 torpentes traxit geminas brumaque perenni
 foedat et aeterno contristat frigore telas.
 nec non et patroi pingit sacraria Ditis
 fatalesque sibi Manes; nec defuit omen,
 praescia nam subitis maduerunt fletibus ora.
 coeperat et vitreis summo iam margine texti
 Oceanum sinuare vadis; sed cardine verso
 cernit adesse deas imperfectumque laborem
 deserit . . .

Proserpina herself, soothing the house with tender song, was weaving in vain a gift for her mother's return. Here she was marking out with her

needle the chain of the elements and her father's abode, the law by which Mother Nature separated out primeval chaos and the seeds of things parted in their proper places: whatever was light was carried on high, and the heavier particles fell to the middle; the air grew bright; flame drove on the pole of the sky; the sea flowed; the earth hung suspended. Nor was the tapestry merely of a single hue: she kindled the stars in gold and flooded the sea in purple. She raised the shorelines with gems, and the threads, even now embossing the counterfeit billows, swelled as a result of her art. You would believe that the seaweed was being dashed against the crags and the harsh roar of the waves was snaking up on the thirsty sands. She added five zones: the middle one, beset with heat, she marked out with red yarn; the scorched strip was parched dry and the threads were thirsty from the constant sun; on either side lay the two habitable zones, over which ranged a temperate mildness suitable for men to dwell in; [next,] at the furthest borders she extended the two inert zones and made her weaving ugly with everlasting winter and gloomy with eternal cold. And she also depicted the sacred regions of her uncle Dis, and the spirits, her fateful lot; nor was there an omen lacking, for, as if knowing the future, her face was drenched with sudden tears. She had even now begun to curl the Ocean with its glassy waves around the very edge of the weaving; but the door-hinge turned and she saw that the goddesses [Venus, Athena and Diana, who have been de-tailed by Jupiter to broker the "marriage" between Proserpina and Pluto] had arrived and left her work unfinished.

This passage is a rich repository of fourth-century style: verbal patterning, enumerative antithesis, *variatio*, sequencing, and much else.⁸ Claudian's description of Proserpina's tapestry is an elaborately and self-consciously artistic representation of the earth on two levels: the original work of art, and its verbal description.

There are four parts to the subject matter of the tapestry: first, a cosmogony (lines 246–58); second, a description of the five zones of the earth (259–65); third, the underworld (666–68); and finally, the description of

⁸ Verbal patterning: line 258 *et raucum bibulis inserpere murmur harenis*; enumerative antithesis: the description of the contrasting zones in lines 259–65; *variatio*: lines 262–64, *duas . . . geminas*; sequence: lines 266–67, *nec non et . . . nec defuit*. On these features of fourth-century style in general (not always of Claudian specifically) see respectively Roberts (1989): 15–19; 23; 45. At p. 24 Roberts refers also to "the play of enumerative and synonymic sequences". More could be said about style here, but it is not my primary concern in this context.

bordering Ocean, which (almost) encloses everything (269–72). This tapestry is an image of an orderly world that will be shattered by the in(ter)ruption of Pluto. Yet, as we'll see, the tapestry itself does not give a logical representation of space.

Before we become enmeshed in its inconsistencies, let's explore the tapestry as an *imago mundi*, an image of the world. Claudian's description works on "two interwoven levels—in terms applicable to nature and the reality of the scene, and those applicable to handicraft."⁹ Proserpina is instantly recognizable as a demiurge: a world artisan. At 266 (*pingit*) she "weaves," or "paints." Her role carries with it a history. *Pingo*, "to paint, work in color," is linguistically and semantically equivalent to Greek ποικίλλω (*poikillō*), often of demiurgic (world-creating) activity.¹⁰ Proserpina in Claudian takes on this demiurgic role, creating a work of art that is also a world icon, one which aims to be a thing of beauty.

The immediate model for Proserpina's tapestry is probably the creation of the world in Ovid, *Metamorphoses* 1.45–51:¹¹

utque duae dextra caelum totidemque sinistra
parte secant zonae, quinta est ardentior illis,
sic onus inclusum numero distinxit eodem
cura dei, totidemque plagae tellure premuntur.
quarum quae media est, non est habitabilis aestu;
nix tegit alta duas: totidem inter utramque locavit
temperiemque dedit mixta cum frigore flamma.

And as the celestial vault is cut by two zones on the right and two on the left, and there is a fifth zone between, hotter than these, so did the providence of god mark off the enclosed mass with the same number of zones, and the same tracts were stamped upon the earth. The central zone of these may not be dwelt in by reason of the heat; deep snow covers two, two he placed between and gave them temperate climate, mingling heat with cold. (Miller 1916)

⁹ Gruzelier (1993) on *DRP* 1.261.

¹⁰ On the linguistic equivalence between *pingo* and ποικίλλω, see de Vaan (2008): *pingo*; *TLL* vol. 10.1.2, *pingo*. For more on ποικίλλω see p. 175n37 and pp. 261–66 below.

¹¹ On this passage see Hiatt (2008): 26–27.

In this passage the demiurge marked (*distinxit*¹²) the earth with the stamp of the celestial zones, which, like Proserpina's, are differentiated by gradations of heat and cold.

Proserpina specifically *wove* her representation of the world (*texebat*, *DRP* 1.247). The medium of the work is significant. Weaving seems to have been associated from early on with demiurgic activity.¹³ As far back as the sixth century BCE we see an act of cosmic creation being imagined in terms of weaving. Pherecydes fr. 53 *KRS* describes a tapestry that Zas (Zeus) made for his wedding with Chthonie ("Earth"): "Ζὰς ποιεῖ φᾶρος μέγα τε καὶ καλὸν καὶ ἐν αὐτῷ <ποικίλλει ἧν> καὶ Ὠγῆ<νὸν καὶ τὰ Ὠ>γηνοῦ <δῶματα, "Zas makes a great and fair cloth and on it he decorates Ge and Ogenos [Ocean] and the Halls of Ogenos." On the cosmic cloak are shown the two defining elements of the world, earth and Ocean. The weaving or embroidering of earth and Ocean by Zas (Zeus) may be an allegory for the creation act.¹⁴ Gruzelier cites this among the sources for Proserpina's tapestry.¹⁵

The concept of weaving as world building finds its way into the philosophical tradition. The term συμπλοκή (*sumplokē*, "a weaving-together") is used by Democritus to illustrate the interweaving of the world into an organic whole at the basic atomic level.¹⁶ In the Latin tradition, Lucretius commonly uses the metaphor of weaving (*textum*, *textura*, etc.) to describe the structure of the world.¹⁷

As well as a demiurge, Proserpina is also a mapmaker. We might recall that the term ποικίλματα (*poikilmata*) is applied by Strabo in *Geography* 2.5.17 (above, p. 57) to the features of the world, as on a "map." A map is an

¹² The verb means both "to separate off" and "decorate, adorn." In the latter sense the participle is used by Cicero of the cosmos itself in the Stoic book of his *On the Nature of the Gods* 2.37: *distinctum et ornatum caelum astris* ('the sky, marked out and decorated with stars', my translation).

¹³ Weaving is associated with world creation earlier in the *DRP* itself: on the weaving of the *Parcae* at *DRP* 1.48–53 as a creation scene, see Guipponi-Gineste (2010): 32.

¹⁴ See *KRS* p. 61.

¹⁵ "The idea of the cosmic cloth draws on ancient philosophical and theological concepts; cf. Pherecydes in the sixth century BC," Gruzelier (1993) on *DRP* 1.246ff. Gruzelier also emphasizes "Orphic" sources for Proserpina's tapestry: see further Guipponi-Gineste (2010): 32–41.

¹⁶ Democritus as quoted by Aristotle at *De caelo* 303a5–9: φασὶ γὰρ εἶναι τὰ πρῶτα μεγέθη πλήθει μὲν ἄπειρα μεγέθει δὲ ἀδιαίρετα, καὶ οὐτ' ἐξ ἐνὸς πολλὰ γίνεσθαι οὔτε ἐκ πολλῶν ἓν, ἀλλὰ τῇ τούτων συμπλοκῇ καὶ περιπαλάξει πάντα γεννᾶσθαι, "[The atomists] say the primary magnitudes [i.e. first particles, atoms] are infinite in number and not divisible in magnitude. Generation is neither of many out of one, nor of one out of many, but consists entirely in the combination and entanglement of these bodies" (Guthrie 1939). Cf. *LSJ* συμπλοκή.

¹⁷ See Costa (1984) on *DRN* 5.92–94). *Textum* (from *texo*, 'to weave') refers to the atomic structure of matter; cf. *DRN* 4.743; 6.997, 1054. *Textura* (e.g. *DRN* 1.247) is a *terminus technicus* for "the 'texture' formed by the particular rarity or density of a thing, i.e. by the proportion of atoms to void in its composition" (Bailey 1947 on *DRN* 1.247); cf. *DRN* 3.209; 4.196, 657.

artistic creation: Strabo's terminology in that passage reflects this. There's also a relationship between weaving, specifically, and geographical representation. For instance, Polybius (second century BCE) uses the metaphor of weaving to describe the unifying influence of Rome on all corners of the world (*Histories* 1.3.3):¹⁸

ἐν μὲν οὖν τοῖς πρὸ τούτων χρόνοις ὡς ἂν εἰ σποράδας εἶναι συνέβαινε τὰς τῆς οἰκουμένης πράξεις, διὰ τὸ καὶ κατὰ τὰς ἐπιβολάς, ἔτι δὲ καὶ τὰς συντελείας αὐτῶν ὁμοίως δὲ καὶ κατὰ τοὺς τόπους ἀπέχειν ἕκαστα τῶν πεπραγμένων. ἀπὸ δὲ τούτων τῶν καιρῶν οἷον εἰ σωματοειδῇ συμβαίνει γίνεσθαι τὴν ἱστορίαν, συμπλέκεσθαι τε τὰς Ἰταλικὰς καὶ Λιβυκὰς πράξεις ταῖς τε κατὰ τὴν Ἀσίαν καὶ ταῖς Ἑλληνικαῖς καὶ πρὸς ἓν γίνεσθαι τέλος τὴν ἀναφορὰν ἀπάντων.

Previously the doings of the world had been, so to say, dispersed, as they were held together by no unity of initiative, results, or locality; but ever since this date [201 BCE, the end of the second Punic War between Rome and Carthage] history has been an organic whole, and the affairs of Italy and Libya have been [interwoven] with those of Greece and Asia, all leading up to one end. (Paton rev. Walbank and Harbich 2010).

Space and time are “interwoven” too here: the unifying progress of events toward a given conclusion is a function of the unification of space, and vice versa. Likewise, Strabo uses the image of weaving to describe the way in which the various pieces of his geographical narrative are related to each other to form a coherent journey, the history of the Acarnanians being “interwoven” with that of the Aetolians (*Geog.* 10.2.26). Likewise topography, in the form of peoples with their toponyms, is “interwoven” with chronology, in the form of their histories.

We find the same metaphor in Pomponius Mela. We remember (p. 54 above) that Mela defined his project at *Chor.* 1.1 as that of describing the “fairly puzzling arrangement” of the world's peoples and places. The phrase he used was *perplexo satis ordine*, lit. “their fairly *interwoven* order.” Mela echoes the metaphor at 1.56, his description of a labyrinth made by Psammetichus,

¹⁸ On this passage, and significance of the metaphor in Polybius, see K. Clarke (1999): 114. On the use of *συνπλοκή* (*sumploke*) and related terms in the atomists, and in Polybius' universal history, where they indicate the “interweaving” of peoples, places and events, see Pédech (1964): 506–7.

which is described as “interwoven”—*perplexus*—“with a great and explicable wandering.” Psammetichus’ labyrinth is both a work of art and a microcosm of Mela’s vision of the world, of which the pattern is confusing yet solvable.¹⁹ In both passages, weaving is the active metaphor.

So far, we’ve seen weaving as a metaphor for world building in a number of contexts. But we may also find an *actual* woven representation of the world contemporary with Mela’s *Chorographia*, in the form of a tapestry described in an epigram by Philip of Thessalonica.²⁰ This tapestry was also some kind of map of the world.²¹

The tapestry is said to show the inhabited world and the surrounding ocean:

γαῖαν τὴν φερέκαρπον ὅσῃν ἔζωκε περίχθων
ὠκεανὸς μέγας Καίσαρι πειθομένην
καὶ γλαυκὴν με θάλασσαν ἀπηκριβώσατο
κερκίσιν ἱστοπόνοις πάντ’ ἀπομαξαμένη·
Καίσαρι δ’ εὐξείνῳ χάρις ἦλθομεν, ἦν γὰρ ἀνάσσης
δῶρα φέρειν τὰ θεοῖς καὶ πρὶν ὀφειλόμενα.

Modelling all with shuttle labouring on the loom, [Kypros²²] made me, a perfect copy of the harvest-bearing earth, all that the land-encircling ocean girdles, obedient to great Caesar, and the grey sea too. We have come as a grateful return for Caesar’s hospitality; it was a queen’s duty, to bring gifts so long due to the gods. (Gow and Page 1968)

Philip mentions only two components of the world—earth and Ocean. This highly schematic representation of the world could be likened to the Homeric vision of the earth surrounded by Ocean, as we find it, archetypally, in the Shield of Achilles in *Iliad* 18.478–608,²³ or the “world map” of the

¹⁹ See Romer (1998): 12–13.

²⁰ *Anthologia Palatina* 9.778, Gow and Page (1968), vol. 1: 300–301. The tapestry was apparently sent as a gift from a foreign queen to a Roman emperor. The queen was almost certainly Kypros, wife of the Jewish client king Herodes Agrippa (see Scott 2002: 6); the emperor was Gaius (Caligula). The occasion was a deputation from Agrippa to Rome to ask for the emperor’s support for his kingship against a rival claimant in 40 CE (Josephus, *Jewish Antiquities* 18.247); see Gow and Page (1968), vol. 2: 333–34; Beckby (1965–68), vol. 3: 819.

²¹ “We are evidently dealing here with a world ‘map’ done either in wool or linen,” Scott (2002): 5.

²² On the restored name, and the identity, see Scott (2002): 6–8.

²³ Scott (2002): 9. The Shield of Achilles has been characterized as “a self-conscious creation of art and intelligence” and as “Western man’s first microcosmic model of a unified, coherent world-order,” Segal (1978): 320. Cf. Cosgrove 2001: 35, who describes it as “the founding figure of a Western cartographic imagination.”

Presocratic philosopher Anaximander (c. 550 BCE).²⁴ From Herodotus 4.36 (Anaximander fr.100 KRS), we learn that the map of Anaximander showed Ocean flowing around the outside of a round earth. Strabo (*Geog.* 1.1.11.4–9, Anaximander fr.99 KRS) explicitly says that Anaximander “followed Homer.” The circular template of Homer’s Shield of Achilles would therefore have lain behind both the Map of Anaximander and the “map of Kypros” although they are around five hundred years apart.²⁵ If this is so, it demonstrates the enduring nature of the Homeric paradigm.

3. The *Oikoumene*

Given its putative importance to the “map-making” tradition, let’s examine the Homeric blueprint a bit further. What we see in the Shield of Achilles is an account of the earth and two cities on it. This is the “inhabited world,” what would later be called the *oikoumene*. It is *this* that is bounded by Ocean at *Il.* 18.607–08:

ἐν δὲ τίθει ποταμοῖο μέγα σθένος Ὠκεανοῖο
ἄντυγα πᾶρ πυμάτων σάκεος πύκα ποιητοῖο.

On it [Hephaistos] set also the great might of the river Oceanus, around the outermost rim of the strongly-made shield. (Murray rev. Wyatt 1999)

Proserpina in her tapestry imitates the Homeric motif of Ocean running around the outside of the world: where the ekphrasis ends at *DRP* 1.269–70, Proserpina *coeperat et vitreis summo iam margine texti / Oceanum sinuare vadis*, “had even now begun to curl the Ocean with its glassy waves around the very edge of the weaving.” Claudian stays close to the Homeric phrasing, when he has Proserpina weaving the Ocean *summo . . . margine*, “around the very edge” (Homer’s ἄντυγα . . . πυμάτων).

It is the edge of the *oikoumene* that is surrounded by Ocean. Claudian’s fourth-century contemporary Macrobius makes exactly this point,

²⁴ On Anaximander’s map see Scott (2002): 182n36; K.Clarke (1999): 212; Brodersen (2003): 16; Nicolet (1991): 59; Romm (1992): 14.

²⁵ Scott (2002): 10, says, “It seems clear that Philip described Kypros’ tapestry map in terms of the Homeric geographical tradition.”

describing the *oikoumene* in his *Commentary on Cicero's Somnium Scipionis*, 2.9.5–6:²⁶

nam inter nos et australes homines means ille per calidam totamque cingens et rursus utriusque regionis extrema sinibus suis ambiens, binas in superiore atque inferiore terrae superficie insulas facit. unde Tullius, hoc intellegi volens, non dixit “omnis terra parva quaedam est insula”, sed “*omnis terra quae colitur a vobis parva quaedam est insula*”, quia et singulae de quattuor habitationibus parvae quaedam efficiuntur insulae, Ocean bis eas, ut diximus, ambiente.

Separating us from the people of the Southern hemisphere, Ocean flows along the whole extent of the equator; again, as its streams branch out at the extremities of both regions, it forms two islands on the upper face of the earth and two on the underside. Cicero, wishing to imply this, did not say, “The whole earth is a small island,” but rather “*The whole of the portion that you inhabit is a small island*” [Cicero, *De republica* 6.13 = *Somnium Scipionis* 21], since each of the four inhabited quarters becomes an island, with Ocean flowing about them all in two great circles, as I have said (Stahl 1952).²⁷

It is not *omnis terra* that is surrounded by Ocean, but *omnis terra quae colitur a vobis*: the “whole world inhabited by you,” i.e. the *oikoumene* (a Latin gloss on the meaning of the Greek term, “the place where people live”).

In fact, Proserpina's tapestry may be a realization in art of a common metaphor describing the shape of the *oikoumene* in geographical literature. We saw in chapter 2 that scholars are sometimes confused as to the shape of the *oikoumene* and that some say it is rectangular.²⁸ A passage of Strabo, *Geog.* 2.5.5–6, makes it clear that the *oikoumene* is not rectangular. *Geog.*

²⁶ On Macrobius' *Commentary on Cicero's Somnium Scipionis*, and his cosmography in general, see Stahl (1942): 234–49 (Macrobius' astronomy) and 249–58 (his geography); Cameron (2011): 231–72. Hiatt (2008): 44–52 is most helpful in the present context. On the date of Macrobius see Cameron (1966), revisited in Cameron (2011), chapter 7, pp. 255–59; 265–72, and especially 269–70. Scholars originally dated the *Saturnalia* to c. 395, making it exactly contemporary with *DRP* Book 1 (see above, p. 66n2); the *Comm.* would have been about a decade earlier (see Cameron 2011: 232). However a date after 430 for the *Saturnalia* is now accepted, that of the commentary about a decade earlier, giving an estimated date of c. 420; cf. Armisen-Marchetti (2001–3), vol. 1: xvi–xviii.

²⁷ All translations of Macrobius in this chapter are from Stahl (1952). The Latin text is Armisen-Marchetti (2001–3).

²⁸ E.g. Nicolet (1991): 104, discussed at p. 61 above; cf. K. Clarke 1999: 212.

2.5.5 is a basic synopsis of the spherical earth model, with the five zones. In this passage the *oikoumene*, an island surrounded by Ocean, is said to lie *within* a quadrilateral (*tetrapleurōi*). This quadrilateral does not have to be a rectangle. Strabo says that the zone within which the quadrilateral lies is in the shape of a spinning whorl, i.e. roughly a truncated conoid, a section through a sphere (for an illustration see Nicolet 1991, fig. 24). It would be easier to imagine that a quadrilateral inscribed in this shape would be trapezoid rather than rectangular. Strabo specifically states that the *oikoumene* within this quadrilateral is a *chlamys*- (cloak-) shaped island, ἡ δ' οἰκουμένη χλαμυδοειδὴς ἐν τούτῳ νῆσος, “the inhabited world is a *chlamys*-shaped island in this quadrilateral.”²⁹ A cloak, laid flat, is basically a section of a circle, narrow at the head end, flaring out at the edges. In Strabo, the fabric created by the decorative landforms and features of the earth is tailored into this distinctive shape.

At *Comm.* 2.9.8, Macrobius too describes the *oikoumene* (*omnem habitalem nostram*) as a cloak placed over the north temperate zone of the spherical earth:

nam quanto longior est tropicus circus septentrionali circo, tanto zona verticibus quam lateribus angustior est, quia summitas eius in artum extremi cinguli brevitae contrahitur, deductio autem laterum cum longitudine tropici ab utraque parte distenditur. denique veteres omnem habitalem nostram extentae chlamydi similem esse dixerunt.

As the tropical circle is greater than the arctic circle, so our zone is narrower at the top than at the sides, for the top is pressed together by the smallness of the Northern circle, whereas the sides extend in either direction over the broad expanse of the tropics. Indeed, the ancients remarked that the whole of our inhabited quarter was like an outspread *chlamys* (Stahl 1952).

Given the widespread nature of the cloak as metaphor for the *oikoumene*, and given the parallels we've seen between weaving and world building, I think it is likely that we are to envisage Proserpina as weaving an embroidered cloak representing the *oikoumene*.

²⁹ *Geog.* 2.5.6; cf. *Geog.* 2.5.14: ἔστι δὴ τι χλαμυδοειδὲς σχῆμα τῆς γῆς τῆς οἰκουμένης, “So the shape of the landmass of the *oikoumene* is somewhat like a *chlamys*” (Jones 1917). All translations of Strabo in this chapter are from Jones (1917).

4. The Spherical Earth

Just as the *oikoumene* is surrounded by Ocean, so the border of Proserpina's *oikoumene*-cloak is a representation of Ocean. Inside the bordering ocean, Proserpina weaves the five zones (DRP 1.258–65). So far this might seem to accord with the literary model for Claudian's world ekphrasis, since, like Proserpina's earth, Homer's Shield of Achilles has five parts (πέντε δ' ἄρ' αὐτοῦ ἔσαν σάκεος πτύχες, "Five were the layers of the shield itself," *Il.* 18.481). What the Shield of Achilles does *not* represent, however, is the spherical universe. Its five layers are numerically equivalent to Claudian's five zones, but equivalent in no other way. Homer's "map" is round like a shield, not spherical like Proserpina's earth. It is composed of vertical layers, not sections through a sphere like the zones.

The ability of geographers to map the earth in zones was a consequence of the *spherical* model of its shape that took hold in both philosophical and technical literature after Plato.³⁰ Strabo in *Geog.* 2.2.1 is explicit about the relationship between the zones and the sphericity of the earth:

ἔστιν οὖν τι τῶν πρὸς γεωγραφίαν οἰκείων τὸ τὴν γῆν ὅλην ὑποθέσθαι σφαιροειδῆ, καθάπερ καὶ τὸν κόσμον, καὶ τὰ ἄλλα παραδέξασθαι τὰ ἀκόλουθα τῇ ὑποθέσει ταύτῃ· τούτων δ' ἐστὶ καὶ τὸ πεντάζωνον αὐτὴν εἶναι.

Now it is one of the things proper to geography to take as an hypothesis that the earth as a whole is sphere-shaped—just as we do in the case of the universe—and accept all the conclusions that follow this hypothesis, one of which is that the earth has five zones.

Aristotle too discusses the geometry of the zones at *Meteorologica* 362a33–b9:

δύο γὰρ ὄντων τμημάτων τῆς δυνατῆς οἰκεῖσθαι χώρας, τῆς μὲν πρὸς τὸν ἄνω πόλον, καθ' ἡμᾶς, τῆς δὲ πρὸς τὸν ἕτερον καὶ πρὸς μεσημβρίαν, καὶ οὐσης οἶον τυμπάνου (τοιούτου γὰρ σχῆμα τῆς γῆς ἐκτέμνουσιν αἱ ἐκ τοῦ κέντρου αὐτῆς ἀγόμεναι, καὶ ποιοῦσι δύο κώνους, τὸν μὲν ἔχοντα βάσιν

³⁰ On the history of the concept of the spherical earth in Greece, see Salway (2004): 27; Hiatt (2008): 16–17. The first reference to the idea is Plato, *Phaedo* 110b (see pp. 259–60 below); the first citation of empirical evidence for it is Aristotle, *Metaphysics* 297b24ff (the projection of the earth's circular shadow on the moon at a lunar eclipse).

τὸν τροπικόν, τὸν δὲ τὸν διὰ παντὸς φανερόν, τὴν δὲ κορυφὴν ἐπὶ τοῦ μέσου τῆς γῆς τὸν αὐτὸν δὲ τρόπον πρὸς τὸν κάτω πόλον ἕτεροι δύο κῶνοι τῆς γῆς ἐκτιμήματα ποιοῦσι. ταῦτα δ' οἰκεῖσθαι μόνα δυνατόν, καὶ οὐτ' ἐπέκεινα τῶν τροπῶν (σκιὰ γὰρ οὐκ ἂν ἦν πρὸς ἄρκτον, νῦν δ' ἀοίκητοι πρότερον γίνονται οἱ τόποι πρὶν ἢ ὑπολείπειν ἢ μεταβάλλειν τὴν σκιὰν πρὸς μεσημβρίαν) τὰ θ' ὑπὸ τὴν ἄρκτον ὑπὸ ψύχους ἀοίκητα.

For there are two habitable sectors on the earth's surface, one, in which we live, towards the upper pole, the other towards the other, that is, the south pole. These sectors are drum-shaped—for lines running from the centre of the earth cut out this shaped figure on its surface: they form two cones, one having the tropic as its base, the other the ever-visible circle, while their vertex is the centre of the earth; and two cones constructed in the same way towards the lower pole cut out corresponding segments on the earth's surface. These are the only habitable regions; for the lands beyond the tropics are uninhabitable, as there the shadow would not fall towards the north, and we know that the earth ceases to be habitable before the shadow disappears or falls to the south, while the lands beneath the Bear are uninhabitable because of the cold (Lee 1978).

In this passage the zones of the earth are seen as sections through a sphere, like a spheroid version of a baby's stacking toy. Cosgrove characterizes Aristotle's description of the zones as a "conceptual synthesis of celestial and terrestrial spheres" in which "Aristotle impresses a celestial spatiality onto the terrestrial sphere."³¹ The whole can be understood through spherical geometry, applicable to the earth on the analogy of the universe as a whole.³²

Macrobius too zooms in on the zones from a universal perspective (*Comm.* 2.5.10–12):

huius igitur ad caelum brevitās, cui punctum est, ad nos vero immensa globositas, distinguitur locis inter se vicissim pressis nimietate vel frigoris vel caloris, geminam nacta inter diversa temperiem. nam et septentrionalis et australis extremitas perpetua obriguerunt pruina, et hi velut duo sunt

³¹ Cosgrove (2001): 36. On the connection between the celestial and terrestrial regions in Aristotle's cosmos, see further Heidel (1937): 85–91 (on *Meteorologica* 362a32–b9, the passage quoted here); and Taub (2003): 86–88; 157.

³² There are also "assumptions of proportion, symmetry and parallel identity" (Hiatt 2008: 16) within the description of the earth in this passage. The two drum-shaped habitable sectors bear the same relations to their respective poles (north and south).

cinguli quibus terra redimitur, sed ambitu breves quasi extrema cingentes. horum uterque habitationis impatiens est, quia torpor ille glacialis nec animali nec frugi vitam ministrat, illo enim aere corpus alitur quo herba nutritur. medius cingulus, et ideo maximus, aeterno adflatu continui caloris ustus, spatium quod et lato et ambitu prolixius occupavit nimietate fervoris facit inhabitabile victuris. inter extremos vero et medium, duo maiores ultimis, medio minores, ex utriusque vicinitatis intemperie temperantur, in hisque tantum vitales auras natura dedit incolis carpere.

Insignificant as [the earth] is in comparison with the sky—it is only a point in comparison, though a vast sphere to us—it is divided into regions of excessive cold or heat, with two temperate zones between the hot and cold regions. The Northern and Southern extremities are frozen with perpetual cold, two belts, so to speak, that go around the earth but are small since they encircle the extremities. Neither zone affords habitation, for their icy torpor withholds life from animals and vegetation; animal life thrives upon the same climate that sustains plant life. The belt in the middle and consequently the greatest, scorched by an incessant blast of heat, occupies an area more extensive in breadth and circumference, and is uninhabited because of the raging heat. Between the extremities and the middle zone lie two belts which are greater than those at the poles and smaller than the one in the middle, tempered by the extremes of the adjoining belts; in these alone has nature permitted the human race to exist.

This passage of Macrobius forms part of a larger discussion of the way in which earth and the heavens around it are structurally connected, the key idea being the sympathy and interconnectedness of all parts of the world. The zones are part of the vision of an orderly universe that consists of a central earth surrounded by nine spheres.³³ Figure 4 presents a diagram of the zones, taken from a manuscript of Macrobius' *Commentary* from c. 1150:³⁴

³³ According to Stahl (1942): 233, "The main framework of M[acrobius]'s cosmography resembles that of Plato's *Timaeus*." The zones are *not* Platonic, however. Stahl (p. 252) notes that, describing the dimensions of the five zones, Macrobius follows Eratosthenes. On the history of the zone model, which is post-Platonic, see especially Hiatt (2008) *passim*.

³⁴ See also the map in the eleventh-century manuscript Harley 2772 reproduced in Talbert (2010): 148 and Hiatt (2008): 49, referenced by Stahl (1942): 254. Macrobius' text in about 100 of the roughly 150 manuscripts in existence is accompanied by a standard map of the zones such as this one (Edson and Savage-Smith 2000: 22n20). Although it is uncertain whether the diagrams that accompany the medieval text of Macrobius are ancient, it is certain that the ancient text was accompanied by diagrams of some kind, since Macrobius refers to a "diagram" (*descriptio*) at 2.5.13.

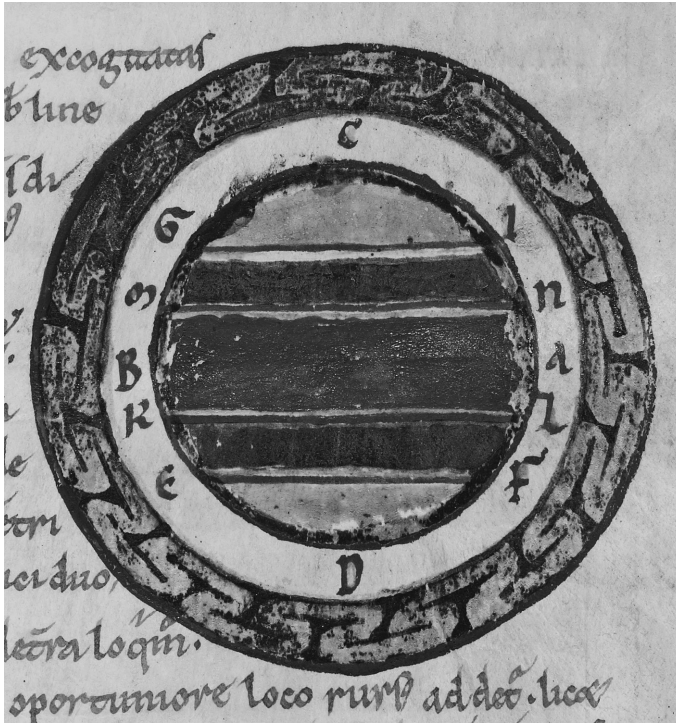


Figure 4 Zone model from Macrobius manuscript, Copenhagen det Kongelige Bibliotek ms NKS 218 4^o folio 34 recto

You might expect the image of the earth inscribed within Proserpina's tapestry to look like a zone map such as this. But there's a complication of space in Proserpina's world. Although Proserpina clearly represents the spherical earth, with its zonal divisions, the spherical universe is *not* surrounded by Ocean; the *oikoumene* is. By the time I reach the end of the passage, I am unsure whether Proserpina is weaving the whole world, or the *oikoumene*. Proserpina's tapestry is in fact a bold simultaneous projection of the flat surface of an *oikoumene* bounded by Ocean, and the spherical-earth model in which the zones of the earth belong: a hybrid of two representations of space that, far from being harmonized by the border of Ocean, are destabilized by it.

Hiatt (2008): 51 argues the maps were included by Macrobius himself. On the maps associated with Macrobius in the manuscript tradition, see further Dolan (2017): 113–16; Hiatt (2008): 48–52; Dilke (1985): 174; Barker-Benfield (1983): 226–27; Destombes (1964): 43–45 and 85–95.

5. Two Geographies?

The oceanic border should lead us to interpret what's shown on Proserpina's tapestry as the *oikoumene*. Yet the presence of the zones insists on the sphericity of the image. Either the image of the bordering Ocean is wrong—it does not fit the spherical model inside it—or the image of the spherical earth is wrong—it is not what should be bounded by Ocean. There is a fudging of the boundaries between globe and *oikoumene*. Where the lines of demarcation lie is a problem in all geographies, including the ancient: “The ancient geographers were accustomed to thinking of a spherical earth. But did that correspond to a circular, mapped earth?”³⁵

Two ways of looking at the earth—as whole, or just the bit we live in—were recognized in antiquity as subject to two different modalities of mapping: the “geographic” (large-scale representations of the earth) and the “chorographic” (small-scale topography). Ptolemy distinguishes between them at *Geog.* 1.1:

Ἡ γεωγραφία μίμησις ἐστὶ διαγραφῆς τοῦ κατελιημένου τῆς γῆς μέρους ὅλου μετὰ τῶν ὡς ἐπίπαν αὐτῷ συνημμένων, καὶ διαφέρει τῆς χωρογραφίας, ἐπειδὴ περ αὕτη μὲν ἀποτεμνομένη τοὺς κατὰ μέρος τόπους χωρὶς ἕκαστον καὶ καθ' αὐτὸν ἐκτίθεται, συναπογραφομένη πάντα σχεδὸν καὶ τὰ σμικρότατα τῶν ἐμπεριλαμβανομένων, οἷον λιμένας καὶ κώμας καὶ δήμους καὶ τὰς ἀπὸ τῶν πρώτων ποταμῶν ἐκτροπὰς καὶ τὰ παραπλήσια. Τῆς δὲ γεωγραφίας ἰδιὸν ἐστὶ τὸ μίαν τε καὶ συνεχῆ δεικνύναι τὴν ἐγνωσμένην γῆν, ὡς ἔχει φύσεώς τε καὶ θέσεως, καὶ μέχρι μόνων τῶν ἐν ὅλαις περιεκτικωτέραις περιγραφαῖς αὐτῇ συνημμένων, οἷον κόλπων, καὶ πόλεων μεγάλων, ἐθνῶν τε καὶ ποταμῶν τῶν ἀξιολογωτέρων, καὶ τῶν καθ' ἕκαστον εἶδος ἐπισημοτέρων. Ἔχεται δὲ τὸ μὲν χωρογραφικὸν τέλος τῆς ἐπὶ μέρους προσβολῆς, ὡς ἂν εἴ τις οὖς μόνον ἢ ὀφθαλμὸν μιμοίτο· τὸ δὲ γεωγραφικὸν τῆς καθόλου θεωρίας, κατὰ τὸ ἀνάλογον τοῖς ὅλην τὴν κεφαλὴν ἀπογραφομένοις . . .

Καταγίνεται δὲ ἐπιπλεῖστον ἢ μὲν χωρογραφία περὶ τὸ ποιὸν μᾶλλον, ἢ τὸ ποσὸν τῶν κατατασσομένων, (τῆς γὰρ ὁμοιότητος πεφρόντικε πανταχῇ, καὶ οὐχ οὕτως τοῦ συμμέτρου τῶν θέσεων) ἢ δὲ γεωγραφία περὶ τὸ ποσὸν μᾶλλον, ἢ τὸ ποιὸν ἐπειδὴ περ τῆς μὲν ἀναλογίας τῶν διαστάσεων ἐν πᾶσι ποιεῖται πρόνοιαν, τῆς δ' ὁμοιότητος μέχρι τῶν μεγαλομερεστέρων περιγραφῶν καὶ κατ' αὐτὸ τὸ σχῆμα μόνον.

³⁵ K. Clarke (1999): 211.

Ὅθεν ἐκείνη μὲν δεῖ τοπογραφίας, καὶ οὐδὲ εἷς ἂν χωρογραφήσειεν, εἰ μὴ γραφικὸς ἀνὴρ· ταύτη δ' οὐ πάντως· ἐμποιεῖ γὰρ καὶ διὰ ψιλῶν τῶν γραμμάτων καὶ τῶν παρασημειώσεων δεικνύναι καὶ τὰς θέσεις καὶ τοὺς καθόλου σχηματισμούς. Διὰ ταῦτα ἐκείνη μὲν οὐδέν τι δεῖ μεθόδου μαθηματικῆς, ἐνταῦθα δὲ τοῦτο μάλιστα προηγείται τὸ μέρος. Προεσκέφθαι γὰρ δεῖ καὶ τῆς ὅλης γῆς τό τε σχῆμα καὶ τὸ μέγεθος, ἔτι τε τὴν πρὸς τὸ περιέχον θέσιν, ἵνα καὶ τὸ κατειλημμένον αὐτῆς μέρος ἐνῇ εἰπεῖν, καὶ πόσον ἐστὶ καὶ ποῖον, καὶ ἔτι τῶν ἐν τούτῳ τόπων ἐκάστους ὑπὸ τίνας εἰσὶ τῆς οὐρανίου σφαίρας παραλλήλους . . .

World cartography (γεωγραφία, *geōgraphia*) is an imitation through drawing of the entire known part of the world together with the things that are, broadly speaking, connected with it. It differs from regional cartography (χωρογραφία, *chōrographia*) in that regional cartography, as an independent discipline, sets out the individual localities, each one independently and by itself, registering practically everything down to the least thing therein (for example, harbours, towns, districts, branches of principal rivers, and so on), while the essence of world cartography is to show the known [earth, *gēn*] as a single and continuous entity, its nature and how it is situated, taking account only the things that are associated with it in its broader, general outlines (such as gulfs, great cities, the more notable peoples and rivers, and the more noteworthy things of each kind). The goal of regional cartography is an impression of a part, as when one makes an image of just an ear or an eye; but the goal of world cartography is a general view, analogous to making a portrait of the whole head. . . .

Regional cartography deals above all with the qualities rather than the quantities of the things that it sets down; it attends everywhere to likeness, and not so much to proportional placements. World cartography, on the other hand, deals with quantities more than qualities, since it gives consideration to the proportionality of distances for all things, but to likeness only as far as the coarser outlines of the features, and only with respect to mere shape. Consequently, regional cartography requires landscape drawing, and no one but a man skilled in drawing would do regional cartography. But world cartography does not require this at all, since it enables one to show the positions and general configurations of features purely by means of lines and labels.

For these reasons, regional cartography has no need of mathematical method, but here in world cartography this element takes absolute

precedence. Thus the first thing one has to investigate is the earth's shape, size and position with respect to its surroundings [i.e. the heavens], so that it will be possible to speak of its known part, how large it is and what it is like, and moreover so that it will be possible to specify under which parallels of the celestial sphere each of the localities of this known part lies.³⁶

Chorography (here translated “regional cartography”), according to Ptolemy, is primarily concerned with “likeness,” the relationship of representation to traversible landscape. As a function of its mimetic nature, chorography needs *art*; geography on the other hand, needs number. At the same time, Ptolemy begins to show how the two are related. An understanding of the earth as sphere is a prerequisite to the investigation of its known part. Thus we see how the zones of the earth underlie particular parts of the celestial sphere, the “shell” of the whole arrangement.

Strabo could also say (*Geog.* 2.3.1), ἡ μὲν οὖν εἰς πέντε διαίρεσις δοκεῖ μοι καὶ φυσικῶς ἅμα καὶ γεωγραφικῶς εἰρῆσθαι, “However, the division [of the earth] into five zones seems to me to be in harmony with physics as well as geography.” He goes on to explain that φυσικῶς (*physikōs*) means in harmony with astronomical data; γεωγραφικῶς (*geōgraphikōs*) means harmony with the regions of the earth according to habitability. Strabo makes a similar distinction to that of Ptolemy, although, confusingly, here “geography” means “chorography,” the study of the minutiae of the earth.

This sheds some light on a passage of Strabo we saw in the previous chapter (p. 57). In *Geog.* 2.5.17, we recall, Strabo said that “it is the sea more than anything else that defines the contours of the land and gives it its shape.” The word he uses for “defines” is γεωγραφεῖ, *geōgraphei*, lit. “draws around.” It is through the various landforms that we are given a clear conception of inhabited places such as nations and cities, ὅσων μεστός ἐστιν ὁ χωρογραφικὸς πίναξ, “[all those] details with which our [chorographic] map is filled.” I have amended the translation of Jones 1917 to reflect the actual term Strabo used for “map,” χωρογραφικὸς πίναξ, *chōrographikos pinax*, lit. “chorographic panel.”³⁷

³⁶ All translations of Ptolemy are from Berggren and Jones 2000. The Greek text is Nobbe (1843-45).

³⁷ On Strabo 2.5.17, see Brodersen (2003): 282–83. Nicolet (1990): 111 believes πίνακες were flat detailed geographical maps that were drawn and painted, as opposed to (much rarer) 3D spheres. Strabo in his *Geography* used the word predominantly in the context of art (Brodersen 2003: 281–82). Perhaps the first use of the term to mean “map of the world” is at Herodotus 5.49, of a bronze plaque on which a map of all the earth, sea, and rivers was engraved.

Strabo seems to mix his terminology: he refers to a *chōrographikos pinax* but one in which the sea *geōgrapei* the land. Nicolet remarks, “In fact, the passage is ambiguous, because it seems to suggest that it could be possible to have maps that were both chorographic and geographic.”³⁸ We find the same inconsistency elsewhere. At *Geog.* 1.1.11 Strabo also refers to a *pinax*, but there the collocation is with *geōgraphikon*, of Anaximander’s map; at 2.1.1, he calls the map of Eratosthenes τὸν τῆς οἰκουμένης πίνακα, “the map [*pinax*] of the *oikoumene*.” From these passages, it appears that a *pinax* could either be *chōrographikos*, of local topography, or *geōgraphikos*, a simplified diagram such as we see in the map accompanying Ptolemy’s *Handy Tables* (see Figure 5). Although the ancient authors distinguish between geographic and chorographic space, these two different types of space could be, and were, indiscriminately or even (as we’ll see) simultaneously projected.³⁹

6. The Peutinger Table Again?

The reader will be wondering why we have suddenly reverted to the Peutinger Table, which is apparently a relentlessly linear spatial model (see pp. 61–64 and Figure 3 in chapter 2). In fact, we’ll now see that the Peutinger Table may be a good analogy for Properpina’s tapestry. The Peutinger Table fits as a parallel for Claudian in terms of chronology, if you accept the prevailing view of the fourth-century date of its original.⁴⁰ The original must have been drawn after 328, because the map names Constantinople, founded in that year. Its ultimate source, however, seems to date from the first century CE or earlier, because it shows Pompeii, which was not rebuilt after it was destroyed by Vesuvius in 79. The *termini* for an ancient map that lay behind the Peutinger Table are, therefore, 79 and 328 CE: i.e. within the chronological purview of Claudian.

³⁸ Nicolet (1991): 101.

³⁹ Similarly K. Clarke (1999): 314: “Both continuous and discrete notions of space and time could, with equal validity, be used to construct a view of the world.”

⁴⁰ The Peutinger Table is a fourth-century “chorographic compilation” (Nicolet 1991: 103); it is a “graphic itinerary collection” that, “in its current form, [is] no earlier than the second half of the fourth century” (Salway 2004: 44). Cf. Salway (2004): 86: it “would appear to be a more or less faithful copy of an original whose contents can be put no earlier than the mid-fourth century CE but which might have been drafted at any point thereafter.” Talbert (2004): 117 characterizes the map as a copy of “a Roman original of indeterminate date,” most likely the fourth century CE. Feldherr (1999): 92 defines it as “a twelfth-century copy of a fourth-century itinerary map, whose primary aim was to record the staging-posts on a network of roads leading from Rome.”

The ostensibly straightforward geometry of the Peutinger Table, like that of Proserpina's earth, conceals a plurality of spatial and temporal concepts. While it might seem a simple roadmap, new cities and cities that no longer exist rub shoulders: it teases the viewer with overlaid historical strata. It is a temporal narrative equivalent to Virgil's underworld.

Consider its shape also, with "its remoulding of the world, which almost (but not quite) eliminates a north-south dimension, and substantially (but deftly) varies the scales at which different regions appear."⁴¹ Noting its distortion of the shape of the land mass and the loss of two compass points, Talbert questions whether it was intended for practical use at all.⁴² According to Salway, too, the map is a "layered masterpiece capable of being 'read' in a variety of ways on various levels."⁴³

Moreover, like the Map of Agrippa in some restorations⁴⁴ the Peutinger Table might have been part of a larger whole, on which different kinds of space may have been represented. In Talbert's view, this explains the laterally stretched shape of the *oikoumene* in it: "A possible explanation for such deliberate squatness . . . is that the original map formed only one component of artwork that was several times larger overall and is otherwise lost."⁴⁵ Moreover, "The map could have formed one part of a design with even more components, in particular a globe image divided horizontally into zones (Greek *climata*)."⁴⁶

If the original of the Peutinger Table was a map designed to represent the northern *oikoumene*, in the north temperate zone, on a *globe*, it combined two different kinds of space, namely the chorographic and geographic respectively, in the sense of Ptolemy's terms. At some point between the original wall map and what we now have—the Peutinger Table—the map was "excerpted" and only the *oikoumene* copied, and this is what we now have in

⁴¹ Talbert (2010): 155. On the elimination of the north-south dimension, see also Talbert (2004): 118; Stückelberger (2004): 37.

⁴² "It has too many shortcomings to be practical," Talbert (2004): 127.

⁴³ Salway (2004): 131. On the definition of "layered" in this context see pp. 40–41n5 above.

⁴⁴ See Troussel (1993) on the Map of Agrippa as a triptych along three walls of a portico, representing the three continents (Europe, Africa, Asia) of the *oikoumene*.

⁴⁵ Talbert (2010): 146.

⁴⁶ Talbert (2010): 147. Talbert imagines the whole original map in the apse of a throne-room or imperial reception: "The curved wall of an apse within which a throne was set would have made an ideal setting for an extended map of the *orbis terrarum* under Roman sway that was deliberately oriented North and centred on the city of Rome" (p. 149, with Talbert's sketch).

the Peutinger Table. But the extant map still gestures toward universality in space and time. The viewer may even have recalled a wider context.

Like the map which lay behind the Peutinger Table, Proserpina's map is not a logical unfolding of space, but a comprehensive vision which projects *simultaneously* both globe and *oikoumene*. But because Proserpina's tapestry is a verbal representation, it can do something the map cannot. It does not have to choose. It does not have to "excerpt" to show just one aspect of space: it is the simultaneous mapping of different kinds of space, telescoped into one image. Ocean, which in theory borders the *oikoumene*, stands as shorthand, as it were, for that *oikoumene*; but at the same time it contains a representation of the spherical universe, in the zone model. Proserpina lets the two representations of space stand together. Her map is not a logical projection, but a symbolic overview, of space. It represents what all of our other after-life texts do: they figure space comprehensively, not logically, reconciling different types of space—globe and *oikoumene*, spherical and stratified visions of the world.

Reading Talbert's reconstruction of the fourth-century original of the Peutinger Table as a decorative artwork, I cannot but call to mind Proserpina's tapestry. According to Talbert, "The Peutinger Map . . . can be viewed as a great, long colourful robe or frieze celebrating Rome and Roman power, with the pictorial symbols as eye-catching *segmenta* and the routine linework as *clavi*."⁴⁷ Talbert favors painting—or perhaps *tapestry*—as its medium: "The Peutinger map is best understood as artwork designed in this tradition, and for a specific type of location. Paint seems the most likely medium—applied either directly to a wall or to movable panels—although tapestry should not be ruled out."⁴⁸

We can imagine the original of the Peutinger Table as a tapestry map, a more detailed, more decorative version the tapestry map of Kypros (p. 75 above). It had affinities with late antique dress, covered in bands and patches infilled with copious decoration in purple and gold.⁴⁹ A cloak could be decorated with both *segmenta* and *zonae*: the late antique writer Isidore of Seville tells us that some clothes are *segmentata zonis quibusdam et quasi*

⁴⁷ Talbert (2004): 129–30. *Clavi* are decorative bands; *segmenta*, patches. These can be seen on the decorative *togae* of the consuls illustrated in the calendar of Philocalus from 354: see Talbert (2004): fig. 19; Salzman (1991): figs. 13 and 14; Stern (1953): figs. XIV and XV; also see Roberts (1989): 103.

⁴⁸ Talbert (2010): 144; cf. Talbert (2004): 130.

⁴⁹ See Roberts (1989): chapter 3 on parallels between late antique dress and poetry.

praecisamentis ornata, “broken up by certain zones and decorated as it were, with cutouts” (my trans.).⁵⁰

Let us envisage Proserpina's tapestry, then, as a cloak that is also a map, a cloak on which the customary *zonae* and *segmenta* have literally become the zones of the earth, infilled with colours representing their differing levels of heat and cold. This is a very clever creation by the poet: an ekphrasis that is also a map, a map legible according to both geographical and artistic convention, representing in one synoptic artifact multiple ways of conceiving space.

7. The Stratified Universe

Further, Proserpina's tapestry incorporates the idea of a *stratified* universe containing the underworld. Proserpina adds the *manes*, the dead, to the zonal model (DRP 1.266–68). Although the addition of the *manes* seems to follow seamlessly from the description of the zones, in fact Claudian's connective *nec non et* ("there were also") is spatially vague. This is because the world of the dead doesn't really belong anywhere in the spherical universe: it is a layer of the *stratified* universe as represented in the pre-spherical earth cosmologies of Homer and Hesiod quoted on pp. 34 and 35.⁵¹

There are precedents for the inclusion of the underworld in representations of the spherical model. In Virgil, *Georgics* 1.233–43, the poet describes the zones of the heavens, of which those on the earth (as we've seen in Strabo, Aristotle and Macrobius) are the mirror image:⁵²

quinque tenent caelum zonae: quarum una corusco
semper sole rubens et torrida semper ab igni;
quam circum extremae dextra laeuaque trahuntur 235
caeruleae, glacie concretae atque imbribus atris;
has inter mediamque duae mortalibus aegris

⁵⁰ Isidore of Seville, *Etymologiae* 19.22, ed. Lindsay (1911).

⁵¹ See also Hiatt (2008): 17. The “antipodes” do not belong to geography as defined by Strabo, namely the description of the known world. Instead the antipodes belong to the mathematical model of the spherical earth, as well as to “philosophers and writers of fiction for whom the position of antipodal regions beyond the reach of empirical knowledge gave them an emblematic appeal.”

⁵² An excellent account of the relations between celestial and terrestrial in this passage is Hiatt (2008): 23–24. Although there is no apparent tradition of representing this image visually in antiquity, some manuscripts from the ninth century onward illustrate this passage by a diagram similar to that found in the manuscripts of Macrobius: see Hiatt (2008): 76–78, with fig. 10. The diagram shows only the zones, not the underworld.

munere concessae diuum, et uia secta per ambas,
 obliquus qua se signorum uerteret ordo.
 mundus, ut ad Scythiam Riphaeasque arduus arces 240
 consurgit, premitur Libyae deuexus in Austros.
 hic uertex nobis semper sublimis; at illum
 sub pedibus Styx atra uidet Manesque profundi.

Five zones comprise the heavens; whereof one is ever glowing in the flashing sun, ever scorched by his flames. Round this, at the world's ends, two stretch darkling to right and left, set fast in ice and black storms. Between these and the middle zone, two by grace of the gods have been vouchsafed to feeble mortals; and a path is cut between the two, wherein the slanting array of the signs may turn. As our globe rises to steep Scythia and the Riphaean crags, so it slopes downward to Libya's Southland. One pole is ever high above us, while the other, beneath our feet, is seen [by] black Styx and the shades infernal. (Fairclough rev. Goold 1999).

Hiatt notes, "This passage is significant for its conflation of celestial imagery with the iconography of the underworld."⁵³ Just as the underworld was in early epic at the bottom of the strata of the universe, so in this account it rests at the bottom of the spherical model. In this passage of the *Georgics*, the underworld is identified with the South Pole. To envisage this, we would take the Macrobian zone map (see p. 82), and place the underworld at the bottom of it. But it makes no logical sense to place the underworld at the bottom of the sphere.⁵⁴ To do so is an attempt to reconcile the "traditional" stratified universe of the epic tradition, Homer and Hesiod, with the zone model contingent on a *spherical* earth. It is a compromise between a stratified universe, in which the underworld represents the "bottom," and a spherical universe in which there is no bottom, only a center.⁵⁵

The assimilation of the underworld into the sphere was already in evidence from at least the time of the pseudo-Platonic *Axiochus* (possibly third century BCE).⁵⁶ The *Axiochus* says that the "gods below" took possession

⁵³ Hiatt (2008): 24.

⁵⁴ Thomas (1988), Introd. n. on *Geo.* 1.231-56, asks, "How is [Virgil's] description of the Underworld (242-43) accommodated by a spherical world . . . ?" Hiatt (2008): 24 wonders, "What prompted Virgil to combine two contradictory representations of the antipodes?" Gale (2000): 118 sees this passage as a subtle response to Lucretius 3.25-27, on the *absence* of an antipodal underworld.

⁵⁵ On the bottomless sphere see pp. 285-89 below.

⁵⁶ On the date see Hershbell (1981): 20-21.

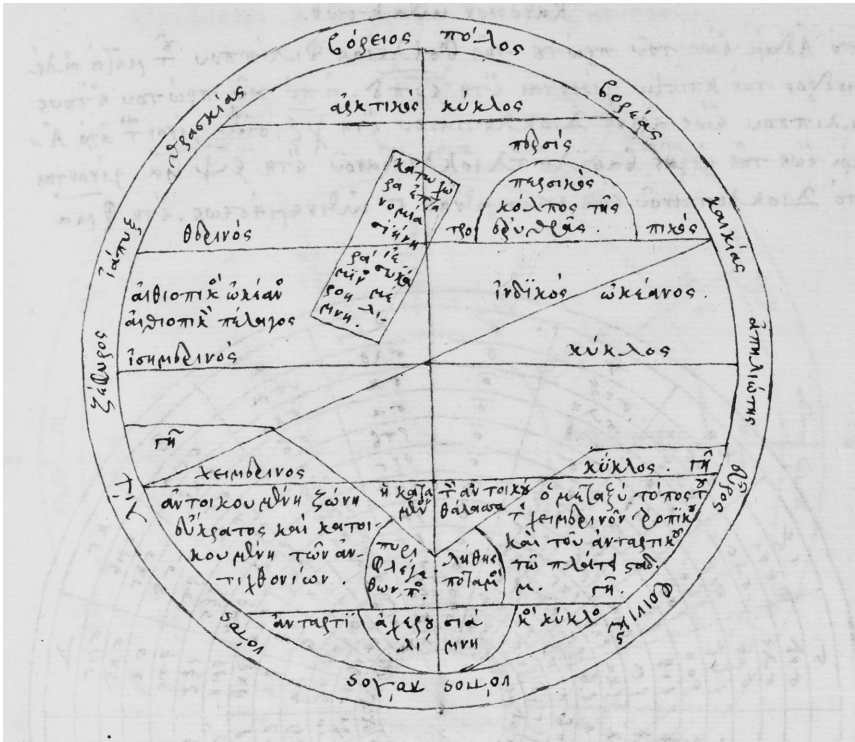


Figure 5 World map from ms Canon Gr32 fol.17r, by permission of the Bodleian Library

of τὸ ἕτερον ἡμισφαίριον, “the other hemisphere” (371b2). As Cumont observed, à propos of this work, “La description que l’auteur fait de ces enfers prétend adapter les traditions mythiques des Grecs aux enseignements de l’astronomie” (“The author’s description of this version of hell claims to adapt the mythic traditions of the Greeks to the teachings of astronomy”).⁵⁷ Here we see the compromise between the stratified underworld and the spherical universe entering the tradition.

Figure 5 is a pictorial representation of the underworld lying at the bottom of the spherical model.⁵⁸ There are at least twelve copies of this map

⁵⁷ Cumont (1949): 193. Cf. Burnet (1911) commenting on Plato *Phaedo* 112e7: “Acheron is the antipodal counterpart of Oceanus, running in the opposite direction. It is fitting that the place of the dead should be in the *other hemisphere*” (my emphasis).

⁵⁸ On this map see Neugebauer (1975) pl. III.2; Dilke (1985): 170 and pl. 29; Jacob (1988); Edson and Savage-Smith (2000); Virga (2007): 23, with pl. 20; Hiatt (2008): 42–4, with fig. 4. Hiatt remarks (p. 44) that “the ‘astrologers map’ is able to depict worlds known, hypothesized and mythologized, within its frame of zonal representation.”

in existence, occurring in two contexts: (1) in manuscripts containing an anonymous astrological compendium and (2) in nine of the twelve surviving copies of the fourth-century CE commentary on Ptolemy's *Handy Tables* by Theon of Alexandria.⁵⁹ It must therefore have conveyed a widely accepted vision of the world. Estimations as to the date of an original map that may have been the model for the image in the manuscripts range from the first century CE to the fifth and sixth centuries CE.⁶⁰ Recently the earlier dating has prevailed. Edson and Savage-Smith therefore characterize it as one of the earliest world maps preserved from antiquity.⁶¹

This map, following the rationale we see in Aristotle, Strabo, and Macrobius, combines celestial and terrestrial concepts: "Il s'agit en premier lieu d'un schéma condensé de l'organisation en zones de la sphère terrestre, dont les cercles et les axes reproduisent ceux de la sphère celeste" ("It concerns itself first of all with a condensed scheme of the organization of the terrestrial sphere into zones, of which the circles and axes reproduce those of the celestial sphere").⁶² Moreover, it has elements of a "chorographic" map: "The geographical names on this map indicate that elements of both a zonal and a celestial map have been superimposed on a world map."⁶³ In fact the map combines two modes of thought: the geographical one, of the *oikoumene* and "counter-*oikoumene*," and the mythical one, of the underworld.⁶⁴ The map is an attempt to harmonize the two, with the underworld localized visually in the southern hemisphere. This was not a practical or utilitarian map but rather "un objet théorique, un structure idéale."⁶⁵ It was a map of ideas, a fantasy compilation that combined and visualized elements of myth and geography much as our written underworld representations do.

The geography of the underworld is visible on Figure 5, where the words Marsh of Acheron, River Lethe, and River Pyriphlegethon are legible.⁶⁶ The startling combination of the zone map with the underworld is best seen in

⁵⁹ Edson and Savage-Smith (2000): 7 and 15.

⁶⁰ Jacob (1988): 1 estimates first to second centuries CE; Neugebauer (1975): 312, first two or three centuries CE, Edson and Savage-Smith (2000): 20, "late imperial origin", i.e. second to third centuries CE; Dilke (1985): 170, fifth to sixth centuries CE.

⁶¹ Edson and Savage-Smith (2000): 13.

⁶² Jacob (1988): 2, my trans.

⁶³ Edson and Savage-Smith (2000): 13.

⁶⁴ See Jacob (1988): 2 and Hiatt (2008): 17 on the "counter-*oikoumene*" in Hellenistic geography (ascribed to Crates of Mallos, c. 150 BCE).

⁶⁵ "A theoretical construct, an idealised structure," Jacob (1988): 4. Edson and Savage-Smith (2000): 21 call it a "composite map" that "reinforces the idea that world maps were philosophical rather than practical, providing a cosmic overview rather than information for some mundane journey."

⁶⁶ See also the schematic diagram in Edson and Savage-Smith (2000): 12.

the juxtaposition In the south frigid zone of ἀχερυσία λίμνη, “The Marsh of Acheron,” and the heading νότιος πόλος, “The South Pole.” The map is a technical drawing that incorporates and makes visible the mythical element of the underworld.

Technical literature, too, seems to feel pressure toward assimilating the underworld of mythic tradition to the universe of “science.” Strabo in his *Geography* develops a highly technical account of the geometrical layout of the earth in zones (*Geog.* 2.5.3). He ends his description with a note about the hemispheres of the earth:

καλεῖται δὲ βόρειον μὲν ἡμισφαίριον τὸ τὴν εὐκρατον ἐκείνην περιέχον
ἐν ἣ ἀπὸ τῆς ἀνατολῆς βλέποντι ἐπὶ τὴν δύσιν ἐν δεξιᾷ μὲν ἐστὶν ὁ πόλος,
ἐν ἀριστερᾷ δ' ὁ ἰσημερινός, ἡ ἐν ᾧ πρὸς μεσημβρίαν βλέπουσιν ἐν δεξιᾷ
μὲν ἐστὶ δύσις, ἐν ἀριστερᾷ δ' ἀνατολή, νότιον δὲ τὸ ἐναντίως ἔχον· ὥστε
δῆλον ὅτι ἡμεῖς ἐσμεν ἐν θατέρῳ τῶν ἡμισφαι- ρίων, καὶ τῷ βορείῳ γε, ἐν
ἀμφοτέροις δ' οὐχ οἷόν τε.

“μέσσω γὰρ μεγάλοι ποταμοί . . . /

Ὤκεανὸς μὲν πρῶτα,” [Homer, *Od.* 11.157–58]

ἔπειτα ἡ διακεκαυμένη.

That hemisphere is called ‘northern hemisphere’ which contains that temperate zone in which, as you look from the east to the west, the pole is on your right hand and the equator on your left, or in which, as you look towards the south, the west is on your right hand and the east on your left; and that hemisphere is called ‘southern hemisphere’, in which the opposite is true; and hence it is clear that we are in one of the two hemispheres (that is, of course, in the north), and that it is impossible for us to be in both:

“Between them are great rivers . . . ; /

first, Oceanus,”

and then the torrid zone.

In the quotation “Between them are great rivers; first, Oceanus,” Strabo combines two lines from Homer, *Odyssey* 11.157–58. In the context of *Od.* 11, Anticleia is speaking in the *underworld*, to her son Odysseus:

τέκνον ἐμόν, πῶς ἦλθες ὑπὸ ζόφον ἡρόεντα

ζῶος ἐών; χαλεπὸν δὲ τάδε ζωῶσιν ὀρᾶσθαι.

μέσσω γὰρ μεγάλοι ποταμοὶ καὶ δεινὰ ῥέεθρα,
 Ὠκεανὸς μὲν πρῶτα, τὸν οὐ πῶς ἔστι περῆσαι
 πεζὸν ἔόντ', ἣν μή τις ἔχη εὐεργέα νῆα.

My child, how did you come beneath the murky darkness, being still alive? Hard is it for those that live to behold these realms, for between are great rivers and appalling streams; Oceanus first, which one may in no way cross on foot, but only if one has a well-built ship. (Murray rev. Dimock 1995).

At the climax of his description of the zones, Strabo gestures toward an epic underworld scene well enough known to his readers to be evoked by a brief quotation. But the quotation is misleading. The Homeric picture of the universe is a *stratified* one, composed of the heaven, the earth, and the underworld at the bottom (see *Il.* 8.13–16, quoted on p. 35). It does not accord with the spherical zone model Strabo has just described with technical precision. Strabo's progression is the equivalent in geographical literature to the incorporation of the underworld into the zone model: a description of the zones that ends with a vision of the epic underworld.

Proserpina's tapestry is an artifact that adopts the same geographic strategy of adding the underworld to the spherical universe. In it we see the now-familiar collapsing of different concepts of space into one polyvalent image. Proserpina employs the apparatus of several different world views. While it does have precedent in the tradition, this synthesis of spatial concepts may also undermine the stability of the universe by introducing the underworld into the zone model.

Conclusion

In this chapter we have looked at the *De raptu Proserpinae* of Claudian, concentrating in particular on its image of world order, the Tapestry of Proserpina in *DRP* 1, an *ekphrasis* set within a narrative that recalls Aeneas' *katabasis*. This world icon embeds two different spatial problems. These are (1) a lack of clarity as to whether what we are seeing is the *oikoumene* (the inhabited world, a flat geometric shape inscribed on the earth's sphere) or the globe, and (2) the coexistence of two apparently different ways of seeing the world-as-a-whole: as a sphere, or as a stack of strata with the underworld

at the bottom. Claudian allows these various representations to coexist in Proserpina's tapestry. The *ekphrasis* becomes a compendium of space.

Perhaps this is the symbolic force of the open oceanic boundary to the tapestry. Proserpina does not close the circle. The openness of the border of Proserpina's tapestry can act as a metaphor for how Proserpina's "map" is such an effective representation of space: it can represent different views of space, according to how the reader wants to interpret and envisage the world icon. Far from being mired in inconsistencies, Proserpina's tapestry is a nest of possibilities.

PART 2
COSMOS

4

The Cloak of Stars¹

‘Virgil, through Anchises’ exposition, has deliberately questioned, even perhaps rejected, the whole conception of the world of the dead through which Aeneas has been led by the Sibyl, making the very notion of κατὰβασις [*katabasis*] seem incongruous.

—Austin (1977) introductory note
on *Aeneid* 6.724–51, p. 221

Introduction

Part 1 of this book (chapters 1–3) focused on various dichotomies in the representation of space in the afterlife, from Homer to Claudian: up and down, real and imaginary, globe and *oikoumene*. I argued that the presence of such dichotomies, rather than being problematic or worrying, is essential to afterlife representations, because the coexistence of different spatial elements speaks to different modes of thought. The afterlife is, precisely, a landscape in which different kinds of thinking can simultaneously find expression. Like a black hole with its gravitational pull, its landscape promiscuously draws in all available ways of representing space. The afterlife becomes a spatial repository for its culture.

Here we shall return, first, to Virgil’s *Aeneid*, concentrating this time not on the journey, with its chorographic idioms and motifs, but on the vision of the cosmos set out in the explanation of souls in the speech of Anchises at *Aen.* 6.724–51. This passage of the *Aeneid*, far from drawing on geographical texts, draws, as I’ll argue, predominantly on Plato’s *Timaeus*. We’ll see that the result of this is that there are two kinds of space in *Aen.* 6: the linear journey, and the synoptic vision. In the previous chapter, we’ve seen an instance of

¹ Title after Leonard Cohen, “Lines from my Grandfather’s Journal,” in *The Spice Box of Earth*, London 1973.

these two kinds of space coexisting in an afterlife text. In Claudian's *DRP*, we are given a *synoptic* image of the world in a *katabatic* setting; the reader, whilst journeying through the metaphorical "underworld" of the poem, is shown a world icon, the Tapestry of Proserpina. In fact we'll see that the journey-vision paradigm, with its two different ways of envisaging space, is the dichotomy perhaps most characteristic of our eschatologies. All of our afterlife texts negotiate some kind of tension between space traversed and space set forth in sum, in vision form. In *Aen.* 6 we have two afterlife modalities, subterranean and celestial, brought together by Virgil.

This has been perceived as a problem. From antiquity, commentators have struggled, perhaps unnecessarily, to resolve a perceived spatial paradox. The standard line among scholars is to lament the "inconsistency" or "incongruity" of these two different kinds of space that coexist in the afterlife landscape. Sometimes they have perceived two "voices" within Virgil's afterlife narrative, voices speaking from the polarities of epic and philosophy. More often than not, they have attempted to reconcile these using allegory. Thus Cumont maintained that Virgil in his underworld setting kept an "older" stratum of belief (the underworld setting), even at the risk of disharmony with the "newer" idea (the celestial abode of souls); and that he was able to include both ideas, because allegory enabled him to retain "les vérités philosophiques sous le voile de l'allégorie" ("philosophical truths under the veil of allegory").²

Allegory is when you say that one thing is "really" another. In the present context, it is a process of "decoding" the underworld. According to this kind of reading, the underworld is not—in fact—under the ground: it is a poetic way of talking about the fate of souls in the upper world, the universe. If the underworld is "really" a way of talking about the cosmos, this is to elide the inconsistency between Anchises' account of the celestial soul and the underworld. It is, effectively, to efface the underworld in favor of the heavens, which become "philosophical" and therefore more "true." This scholarly trope has long pedigree that endures long after Virgil.

Eduard Norden's influential commentary on *Aen.* 6 is probably responsible for the persistence of this type of reading among modern scholars. Norden rests his argument on the phrase *aëris in campis latis*, which occurs in the final panoramic view of Aeneas' and the Sibyl's journey just before the close of the book, at *Aen.* 6.886–87:³

² Cumont (1949): 213.

³ The following argument is from Norden (1926): 3–48, *Einleitung*, in particular pp. 23–26.

... sic tota passim regione vagantur
aeris in campis latis atque omnia lustrant.

Thus they wander at large over the whole region in the wide airy plain,
taking note of all.⁴

Although Aeneas and the Sibyl seem to be continuing their underworld journey, the place of their wanderings is *aëris in campis latis*, lit. “in the broad plains of air.”

Norden traced the concept of the “plains of air” back to an “Orphic” doctrine that put the abode of the souls as actually in the air above the earth. This doctrine was said to arrive at Virgil via a number of intermediaries, principal among whom was the first-century BCE Stoic Posidonius.⁵ The view that the natural home of the soul is in the heavens finds expression in texts such as Cicero’s *Tusculan Disputations* 1.42–43. The soul is said to escape from “this [i.e. our] air” (*ex hoc aëre*, *Tusc.* 1.43), i.e. the dense air around the earth in which meteorological turbulence occurs (*omne caelum hoc, in quo nubes, imbres ventique coguntur, quod et humidum et caliginosum est propter exhalationes terrae*, “this atmosphere of ours, in which clouds, storms and winds collect because of the moisture and mist produced by evaporation from the earth,” (King 1927) —and to seek out “conditions of lightness and heat resembling its own” (*sui similem et levitatem et calorem*), where it “will be nourished and maintained on the same food as nourishes and maintains the stars” (*aletur et sustentabitur iisdem rebus, quibus astra sustentatur et aluntur*). On the analogy of this, Norden interprets Virgil’s *aër* as the air around the earth. Thus we are to see all the underworld action of *Aen.* 6 as happening not underground but, allegorically, in the murk around the earth.

This type of *Quellenforschung* (source criticism), which attempts to trace individual motifs in the text genealogically back to a common source, in this case an Orphic one, rests on a combination of subjective judgment and fragmentary evidence. It is impossible to prove that *Aen.* 6 does *not* “go back to” an Orphic source or sources. It is also impossible to prove that it does. Norden’s reconstruction is based not on first-hand “Orphic” sources but on Stoic and Neoplatonic ones. Such texts as that just quoted could be taken as

⁴ All translations of Virgil, *Aen.* 6 in this chapter are from Fairclough rev. Goold (1999).

⁵ Norden’s thesis that Virgil’s source was the first-century BCE Stoic philosopher Posidonius has long been discredited: see Jones (1932): 56; Jones (1980): Appendix; Hamilton (1934a): 24n1 and 28nn1 and 2; Cherniss (1976): 24–25; Donini (1988): 141.

intermediaries between Virgil and an Orphic tradition, coming via the first-century BCE Stoic philosopher Posidonius. But Cicero's is more likely to be a Stoic view, since he names Posidonius' fellow Stoic Panaetius in this passage and since he places the soul in the context of the four-element theory of Stoicism (*Tusc.* 1.42).⁶ Also, Norden quotes in support of his thesis the fourth-century Neoplatonic commentary of Servius, on *Aen.* 5.735:

secundum philosophos elysium est insulae fortunatae, quas ait Sallustius inclitas esse Homeri carminibus, quarum descriptionem Porphyrius commentator dicit esse sublatam: secundum theologos circa lunarem circulum, ubi iam aer purior est: unde ait ipse Vergilius <VI 887> "aeris in campis" . . .⁷

According to the philosophers, Elysium is the Islands of the Blessed, which Sallustius says are famous from Homer's poems, whence the commentator Porphyry says the description is lifted: according to theologians it is the circle around the moon, where the air is more pure; whence Virgil himself says "*aëris in campis*" . . . (my trans.)

Servius refers to two authorities in this passage. Sallustius is presumably the contemporary of the Neoplatonist emperor Julian (fourth century CE); Porphyry is a Neoplatonic commentator on Plato. Servius' sources are Neoplatonic;⁸ and what we are really looking at in Servius is *Neoplatonic* allegory, in which the underworld is regularly interpreted as an allegory for the circle of air around the earth.⁹

Nevertheless, the view that Virgil's underworld is an allegory for the *celestial* afterlife of Orphism has passed, reasonably uncritically, into standard

⁶ On the Stoicism of the idea see Clark (1979): 182.

⁷ Thilo and Hagen (1881–84) vol. 1 p. 645.

⁸ On Servius' Neoplatonism see Gersh (1986), vol. 2: 747–55, esp. p. 754: "The doctrine of the soul which Servius finds especially in *Aen.* 6 is obviously put together from commonplaces in Platonic philosophical literature." Gersh is insufficiently skeptical when it comes to Virgil. Enumerating Servius' points of contact with Neoplatonist doctrines, Gersh (1986): 750 nevertheless remarks, vis-à-vis the soul's loss of its transcendent status on entry into the body, "This descent is elaborately symbolized by Virgil's description of the infernal regions" (my emphasis). Virgil does not thus symbolize them: Servius does.

⁹ See Hiatt (2008): 46 on the Neoplatonic "tidying" of Virgil. Sadly it seems that Mihai (2015): 266 still accepts this passage of Servius (and Norden's citation of it) as testimony to Virgil's *own* view, referring to "Servius, qui reproduit ici une croyance commune à la période de Virgile" ("Servius, who here reproduces a general belief of Virgil's period"). On Mihai's approach to Classical scholarship, which makes his book an unreliable witness to Classical ideas of the afterlife, see my Introduction, p. 8.

commentaries and scholarship on *Aen.* 6. Austin describes *aëris in campis latis* as “a startling expression for an Elysium set in the underworld.” To explain it, he adopts the allegorical approach: “It is extremely probable that Virgil’s *aëris campi*, though *factually* in an underworld Elysium, yet *allusively* reflect . . . cosmological theories of the soul’s ascent to heaven” (my emphases).¹⁰ Clark (1979): 181 refers to the “mythical disguise” of Aeneas’ *katabasis*.¹¹ Most recently, Horsfall opines that “V. is in all probability writing in terms of ‘astral immortality.’”¹²

The desire of commentators to assimilate Virgil’s underworld to a celestial afterlife is telling. It is a way of simplifying space in *Aen.* 6. Now, instead of the tension between underworld and upper world, as seen respectively in the journey and the speech of Anchises, we have a single location, the upper world, since the underworld is “really” the upper world. Such allegory strives toward the resolution of afterlife space onto a single plane.

The allegorical approach becomes part of the fabric of the eschatological universe after Virgil. It is particularly revealing in this respect to look at texts that are chronologically, perhaps also ideologically, far apart. So in the second half of this chapter we will pass from Virgil to Dante, writing at the beginning of the fourteenth century, a leap of about a millennium and a half. One of the striking things that will arise from such a study is how Plato’s *Timaeus* retains its importance in the eschatological tradition. Each of our authors adopts Plato’s idea of souls-as-stars, reincarnated in bodies, but each also metabolizes it according to their own concerns. Where Virgil Romanizes Plato, Dante Christianizes him.

Virgil partially opens the circle from stars to incarnation and back again. In *Aen.* 6 we somewhat lose sight of the return, as the reinstatement of the heroes is indefinitely deferred after the Parade of Heroes that follows Anchises’ cosmological exposition. They must stick around to become future Romans, in history. Dante, however, opens the circle altogether, so that it becomes a straight line pointing to the resurrection. His souls have to be assimilated to the doctrine of the Christian church, in which incarnation is a one-way street leading to the resurrection of the body.

¹⁰ Austin (1977) on *Aen.* 6.887.

¹¹ Clark (1979): 181. We’ve not seen the last of the topos of “disguise”; we’ll come across it again at pp. 122–26, in our discussion of the twelfth-century Guillaume de Conches’ interpretations of Plato.

¹² Horsfall (2013) on *Aen.* 6.887. Horsfall references the same passage of Servius quoted by Norden. The same caveats apply vis-à-vis Neoplatonic sources as in relation to those already mentioned regarding Norden.

1. The Speech of Anchises

For the greater part of *Aen.* 6 we follow Aeneas and the Sibyl on a horizontal journey, the pattern of which we can understand by analogy with contemporary ways of traversing space. We can envisage Virgil's underworld up to line 724 as a chorographic "map" or narrative landscape in which we move from staging post to staging post. But after line 724, we see that this map has an inset *tondo*, as it were: a vision of the universe, set out in the speech of Anchises.

The speech of Anchises acts as a "cosmic setting" for the Parade of Heroes that follows, in which the souls of future Romans line up at the exit of the underworld.¹³ But while the Parade of Heroes has been extensively treated in scholarship, because of its historical and political content, the preceding speech has been neglected, perhaps because of its apparent intransigence in the underworld setting.¹⁴ The affinities of Anchises' speech seem to lie with the philosophical rather than the epic or geographical tradition as we saw it previously, in chapter 2.

The speech is celestial from its outset (*Aen.* 6.724–34):

‘Principio caelum ac terras camposque liquentis
 lucentemque globum lunae Titaniaque astra
 spiritus intus alit, totamque infusa per artus
 mens agitat molem et magno se corpore miscet.
 inde hominum pecudumque genus uitaeque uolantum
 et quae marmoreo fert monstra sub aequore pontus.
 igneus est ollis uigor et caelestis origo
 seminibus, quantum non noxia corpora tardant
 terrenique hebetant artus moribundaque membra.
 hinc metuunt cupiuntque, dolent gaudentque, neque auras
 dispiciunt clausae tenebris et carcere caeco.’

¹³ On the speech of Anchises as a "cosmic setting," see Hardie (1986): 66–83.

¹⁴ On the Parade of Heroes see Feeney (1986); Habinek (1989); Goold (1992); Feldherr (1999); and Hardie (2004) among others. It's been noted that the wider worldview is fundamental to understanding it: "Only after we have learned the truth about the meaning of life in a divine world scheme may the galaxy of Roman warriors and statesmen display itself before our eyes" (Solmsen 1990: 222). But in standard commentaries the speech of Anchises has been underplayed in scholarship vis-à-vis the Parade of Heroes. Williams (1964): 58, for example, has a single paragraph on the speech, followed by four pages on the parade.

“First, know that heaven and earth and the watery plains, the moon’s bright sphere and Titan’s star, a spirit within sustains; in all the limbs mind moves the mass and mingles with the mighty frame. Thence spring the races of man and beast, the life of winged creatures, and the monsters that ocean bears beneath his marble surface. Fiery is the vigour and divine the source of those seeds of life, so far as harmful bodies clog them not, or earthly limbs and frames born but to die. Hence their fears and desires, their griefs and joys; nor do they discern the heavenly light, penned as they are in the gloom of their dark dungeon.”

According to Anchises, souls come from the heavenly bodies (*caelestis origo*, 730) and, like them, are fiery in nature (*igneus est ollis uigor*). What will be left after the attrition of the body will be just that fiery nature, *aurai simplicis ignem*, “the fire of pure air” (746–47). Anchises’ account of reincarnation (735–51) follows his cosmic setting:

‘quin et supremo cum lumine uita reliquit, non tamen omne malum miseris nec funditus omnes corporeae excedunt pestes, penitusque necesse est multa diu concreta modis inolescere miris. ergo exercentur poenis veterumque malorum supplicia expendunt. aliae panduntur inanes	740
suspensae ad ventos, aliis sub gurgite vasto infectum eluitur scelus aut exuritur igni, donec longa dies perfecto temporis orbe	745
concretam exemit labem, purumque relinquit aetherium sensum atque aurai simplicis ignem: quisque suos patimur manis. exinde per amplum	734
mittimur Elysium et pauci laeta arva tenemus.	744
has omnis, ubi mille rotam volvere per annos,	748
Lethaeum ad fluvium deus evocat agmine magno, scilicet immemores supera ut convexa revisant rursus, et incipiant in corpora velle reverti.’ ¹⁵	750

“[Moreover], when life’s last ray has fled, the wretches are not entirely freed from all evil and all the plagues of the body; and it needs must be that

¹⁵ Arrangement of the text here as in Fairclough rev. Goold (1999).

many a taint, long ingrained, should in wondrous wise become deeply rooted in their being. Therefore are they schooled with punishments, and pay penance for bygone sins. Some are hung stretched out to the empty winds; from others the stain of guilt is washed away under swirling floods or burned out by fire till length of days, when time's cycle is complete, has removed the inbred taint and leaves unsoiled the ethereal sense and pure flame of spirit: each of us undergoes his own purgatory. Then we are sent to spacious Elysium, a few of us to possess the blissful fields. All these that you see, when they have rolled time's wheel through a thousand years, the god summons in vast throng to Lethe's river, so that, their memories effaced, they may once more revisit the vault above and conceive the desire of return to the body."

Reincarnation occurs in Platonic myths of the afterlife. At *Phaedrus* 248e, a cycle of rebirths lasting ten thousand years is necessary for a soul to return to the place whence it came (outside the heaven), although philosophers can make it in three. Perhaps this long period is what is meant by Anchises in 745, *perfecto temporis orbe*, "when time's cycle is complete." A shorter, thousand-year period between individual rebirths is specified at 748 (*mille . . . per annos*).¹⁶ Similarly, there are a thousand years between rebirths at *Phaedrus* 249a–b and *Republic* 615a.

The various temporal cycles involved in the "human cycle" will be further examined in the Intermezzo. The points to note at this stage are that in this part of *Aen.* 6, souls are said to be (1) related to the universe, and (2) fiery. The idea of the fiery soul is probably Stoic.¹⁷ But there's also an immediate Platonic model for Anchises' speech, one that has been underplayed in modern scholarship on the passage: the *Timaeus*.¹⁸ Although I do not mean to argue in what follows that the *Timaeus* is the only "source" for Anchises' speech, its importance cannot be underestimated. Ultimately it is reference

¹⁶ This passage has been the subject of debate, much of which centers on the precise distinction between the *pauci* in line 744 and the *omnis* of 748: the "few" who escape rebirth and "these all" who become new Romans. On the debate, see for example Clark (1979): 177–83; Habinek (1989) 224–28; Williams (1972): on *Aen.* 6.743.

¹⁷ *Tusc.* 1.42–43, discussed at p. 101 above and quoted pp. 160–61 below; cf. Cicero, *De natura deorum* 2.19, 2.41.

¹⁸ References to the *Timaeus* by modern commentators on the speech of Anchises are almost nonexistent: see for instance Norden (1926): 18–19; Austin (1977): on *Aen.* 6.738. The *Timaeus* is not usually counted among Platonic myths of eschatology, namely *Gorgias*, *Phaedo*, *Phaedrus*, and *Republic* (see p. 187 below); this may explain why scholars have hardly noticed it as a model here.

to the *Timaeus* that goes furthest in creating the “anomaly” or tension in the representation of afterlife space in *Aen.* 6, between an underworld geography and a vision of the universe. This part of my argument is, as far as I’m aware, new.

In *Tim.* 41d8–42b5 the Demiurge, architect of the world, turns to the manufacture of the human soul:

συστήσας δὲ τὸ πᾶν διεῖλεν ψυχὰς ἰσαριθμούς τοῖς ἄστροις, ἔνειμέν θ’ ἐκάστην πρὸς ἕκαστον, καὶ ἐμβιβάσας ὡς ἐς ὄχημα τὴν τοῦ παντὸς φύσιν ἔδειξεν, νόμους τε τοὺς εἰμαρμένους εἶπεν αὐταῖς, ὅτι γένεσις πρώτη μὲν ἔσοιτο τεταγμένη μία πᾶσιν, ἵνα μή τις ἐλαττοῖτο ὑπ’ αὐτοῦ, δέοι δὲ σπαρείσας αὐτὰς εἰς τὰ προσήκοντα ἐκάσταις ἕκαστα ὄργανα χρόνων φῦναι ζῶων τὸ θεοσεβέστατον . . . ὁπότε δὴ σώμασιν ἐμφυτευθεῖεν ἐξ ἀνάγκης, καὶ τὸ μὲν προσίοι, τὸ δ’ ἀπίοι τοῦ σώματος αὐτῶν, πρῶτον μὲν αἰσθησιν ἀναγκαῖον εἶη μίαν πᾶσιν ἐκ βιαίων παθημάτων σύμφυτον γίνεσθαι, δεύτερον δὲ ἡδονῇ καὶ λύπῃ μεμειγμένον ἔρωτα, πρὸς δὲ τούτοις φόβον καὶ θυμὸν ὅσα τε ἐπόμενα αὐτοῖς καὶ ὅποσα ἐναντίως πέφυκε διεστηκότα· ὧν εἰ μὲν κρατήσοιεν, δίκη βιώσوينτο, κρατηθέντες δὲ ἀδικία. καὶ ὁ μὲν εὖ τὸν προσήκοντα χρόνον βιούς, πάλιν εἰς τὴν τοῦ συννόμου πορευθεὶς οἴκησιν ἄστρου, βίον εὐδαίμονα καὶ συνήθη ἔξει . . .

And when he had compounded [the cosmic mixture], he divided the mixture into a number of souls equal to the number of stars and assigned each soul to a star. He mounted each soul in a carriage, as it were, and showed it the nature of the universe. He described to them the laws that had been foreordained: they would all be assigned one and the same initial birth, so that none would be less well treated by him than any other. Then he would sow each of the souls into that instrument of time suitable to it, where they were to acquire the nature of being the most god-fearing of living things . . . So, once the souls were of necessity implanted in bodies, and these bodies had things coming to them and leaving them, the first innate capacity they would of necessity come to have would be sense-perception, which arises out of forceful disturbances. The second would be love, mingled with pleasure and pain. And they would come to have fear and spiritedness as well, plus whatever goes with having these emotions, as well as all their natural opposites. And if they could master these emotions, their lives would be just, whereas if they were mastered by them, they would be unjust. And if a person lived a good life throughout the due course of his time, he would

at the end return to his dwelling-place in his companion star, to live a life of happiness that agreed with his character . . . (Zeyl 2000)¹⁹

Reading Anchises' speech alongside this passage of the *Timaeus* is very helpful in arriving at an understanding of the structure and intention of the speech. Tracking Anchises' account of reincarnation alongside the *Timaeus* passage makes it easier to follow the thought progression of Anchises' speech.

The progression of Anchises' speech appears problematic, because Anchises suggests connections rather than makes them. His train of thought is as follows: (a) Whatever it is that forms the essence of living things is made of fire and comes from the heavens (728–32); (b) affect (emotion) is a result of incarnation (733–34); (c) impurities derived from incarnation must be stripped away after death (735–47); (d) after purification, a few (*pauci*) of the souls are resolved into their initial state of fiery air or airy fire (747, *aetherium sensum atque aurai simplicis ignem*); (e) the rest are incarnated as Romans.

All of these elements are found in some form in the quoted passage from the *Timaeus*.²⁰ In Plato, the god taught the soul the nature of the universe as a prerequisite for incarnation. Similarly, Anchises expounds cosmogony. In the *Timaeus*, each individual soul is directly related to the universe by being sown into its “instrument of time” (i.e. heavenly body²¹). The relationship between the universe and the individual soul in the *Timaeus* is a physical one: they are actually part of it, in the forms of the stars. After the lesson, Plato's Demiurge “sowed” (ἐσπείρεν, *Tim.* 42d4; cf. σπαρείσας, 41e4²²) the souls like seeds into the heavenly bodies. Virgil's strangely loose term for souls in *Aen.* 6.731, *semina*, “seeds,” can be explained by the Platonic metaphor of “sowing.” Virgil's souls—*semina*—are the things that in Plato were sown.

The Demiurge's lesson to the souls in the *Timaeus* was in two parts: (1) the nature of the universe and (2) the “laws of destiny,” namely reincarnation. Both parts of the lesson are covered by Anchises' speech. The “nature of the universe” is Anchises' cosmology; the “laws of destiny,” his exposition of reincarnation.

¹⁹ All translations of Plato's *Timaeus* in this chapter are from Zeyl (2000).

²⁰ In addition, the idea that the body fills us with emotions occurs at Plato, *Phaedo* 66c2–4, on which, see Apolloni (1996): 24.

²¹ For the definition see *Tim.* 38c.

²² For the metaphor of “sowing” in Dante's *Paradiso*, almost certainly derived from Plato there too, see pp. 116–17.

But perhaps the most concrete connection between the two texts lies in their explanation of emotion. Unlike in the world soul, for which feeling is not an issue (because it is not in a body, *Tim.* 33c1–3), embodiment creates problems for the human soul, because of the sense impressions that continually assault its surface from outside. In *Tim.* 42a2–b2, sense perception, *aisthēsis*, comes from incarnation. The senses are the inevitable drawback of being in a body.²³ Emotion too arises from exposure to sense impressions after incarnation.

The passions that result from embodiment were described at *Tim.* 42a2–b2.²⁴ Plato's account of emotion explains the oblique connection between lines 732 and 733 in Virgil. As in Plato, in Anchises' speech too, emotions result from contact with the body after incarnation (*Aen.* 6.731–34). The hinge between the two ideas—the body and emotion—is *hinc*, “from here” (733). This must mean “from the body,” i.e. the *moribundaque membra*, “limbs doomed to die,” in the previous line.²⁵ In Plato's *Timaeus*, the succession of emotions follows from the temporal clause, marked by ὁπότε, in *Tim.* 42a3: “when the souls are implanted in bodies.” Virgil's *hinc* fulfills the function of Plato's ὁπότε: both indicate that the passions flow from embodiment.

Plato's description of the emotions also lies behind Anchises' sequence. Once we have a body, and perception, there arise emotions: pleasure, pain, fear, and courage (“spiritedness”), all coexisting with “love” (ἡδονῇ καὶ λύπῃ μεμειγμένον ἔρωτα, πρὸς δὲ τούτοις φόβον καὶ θυμὸν).²⁶ Virgil too lists four emotions in line 733, *metuunt cupiuntque, dolent gaudentque*. When the emotions have been sloughed off, the souls in Virgil regain their *purum . . . / aetherium sensum atque aurai simplicis ignem* (747). The *aetherium sensum* is their heavenly capacity for perception, i.e. as they would have had it in their disembodied state, unclouded by emotion. Purification represents a stripping away of affect, leaving only what is akin to heaven. Once the passions

²³ Cf. Plato, *Phaedo* 79c4–5, τοῦτο γάρ ἐστιν τὸ διὰ τοῦ σώματος, τὸ δὲ αἰσθήσεως σκοπεῖν τι, “inquiry through the body means inquiry through the senses.” Thanks to one of the readers for Oxford University Press for this reference.

²⁴ Cf. 69c5–d6.

²⁵ This is how Servius commenting on *Aen.* 6.733 interpreted the connection: *HINC METUUNT CUPIUNTQUE DOLENT GAUDENTQUE ex corporis coniunctione et hebetudine*, “‘From here they fear, desire, grieve and rejoice’—from the body's conjunction and hampering” (Thilo and Hgen 1881–84: vol. 2 p. 103, with my trans.).

²⁶ Compare Plato, *Phaedo* 66c2–4, “[the body] fills us with all kinds of passions, desires, fears, and illusions as well as much nonsense,” ἐρώτων δὲ καὶ ἐπιθυμιῶν καὶ φόβων καὶ εἰδώλων παντοδαπῶν καὶ φλυαρίας ἐμπύμπλησιν ἡμᾶς πολλῆς. On this passage see Apolloni (1996): 24. On the *Phaedo* see further below, Chapter 8.

pertaining to the mortal body have been stripped away, the souls are once again akin to the heavenly bodies.

Once we read the speech of Anchises through the *Timaeus*, we see that, for all the apparent ellipses and illogicalities of the speech, Virgil is describing the alignment of soul and universe. This description is not a good fit with the underworld; but it is a good fit with Platonic philosophy. Anchises' speech is parallel to the action of the Demiurge in the *Timaeus*, showing the souls the "laws of destiny." But what we end up with in the process is a spatial paradox, whereby the structure of the universe is brought into stark juxtaposition with the underworld.

2. Virgil's "Two Voices"

To sum up so far: the basic problem of *Aen.* 6 is that it presents two kinds of space, the underworld and the cosmos. The setting is subterranean, that of epic *katabasis*; in terms of Anchises' speech, souls are *celestial* in origin and destination. This seems to render the underworld setting obsolete. Clark articulates the paradox: "On the one hand, how can the aim of the soul to escape from the cycle of rebirth and from the body that clogs the soul be reconciled with the historical purpose of the poem, which is to glorify Rome on earth? And, on the other, if the soul is said to have its origin in heaven (*caelestis origo*, 730), do we not expect that it will rise upward after separation from the body and eventually rejoin the elemental mass whence it originated?"²⁷ Hence come attempts to "decode" the underworld so that it becomes the heavens, in which case there is no conflict between underworld setting and celestial eschatology.

This kind of schizoid approach to space—reading one thing, interpreting another—has its origin in the Neoplatonic commentators on Virgil, namely Servius, and Macrobius.²⁸ Servius, commenting on *Aen.* 6.439, allegorizes Virgil's Styx as the nine celestial circles of the universe:

NOVIES STYX INTERFUSA quia qui altius de mundi ratione quaesiverunt,
dicunt intra novem hos mundi circulos inclusas esse virtutes, in quibus et

²⁷ Clark (1979): 180.

²⁸ On the late antique commentators see Courcelle (1955); Hiatt (2008): 39–40. Servius' commentaries were probably compiled around the turn of the fifth century CE, and predate Macrobius' commentary on the *Somnium Scipionis*, which is now dated to c. 430 (see p. 77n26 above).

iracundiae sunt et cupiditates, de quibus tristitia nascitur, id est Styx. unde dicit novem esse circulos Stygis, quae inferos cingit, id est terram . . .²⁹

“Styx flowing around nine times”: because those who have looked more deeply into the rationale of the universe say that qualities are implicated in these nine circles of the universe. Impulsiveness is among them, as are lusts, which only give rise to sadness: this is the Styx. This is why [Virgil] says that there are nine circles of the Styx, which girds the underworld, that is, the earth . . . (my trans.)

For the Styx, we are to envisage not the proverbial River of Hell but instead an armillary sphere of nine celestial circles with the earth at its center. The underworld is “really” the earth (*quae inferos cingit, id est terram*). On this reading, everything is moved up a level: according to Servius, Virgil meant (allegorically) that the earth is the underworld; the Styx, the circles of heaven. This move builds on the similarity, seen as early as the Hesiodic text (discussed at pp. 35–36 above) of Styx to the universe. Now, instead of a spatial *parallel*, we have a spatial assimilation: Styx *becomes* the universe under another name.³⁰

In performing this maneuver, we now have no inconsistency between Anchises’ cosmography and the underworld location of the journey of *Aen.* 6. Those who are “in the know,” who have delved more deeply beneath the surface of the world’s makeup (*qui altius de mundi ratione quaesiverunt*), understand that the underworld is a poetic trope, that the action of *Aen.* 6 is “really” in the world above. Servius seems to attribute this attitude to Virgil himself, who is seen as using the underworld as a conscious ploy, drawing his readers in toward philosophical truth. Actually, the allegory is Servius’ *own*.

Likewise Macrobius credits Virgil with intentional allegory (*Commentary on the Dream of Scipio* 1.9.8–10):³¹

hoc et Vergilius non ignorat, qui, licet argumento suo serviens heroas in inferos relegaverit, non tamen eos abducit a caelo, sed aethera his deputat

²⁹ Thilo and Hagen (1881–84): vol. 2 pp. 66–67.

³⁰ On the Neoplatonic readings of Virgil’s Styx as celestial, see Mihai (2015): 272–81. Mihai suggests (p. 278) that readings of the infernal rivers in terms of the circles of the universe rest on the scheme of the structure of the universe represented in Plato’s Spindle of Necessity in *Rep.* 10 (on which, see below, pp. 191–96).

³¹ This passage is also cited by Mihai (2015): 285, who, however, seems to take the passage as evidence of Virgilian thought; in fact Macrobius, like Servius, is commenting from a Neoplatonist vantage point.

largiorem, et nosse eos solem suum ac sua sidera profitetur, ut geminae doctrinae observatione praestiterit et poeticae figmentum et philosophiae veritatem. . . . hae autem animae in ultimam sphaeram recipi creduntur quae ἀπλανής vocatur, nec frustra hoc usurpatum est siquidem inde profectae sunt. animis enim necdum desiderio corporis inretitis siderea pars mundi praestat habitaculum, et inde labuntur in corpora. ideo his illo est reditio qui merentur.

Virgil is in agreement with this, too, for although he consigns his heroes to the underworld in accordance with his plan, he does not deprive them of the sky, but grants them an “ampler ether” and states that “they know their own sun and stars of their own,” thus giving evidence of his twofold training, the poet’s imagination and the philosopher’s accuracy . . . These souls are believed to be received into the outermost sphere of the universe, the so-called fixed sphere, a name that is appropriate if, indeed, they started out from there. The starry portion of the universe affords habitation for those souls not yet overtaken by a longing for a body; and leaving there they slip down into bodies. The deserving souls are allowed to return here. (Stahl 1952)³²

Macrobius closes the loop between the celestial origin of Anchises’ souls and their return to the *stars*. He reunites this passage of the *Aeneid* with its Platonic context (*Comm.* 1.9.10): “The starry portion of the universe affords habitation for those souls not yet overtaken by a longing for a body; and leaving there they slip down into bodies. The deserving souls are allowed to return here.” Macrobius’ interpretation of Virgil’s text involves a close paraphrase of Plato’s formulation in the passage we’ve seen, καὶ ὁ μὲν εὖ τὸν προσήκοντα χρόνον βιούς, πάλιν εἰς τὴν τοῦ συννόμου πορευθεὶς οἴκησιν ἄστρον: “And if a person lived a good life throughout the due course of his time, he would at the end return to his dwelling-place in his companion star” (*Tim.* 42b3–4). Once this text has been spliced back into Virgil’s account of souls, through the interpretative tradition, we are forcibly reminded of the view that all souls come from stars, *all* souls return to them. Macrobius’ reading makes the passage of the *Aeneid* look even closer to the Platonic source material than it does in its original setting.

³² All translations of Macrobius in this chapter are from Stahl (1952). The text is that of Armisen-Marchetti (2001): vol. 1.

Macrobius refracts Virgil's afterlife through two different, simultaneously present, interpretative frames (the *gemina doctrina* he ascribes to Virgil but which are actually the critical lenses he—Macrobius—employs). In his dualistic categorization, the underworld belongs to the sphere of “poetic fiction,” the celestial afterlife to that of “philosophical truth” (compare this to the formulation of Cumont, discussed at p. 100 above). Another way of saying this, in the more familiar terms of our argument up till now, is that “poetic fiction” gives us the linear journey, “philosophical truth” the upward thrust of *Aen.* 6, seen in the speech of Anchises. It is predominantly through the lens of Stoic, Neoplatonic, and Christian thought, however, that the *heavens* are equated to “truth” as a dwelling place for souls.

In fact, of course, there is no true-false dichotomy in terms of where souls go. Other lenses will yield other truths. The problem is the commentators' search for one truth, rather than many truths, and this is as true of modern commentary as it is of ancient.

3. Dante's Shroud

In order to understand the origin and destiny of our souls, we need to understand the principles of the cosmos. In Plato's *Timaeus*, the Demiurge is at pains to teach the souls the nature of the universe. This is why the *Timaeus* is so important for Anchises' exposition of the origin and destiny of souls in *Aen.* 6. Reference to the *Timaeus* becomes a way of incorporating teachings about the nature of the universe into the eschatological narrative. But the fact that the *Timaeus* shows through the tears in the fabric of *Aen.* 6 creates a problem. The *Timaeus* brings us into a world where souls come from stars and eventually go back to them. Since antiquity commentators have attempted to smooth over the inconsistency by allegorizing the underworld as “really” the upper world, so that space becomes more manageable: we are now only—“really”—reading on one spatial level.

Dante constructs his eschatology as heir to the Neoplatonic tradition of allegory, mediated across another millennium. The Neoplatonic and medieval traditions he inherits focused their attention primarily on Plato's *Timaeus*. So too the *Timaeus* is fundamental in how we understand Dante's eschatology. At the same time, Dante's is a Christian taming of Platonic doctrine. While the literary and philosophical orientation of the *Commedia* arcs back to Plato, at the same time its religious trajectory pulls away. Paradoxically,

its end result seems to me profoundly Platonic: the world we think we see becomes, in Dante, a didactic fiction, just as the account of the universe in the *Timaeus* is an εἰκὼς μῦθος (“likely account,” *Tim.* 29d2). What we see is not what is. Fundamental to our growth in understanding is not just the “nature of the universe” but also the recognition of the *metaphorical* status of what we see. Everything we think is real is actually a symbol of a higher, nonvisual, level of being.

The role of the senses is fundamental in this argument. Plato’s view appears, for instance, in his assessment of the value of optical astronomy at *Rep.* 529c7–d5:

ταῦτα μὲν τὰ ἐν τῷ οὐρανῷ ποικίλματα, ἐπεὶπερ ἐν ὁρατῷ πεποικίλται, κάλλιστα μὲν ἡγεῖσθαι καὶ ἀκριβέστατα τῶν τοιούτων ἔχειν, τῶν δὲ ἀληθινῶν πολὺ ἐνδεῖν, ἅς τὸ ὄν τάχος καὶ ἡ οὐσα βραδυτῆς ἐν τῷ ἀληθινῷ ἀριθμῷ καὶ πᾶσι τοῖς ἀληθέσι σχήμασιφοράς τε πρὸς ἄλληλα φέρεται καὶ τὰ ἐνόντα φέρει, ἃ δὴ λόγῳ μὲν καὶ διανοίᾳ ληπτὰ, ὅψει δ’ οὐ . . .

These stars that adorn the heavens, since they ornament the visible sky, we think they’re the most beautiful and perfect examples of their kind. And yet they fall far short of the real ones—those courses, represented by real speed and real slowness in real number and in all the real geometrical shapes, which are conveyed in relation to each other and convey what is in them, all of which can be apprehended by reason and intellect, but not by sight . . . (Emlyn-Jones and Preddy 2013)

In Plato, we were to see the sensible world as a pointer to the intelligible world, not necessarily in opposition to it. Although the senses are inferior to abstract understanding, they are the gatekeepers of truth. But in Dante, as we’ll see, the relationship between sensible and intelligible is, rather, one of opposition. The senses are not merely imperfect: the readings they give are actually false vis-à-vis the universe’s [true] divine structure.

Dante scholars might think that I am putting too much emphasis on Dante’s Platonic hinterland here. Because of his prominence in forming fourteenth-century thought, *Aristotle* is usually seen as the dominant philosophical force in Dante’s *Commedia*. For instance, Durling and Martinez (1996–2011; hereafter *DM*) state, with reference to *Paradiso* IV.40–42, that “the view that all human knowledge is ultimately based on sense perception . . . is *Aristotle’s*, . . . developed in reaction against *Plato’s* theory that all

abstract understanding was a form of recollection of the forms or ideas, known before birth” (my emphases). *DM* speak in terms of an opposition between Plato and Aristotle.

In fact, by Dante’s time, the two were often seen as a philosophical amalgam.³³ In terms of sense perception both Plato and Aristotle advocated the initial role of the senses.³⁴ The idea that knowledge has its beginning in sense perception could also be said to be Aristotelian; see for instance *Metaph.* 980a21–27:

πάντες ἄνθρωποι τοῦ εἰδέναι ὀρέγονται φύσει. σημεῖον δ’ ἡ τῶν αἰσθήσεων ἀγάπησις· καὶ γὰρ χωρὶς τῆς χρείας ἀγαπῶνται δι’ αὐτάς, καὶ μάλιστα τῶν ἄλλων ἢ διὰ τῶν ὁμμάτων. . . . αἴτιον δ’ ὅτι μάλιστα ποιεῖ γνωρίζειν ἡμᾶς αὕτη τῶν αἰσθήσεων . . .

All men naturally desire knowledge. An indication of this is our esteem for the senses; for apart from their use we esteem them for their own sake, and most of all the sense of sight. . . . This reason of this is that of all the senses sight best helps us to know things . . . (Tredennick 1933).

The worlds we perceive using our senses in Plato and Aristotle are, however, different. While it is true that Dante’s model of the physical universe is that of Aristotle,³⁵ Aristotle had “depraved” the Platonic universe by rendering it concrete, as a mechanical system.³⁶ Dante, in my view, restores the Platonism of the world: the physical universe we see in Dante is *not*, in fact, anything like how things really are; rather, it is a metaphor for the fate of souls, and in this sense, more akin to Platonic myth.

The revealing factor vis-à-vis Dante’s Platonism is his language. The language Dante uses at salient points is explicitly borrowed from Calcidius’ fourth-century CE Latin translation of and/or commentary on the *Timaeus*: Dante draws linguistically on the *Timaeus*, through the medium of its late antique tradition.³⁷ Close reading of Plato and Dante reveals a

³³ Moevs (2005): 107–8 demonstrates the complex lines of convergence in Dante between Plato and Aristotle. In the Middle Ages, Aristotle became a lens through which to view Plato, an approach evidenced in this chapter by Guillaume de Conches (discussed further below). On the syncretistic philosophical climate of the twelfth century in particular, see Gregory (1988).

³⁴ On the later inheritance of this view, see Williams (2012): 17–21.

³⁵ See Lindberg (1978): 275–84; Morgan (1990): 173–74; Moevs (2005): 15–17. On the history of the Aristotelian model of concentric spheres (Aristotle, *De caelo* 288a13–b7), see Kuhn (1957) *passim*; Lindberg (1978): 275–84; Moevs (2005): 15–17.

³⁶ Cornford (1937): 87n2; Moevs (2005): 15.

³⁷ Dante’s knowledge of the *Timaeus*, indeed all of his first-hand knowledge of Plato, came to him solely via the Latin translation and commentary of the fourth century CE neoplatonist Calcidius,

distinctive Platonic stratum in Dante's language, which, I believe, speaks to a Platonic philosophical orientation.

To give an example that will now be familiar to the reader: we find Plato's metaphor of sowing (discussed at p. 108) at *Par.* II.118–23:

Li altri giron per varie differenze
le distinzion che dentro da sé hanno
dispongono a lor fini e lor semenze.
Questi organi del mondo così vanno,
come tu vedi omai, di grado in grado,
che di sù prendono e di sotto fanno.

'The other spheres through various
differences dispose the distinctions held within
them to their ends and to their sowings.

These organs of the world thus descend, as
you can see, by degrees, for they take from
above and fashion below.' (*DM*)³⁸

This is Dante's description of the trickle-down effect of divine influence passing through the celestial spheres. Dante, like Virgil (p. 108 above), echoes Plato's metaphor of sowing from the *Timaeus* (σπαρείσας, 41e4; ἔσπειρεν, 42d4). The metaphor comes to him via Calcidius' translation of *Tim.* 41e–42a:

oportebat porro satas eas certis legitimisque temporum vicibus piaenationis animalium quaeque praeter ceteras animantes deum suspiciant.

"And it was necessary that the souls, once sown according to fixed and prescribed seasons, should bear fruit in the form of a pious race of beings that live and acknowledge god as other creatures cannot."³⁹

the standard medieval text of the work. Although "Dante's direct knowledge of Plato was doubtless confined to this one dialogue" (Singleton 1970–75 on *Par.* IV.24), he could not have been altogether ignorant of some of the other Platonic dialogues: there are attributed references to Plato's *Phaedrus* in Calcidius' commentary (Dillon 1977: 425n15). Dante also knew of Plato's Myth of Er in *Rep.* 10, perhaps through Cicero's version of it in the *Somnium Scipionis* and/or Macrobius' *Commentary* (Jeauneau 2006: p. 186).

³⁸ Text and translations of Dante in this chapter are from *DM*.

³⁹ Magee (2016): 80–81. On Calcidius see Alline (1915): 140; Dillon (1977): 401–8; Gersh (1986), vol. 2: 421–92; Gregory (1988); Somfai (2002); Somfai (2004). On the text of the *Timaeus* available to Calcidius, see Jauneau (2006): Introduction pp. LV–LVI. Medieval commentators including

Plato's σπαρείσας (*spareisas*, "sowing," present participle) becomes Calcidius' *satas* ("having been sown," the idiomatic Latin perfect participle), and that becomes in turn Dante's noun *semenze*, "sowings." The metaphor, ball-like, is tossed across the intervening centuries between Plato, Virgil, and Dante, appearing in different grammatical forms.

At the same time we can see how Calcidius varied Plato's text. Plato described the heavenly bodies as ὄργανα χρόνων, "instruments of time" (*Tim.* 41e5), i.e. (to put it anachronistically) cogs in the celestial clock. Although this appears very close to Dante's *organi del mondo*, "organs of the world" (*Par.* II.21), in fact Dante cannot be following Calcidius here, since the latter uses the periphrasis *certis legitimisque temporum vicibus*, "according to fixed and prescribed seasons," for Plato's ὄργανα χρόνων. Calcidius' variation of Plato is most likely a product of his Neoplatonic viewpoint, as we'll see in a moment, which does not attribute autonomy to the heavenly bodies as vehicles for souls but instead sees them in terms of their influence (just as the seasons influence growth).⁴⁰ By some chance, Dante is closer here to Plato's original than to his own medieval Latin tradition.

Linguistic debt speaks to the presence of Platonic *thought* in Dante. Plato is explicitly cited at *Par.* IV.24.⁴¹ When Dante pauses on the threshold of this canto, Plato is partly responsible for detaining him, as Beatrice points out, at *Par.* IV.22–24:

Ancor di dubitar ti dà cagione
parer tornarsi l'anime a le stelle,
secondo la sentenza di Platone.

Another cause of doubt for you is that the
souls seem to have returned to the stars, in
accord with Plato's opinion.

The question detaining Dante is whether the souls are actually where they appear to be, i.e. where we will see them to be for the greater part of the *Paradiso*: distributed hierarchically among the celestial spheres. Beatrice

Guillaume claimed Calcidius as a Christian, although this is not backed up by the evidence of his text (see Somfai 2002: 12).

⁴⁰ Somfai (2004) demonstrates how Calcidius was not merely a translator, but an *interpreter*, of the *Timaeus*; cf. Gregory (1988).

⁴¹ On this canto see especially Freccero (1986): 221–27.

explains that the souls only seem (*parer*, *Par.* IV.23) to have returned to the stars, but they are not “really” where they seem to be. It will emerge that they are *all* “really” points of light in the Empyrean (the tenth, abstract circle). The souls *seem* to be placed in ascending order in the celestial spheres purely for didactic purposes, so that Dante can understand, through visual metaphor, their relative states of blessedness.⁴² In Plato, souls *really* originate in, and return to, stars; in Dante, they are only metaphorically in the stars.

The problem is one of *misalignment* between Plato’s and Dante’s understanding of the place of the souls; but the language which Dante chooses is directly Platonic, which initially creates the false expectation in the reader (as in the Dante character himself) that the argument will be in line with Plato. At *Par.* IV.34–42 Beatrice draws on an opposition between perception and understanding that looks profoundly Platonic:

Ma tutti fanno bello il primo giro,
e differentemente han dolce vita
per sentir più e men l’eterno Spiro.
Qui si mostraro, non perché sortita
sia questa spera lor, ma per far segno
de la celestial c’ha men salita.
Così parlar conviensi al vostro ingegno,
però che solo da sensato apprende
ciò che fa poscia d’intelletto degno.

‘But all adorn the first sphere and differinglly
have blessed life, in that they feel more and less
of the eternal spirit.

They have shown themselves here, not
because this sphere is allotted to them, but to
signify the celestial one that is least exalted.

To speak thus to your understanding is
necessary, for it takes from sense perception
alone what later it makes worthy of intellection.’

Here Beatrice explains the poles of reference—an opposition between *da sensato*, i.e. by observation of the objects of sense perception—and

⁴² Hollander (2000–07) on *Par.* IV.49–54 refers to the souls’ positioning as a “cosmic accommodative metaphor”; Freccero (1986): 223 calls this a “spatial metaphor for beatitude.”

d'intelletto—by purely intellectual comprehension.⁴³ Through Calcidius, the distinction, and the language, would have been familiar to Dante. Fundamentally for Calcidius (as for Plato), *mundus intelligibilis exemplum est mundi sensilis*, “the intelligible world is the model for the sensible world” (Magee 2016).⁴⁴ Elsewhere Calcidius remarks, [*stellae*] *non sunt intelligibiles sed sensiles, at vero fabricator eorum intelligibilis adprime*, “[The stars] are not intelligible but sensible, whereas their maker is supremely intelligible.”⁴⁵ Calcidius also opposes the sensible and intelligible in respect of the perceptive capacities of the soul:

quae constitutio animae propterea facta est ut esset, opinor, eadem anima scia tam intellegibilium quam substantiae sensilis, utpote quae rationes utriusque naturae habeat in semet ipsa.

And the reason why this constitution of the soul was effected was, I suppose, so that the same soul might be capable of knowing both the intelligibles and sensible being, in other words, so that it might have within itself the rational capacities corresponding to both natures.⁴⁶

Dante's Beatrice reproduces Calcidius' language: *sensilis* = *da sensato*, *intelligibilis* = *d'intelletto*. The progress of Dante's understanding in *Par.* IV maps the transition from perception to reason (*da sensato* > *d'intelletto*). The Platonic distinction lies behind Dante's argument, mediated through the late antique tradition: the senses allow us to grasp the abstract. Thus Dante must see *with his eyes* the distribution of souls among the celestial spheres in order to understand their relative blessedness *with his intellect*. The visual metaphor of the souls being situated in the celestial circles is necessary because of the naiveté of human understanding.

So far we've seen striking examples of Platonic language and thought in Dante. But ultimately, perhaps, linguistic debt only serves to accentuate ideological difference. The metaphorical positioning of the souls, Beatrice goes on to assert, is profoundly *different* from what is argued in the *Timaeus* (*Par.* IV.49–63):

⁴³ Freccero (1986): 221 describes this opposition as the principle on which the whole cantica (the *Paradiso*) depends.

⁴⁴ Magee (2016): pp. 296–97 = Waszink (1962): pp. 154.10–11. On the theme of model and copy in Calcidius' *Timaeus* commentary, see Somfai (2004): 207.

⁴⁵ Magee (2016): 350–51 = Waszink (1962): 179.11–12.

⁴⁶ Magee (2016): 352–53 = Waszink (1962): 181.1–3.

Quel che Timeo de l'anime argomenta
non è simile a ciò che qui si vede,
però che come dice par che senta.

Dice che l'alma a la sua stella riede,
credendo quella quindi esser decisa
quando Natura per forma la diede.

E forse sua sentenza è d'altra guisa
che la voce non suona, ed esser puote
con intenzion da non esser derisa:

s'elli intende tornare a queste ruote
l'onor de la influenza e 'l biasmo, forse
in alcun vero suo arco percuote.

Questo principio, male inteso, torse
già tutto il mondo quasi, sì che Giove,
Mercurio e Marte a nominar trascorse.

What Timaeus argues about souls is not
similar to what is seen here, since what he says
does seem to be his meaning.

He says that the soul returns to its star,
believing that it had fallen down from there
when Nature gave it to be a form.

And perhaps his opinion is different from
what the words seem to express, and it may
have a meaning that is not to be scorned:

if he means that honour and blame for their
influence returns to these wheels, perhaps his
bow strikes some truth.

This principle, ill understood, led almost the
whole world astray, so that it erred in naming
planets Jove, Mercury, and Mars.

Beatrice allegorizes the Platonic *location* of souls (in the stars) as a figure for celestial *influences* upon the natures of the souls.⁴⁷ The planets are not “really” gods that exert their powers; they are descriptive of personality traits. In

⁴⁷ On the idea of the “influence” of the heavenly bodies in the middle ages see Lindberg (1978): 288–90.

her explanation, souls are like they are because of the imprints left on them by astrological influences. They appear to be distributed among the heavenly bodies, as a visual illustration of the characteristics given them by astral influence. This trope is the product of a genealogy of influence, which begins with the Neoplatonic commentators on Virgil and arrives at Dante through the twelfth-century commentator on Plato's *Timaeus*, Guillaume de Conches. The traditions of Plato and of Virgil, and of their commentators, bring the weight of their cumulative influence to bear on Dante's story. This is what we might call "tiered interpretation."

First, Beatrice's idea of astral influence stands in the tradition of the Neoplatonic commentators on Virgil. At *Aen.* 6.713–14, Anchises had referred to *animae, quibus altera fato / corpora debentur*, "souls to which other bodies are owed by fate." Servius in his commentary on *Aen.* 6.714 glosses "fate" in terms of astral influence. He tells how "the philosophers" think that human souls descend from their heavenly place of origin through the system of celestial circles, and this is the mechanism by which they acquire those qualities that will disturb them on embodiment:

docent autem philosophi, anima descendens quid per singulos circulos perdat: unde etiam mathematici fingunt, quod singulorum numinum potestatibus corpus et anima nostra conexas sunt ea ratione, quia cum descendunt animae trahunt secum torporem Saturni, Martis iracundiam, libidinem Veneris, Mercurii lucri cupiditatem, Iovis regni desiderium: quae res faciunt perturbationem animabus, ne possint uti vigore suo et viribus propriis.⁴⁸

Philosophers teach that the soul loses something as it descends through each [celestial] circle; hence astrologers claim that our body and soul are connected each to their own divinities in this way: because when the souls descend they carry along with them the lassitude of Saturn, the impulsiveness of Mars, the lust of Venus, Mercury's love of money, Jupiter's desire for kingship. These things ruin the souls' equilibrium, so they can't take advantage of their innate strength and proper powers. (my trans.)

In this explanation of astral influence, Servius, here as elsewhere, relies on the fact that he refines the underworld of Virgil into an elaborate allegory,

⁴⁸ Thilo and Hagen (1881–84), vol. 2: 98.

accommodating Virgil's underworld to the heavenly system. We've already seen this at work in Servius' allegory of the Styx as the nine circles of heaven (see pp. 110–11).

Dante uses a similar strategy to accommodate the Platonic return of souls to the Christian doctrine of the resurrection. Christian souls *cannot* return to the stars, because in Christian theology, resurrection is “a new embodied life” in which our one unique soul-body pairing will be needed again.⁴⁹ The notion in the *Timaeus* that souls return to the stars would be “heresy *tout court*” if Dante understood it literally.⁵⁰ Plato's closed circle of stars-to-bodies-to-stars is must be opened to become a straight line, an arrow pointing toward resurrection. So, rather than the stars being homes for souls, they become influences.

In turn, this approach may well be mediated through Guillaume de Conches: Beatrice's explanation is probably borrowed direct from Guillaume.⁵¹ Dante most likely read Calcidius and Guillaume together, as a combined apparatus toward a Christian interpretation of the Platonic soul. This cumulative tradition is what enables him to steer clear of the pitfalls involved in Plato's idea of celestial immortality, i.e. souls *as* stars.⁵²

Guillaume wrote an immensely learned and compendious commentary on Calcidius' text of the *Timaeus*, the *Glosae super Platonem*.⁵³ Guillaume's strategy for dealing with the vexed question of the relationship of Christian and Platonic souls has much in common with Servius' allegorization of Virgil's underworld:

ostensa creatione humanae animae, dicit Deum delegisse animas pares numero stellarum et singulas singulis imposuisse et inde naturam universae rei

⁴⁹ Wright (2003): 83.

⁵⁰ Hollander (2000–7): on *Par.* IV.49–54. Similarly, Christian commentators on Virgil had to deny metempsychosis (see Courcelle 1955: 114–117).

⁵¹ See *DM* on *Par.* IV.58–60. *DM* cite Guillaume but do not elaborate.

⁵² Evidence that Dante read Calcidius and Guillaume together comes in the form of Manuscript F of Calcidius and Guillaume: see Jeaneau (2006): Introduction pp. LXXIV–VI. This manuscript is Waszink's “F₅”; see Waszink (1962): Introduction p. CXIV. This is a Florentine manuscript of the first half of the thirteenth century, and it contains (1) the text of Calcidius' translation of the *Timaeus* and (2) Guillaume de Conches' *Glosae super Platonem*, with three diagrams (see Jeaneau 2006: pp. 141 and 145). It would not be unreasonable to speculate that Dante was reading his Plato commentaries in similar format.

⁵³ Guillaume, like Dante, had no direct knowledge of the *Timaeus* in Greek but read the text in Calcidius' translation (Jeaneau 2006: Introduction pp. LVIII–LXVII). On Guillaume and Calcidius see Somfai (2002); Elford (1988). On Guillaume and his twelfth-century intellectual environment, see Cristiani (1970): “Timeo” and “Platonismo”; Gregory (1988).

spectare iussisse. quod quidam, ad literam exponentes, dicunt hic Platonem haeresim docuisse, quia divina pagina dicit: cotidie creat Deus novas animas. . . . si quis tamen non verba tantum sed sensum Platonis cognoscat, non inveniet haeresim sed profundissimam philosophiam integumentis verborum tectam. quod nos, Platonem diligentes, ostendamus. cum igitur dicit Plato Deum delegisse animas pares numero stellarum, non dicit Deum fecisse tot animas quot sunt stellae—numerus enim stellarum scire non potest, nec deligere est facere—sed intellexit Deum providisse quod animae ex constellatione in qua corporibus coniunguntur contrahunt numerum dierum habitandi in corpore, quem transire non possunt . . . delegit ergo Deus animas pares numero stellarum ut implerent et non excederent numerum habitandi in corporibus quem contrahunt ex constellatione. sed, dicunt, fugiendo Scillam, Caribdim incurristi: maior enim haeresis est credere constellationi quam animas credere simul esse factas. quibus respondemus non esse constellationem vituperandum. si enim verum est quod planetae calorem et siccitatem, frigus et humiditatem conferunt terris, si vitam herbis et arboribus, si temperiem vel distemperiem humanis corporibus, quid mirum si in conceptione in utero, in nativitate, in vita, corpora contrahunt temperiem qualitatum ad diu vivendum et ad animam conservandam, vel distemperiem ad contrarium? huic ergo constellationi credere non est haeresis, sed credere quod ex stellis contrahat homo officia, regna, divitias, potentias, hoc vere haereticum est: haec enim ad liberum arbitrium pertinent vel ad casum vel ad donum Dei. haec de eo quod delegit animas pares numero stellarum. quod vero dixit stellas vehicula animae, non est credendum quod positae essent super stellas et quasi equitantes cum eis irent ad ortum et occasum: hoc enim utilitatem scurrilis ioci excedit. sed voluit Plato animas esse positas super stellas causaliter, non localiter, et easdem esse vehicula animae, quia per effectum earum corpus est aptum ut anima in eo creari possit.

Having demonstrated the creation of the human soul, he says that God assigned souls equal in number to the stars and placed them one on each [star] and then ordered them to observe the nature of the universe. Some, interpreting this literally, say that Plato taught heresy, because holy writ says: "Every day God creates new souls." . . . But if anyone reads not only Plato's words but his meaning (*non verba tantum sed sensum Platonis*), he will find, not heresy, but a most profound philosophy concealed under the disguise of words (*integumentis verborum*). Let us, because of our

love for Plato, reveal his meaning. When Plato says God assigned souls equal in number to the stars, he is not saying that God made as many souls as there are stars—for it is impossible to know the number of the stars, nor is “assigning” the same as “making”—but he understood God to have arranged things in such a way that souls take from the constellation in which they were joined to their bodies the number of their days of subsisting in the body, a number that they cannot surpass . . . So God assigned souls equal in number to the stars so that they should fulfill and not exceed their sum of bodily subsistence which they draw from their constellation. But, [my opponents] say, in escaping Scylla, you have run into Charybdis: because it is a greater heresy to attribute this to a constellation than to believe that all souls were created at the one time. We shall respond to these people that there is nothing wrong with a constellation. If it is true that the planets bring warmth and dryness, cold and damp to the earth, life to plants and trees, good or ill health to human bodies, is it so amazing if bodies draw from them in their conception *in utero*, in their birth, and in their life, the good health of their components to the effect that they live a long time and preserve their soul, or their ill-health, with the opposite outcome? To attribute this to a constellation is not heresy. On the other hand, to believe that a man derives from the stars his career-path, his areas of authority, his wealth and his powers, *is* truly heresy, since these things pertain to free will or to chance or are in God’s gift. So much for the assertion that that [God] assigned souls equal in number to the stars. As for what [Plato] said about the stars being vehicles for the soul, we shouldn’t imagine they are placed on top of the stars and like horsemen go with them to their rising and setting; this is beyond a joke. Plato meant that the souls were placed on the stars causally (*causaliter*), not in terms of place (*localiter*), and the stars are the vehicles of the souls because it is by their effect that the body is fitted to receive the soul created in it.⁵⁴

Souls are where they are not *localiter*—because they are really *in* a place—but *causaliter*—because where they are positioned says something about what they are *like*. In other words, *place* is a way of talking about the nature of *soul*.

⁵⁴ Jeaneau (2006): pp. 213–16, GSP CXIX–CXX, with my translation. On Guillaume and other twelfth-century commentators as the heirs of Neoplatonism see Gregory (1988).

Guillaume is concerned throughout his commentary with combating what he thinks is the wrong-headed idea of those who think Plato is committing heresy. He does this by reconciling Plato with Christianity through allegory.⁵⁵ At the same time, he articulates his interpretation of Plato's stars as a metaphor for stellar influence in a painstakingly *Aristotelian* way, invoking a "tropic" notion of human life spans, in which human lives are determined by the motions of the sun.⁵⁶ Guillaume uses Aristotle to comment on Plato.⁵⁷ Not only is this evidence of the medieval synthesis of Plato and Aristotle already referred to (see p. 115 above); I read Guillaume's Aristotelianism as a challenge to his fictional interlocutors, who accuse him of having gone from the frying pan into the fire with his recourse to astrology. This is unjust, he replies: it is not cheap horoscopy at stake in ideas of celestial influence, he argues, but the cycles of the universe—as they should know, he implies by his reference to tropic cycles, if they are Aristotelian philosophers worth their salt.⁵⁸

We can only admire the acuity of this medieval scholar. Guillaume cleverly brings Plato's egress and return of souls into line with both Aristotelian philosophy and Christian doctrine. As Servius did, he allows the souls, in a sense, to fall from the stars in order to acquire the characteristics that mark out their embodied lives. Unlike for the Neoplatonist, however, for Guillaume as a Christian this must remain metaphorical: the souls do not "really" descend through the stars, acquiring characteristics like smears of paint. To say that souls have affinity to particular stars is a way of *talking about* the characteristics they have.

⁵⁵ At *GSP* CXXIV.14–16 (Jeauneau 2006: pp. 224–25) Guillaume allegorizes Plato's physical elements, which adhere to the souls at *Tim.* 42c6–d1, as the vices: *ut ex igne fervorem irae et luxuriae, ex aere risum superfluum, ex aqua inconstantiam, ex terra gravedinem et avariciam* ("as from fire the heat of anger and self-indulgence, from air flippancy, fickleness from water, from earth stolidness and greed," my trans.). On Guillaume's harmonization of Plato with Christianity see the preliminary remarks of Gregory (1988): 60–68.

⁵⁶ For instance, see Aristotle, *On the Generation of Animals* (*De generatione animalium*) 778a5–7, βούλεται μὲν οὖν ἡ φύσις τοῖς τοῦτων [τῶν ἀστρῶν] ἀριθμοῖς ἀριθμεῖν τὰς γενέσεις καὶ τὰς τελευτάς, "For nature wants to measure birth and death by the numbers of [the heavenly bodies]." Lindberg (1978): 288 comments on medieval notions of stellar influence, "All agreed with Aristotle that the sun's alternate approach and retreat every year was essential for life on earth." Tropic notions of human existence will be discussed at p. 153 and pp. 168–70 below.

⁵⁷ Guillaume refers to Aristotle by name frequently in the *GSP*, as for instance at *GSP* CXLIII.21 (Jeauneau 2006: p. 260) and *GSP* CXLV.6 (Jeauneau 2006: p. 263).

⁵⁸ It's possible that this attitude to astrology is inherited from Arabic thought, for instance the ninth-century philosopher Abu Ma'shar: see Dolan (2017): 193. Arabic influence is, sadly, beyond the scope of this book.

Key in Guillaume's strategy is the idea of myth-as-disguise (*integumentum*).⁵⁹ The souls appear dressed in stars, just as the truth appears in a rainment of myth. Modern scholars retain the metaphor: thus in *Par.* IV, according to Freccero, "the Christian mystery underlying Dante's representation seems to be clothed in Platonic myth."⁶⁰ In Dante, the souls' starry cloak becomes the disguise for their "real" nature. We talk about them in terms of their abode in the stars, but this is only a way of talking about their individual characteristics. Congruent with this is how we see the stars themselves. They "represent the goal of the *itinerary of the mind*,"⁶¹ a place our understanding wants to go, rather than the physical destiny of the soul. In Dante, the stars are an intellective tool rather than an eschatological destiny: *world* has become a way of talking about the nature of *soul*.

We are now in a position to appreciate the longevity and influence of the metaphor of "disguise" and the hermeneutic strategy it, in turn, disguises. In interpretations of Virgil, the underworld is seen as a disguise for the cosmos; in Dante, the cosmos is a disguise for the ineffable divine *telos* for souls.

Conclusion

We've seen that there are two types of space in Virgil: the underworld journey and the cosmic vision set forth in Anchises' speech. We've seen how Virgil commentators, Neoplatonic to modern, have tried to simplify space through allegory, reducing two modalities of space to one, through a reading in which one (the underworld) is seen as merely a cover for the other (the cosmos). The cosmos becomes "philosophical truth" while the underworld becomes "poetic dress." We're happier, it seems, putting souls in the heavens, interweaving them with the cosmic structure, than we are leaving them in the underworld.

But if there are two voices in *Aen.* 6, the philosophical voice does not silence the epic one. Rather than seeing the underworld as a veil, a "fiction"

⁵⁹ On *integumentum* and related terms, in the context of harmonizing ancient authors with Christianity, see Gregory (1988): 59–60. On Guillaume's uses of it, see Jeauneau (2006): Introduction p. XLVII; Jeauneau (1957). In the GSP Guillaume refers many times to Plato's *integumentum*, his use of myth to cover over the truth: e.g. at GSP LXXIV.1–5; LXXVII.1–2; LXXX.1; LXXXVII.3–4; CXIII.3; CXVIII.3. See especially the passage of Guillaume at Jeauneau (2006): p. 211 (GSP CXVII.2–12), making the distinction between Platonic *integumentum* and interpretative *veritas*. The technique is Neoplatonic: Guillaume's distinction is similar to the distinction Macrobius makes (p. 112 above) between *poeticae figmentum* and *philosophiae veritatem*.

⁶⁰ Freccero (1986): 223.

⁶¹ Freccero (1986): 226 (my emphasis).

thinly concealing the philosophical “truth” of a celestial afterlife, we can see Virgil’s underworld as a *mesh* through which the upper world appears. One kind of space does not exclude the other as a location for souls: they coexist.

In Dante, virtuous souls are “in” the heaven. No longer are we allegorizing the underworld as the cosmos: the tenor of the allegory has changed: now we allegorize the heavens themselves, as a visible symbol, only, of beatitude. These revolving modalities of interpretation indicate the wonderful flexibility of the afterlife landscape. Its structure changes according to how we perceive the world; so the eschatological tradition is constantly written and rewritten, with layers of discourse and interpretation superimposed.

In reality, there’s no need to cloak one kind of space with another. All eschatological space is a way of talking about something else: soul, or, as we’d put it, psychology, of which perception and mapping are instances of many possible psychic outgrowths. In that sense, *no* eschatological space is tangibly real; in another way, all eschatological space is real, in a fundamental but intangible sense—psychologically real.

5

Soul Music

Dissonance and beauty are, of course, not actually very different from each other.

—Philip Glass, *Words without Music*

Introduction

In chapter 4, we saw how the speech of Anchises in *Aeneid* 6 faithfully tracks Plato's *Timaeus*. We saw also how this contributes to a problem of space in *Aen.* 6, the perceived “dissonance” between the underworld setting and the heavenly provenance and destiny of souls as we see them in Anchises' speech. Anchises' speech is a better fit with Plato's universe than it is with the epic tradition of the underworld that forms its setting.

As we've seen (pp. 106–10), Virgil may draw directly on Plato's *Timaeus* for the progression of Anchises' speech, but, as you would expect, his is a Roman Platonism, the historical aspect of which, in particular the connection between Roman heroes and Platonic eschatology seen in the Parade of Heroes, relates also to the Roman tradition. Chief among Virgil's Roman Platonic sources is Cicero's *Somnium Scipionis*, or *Dream of Scipio*, written a generation before Virgil, in the mid-50s BCE.¹

The *Somnium* is an important precedent for the interweaving of Platonic cosmology and Roman history.² It's also an important instance of the interweaving of various dialogues by later interpreters of Plato. While the

¹ On the date of the *Somnium*, the final part of Cicero's *De re publica*, see Zetzel (1995): p. 2; Powell (1990): pp. 119–20. On the *Somnium* as a source for *Aen.* 6, see Horsfall (2013) vol. 1 p. xxiii and n. on *Aen.* 6.887.

² On the *Somnium* see Boyancé (1936); Festugière (1946); Cumont (1949): 162–3; Alfonsi (1950); Hubaux (1960); Harder (1929); Coleman (1964); Lamacchia (1964); Fontaine (1966); Büchner (1976); Levy (1992): 115–8. On the *Somnium* as a 'translation' of Plato's Myth of Er in *Rep.* 10, see Zetzel (1995), Introduction pp. 13–17 and p. 223; Büchner (1976): 63. On the political aspects of the *Somnium* see Hiatt (2008): 20–22.

Somnium performs the structural role in Cicero's *Republic* that the Myth of Er did in Plato's *Republic*, closing the dialogue with an eschatology, we'll see later in this chapter that Cicero's is not purely a translation of the *Republic*, but a combination of several dialogues of Plato, among which the *Timaeus* is prominent.

In the *Somnium*, Scipio Aemilianus, destroyer of Carthage in the Third Punic War (149–146 BCE), encounters his grandfather Scipio Africanus, hero of the Second Punic War, and his father, Aemilius Paulus, in a dream. In the little philosophical dialogue that follows, Scipio Africanus takes on the role that will be assigned to Aeneas' father in Virgil's *Aeneid*. Like Anchises, he will present a vision of the universe and the place of souls in it. This vision will be seen to take place on two levels: sight and hearing. In each case, on the basic Platonic template, up-to-date images of the world are presented. The soul of Scipio, when he dies, will exist in harmony with a current picture of the universe.

Particular emphasis is placed, in this chapter, on the concept of the "harmony of the spheres." This is the first of two "musical" chapters in this book (the second is chapter 6, following the *Intermezzo*).³ For the non-musicologist, some of the theory presented in these two chapters might seem a bit esoteric. I have done my best to explain the necessary concepts, and I ask the reader's forbearance. I believe it is important to try to grasp the rationale behind the theory of the harmony of the spheres: we need to understand what it is, and why, especially, it appears in the afterlife context. This is an intriguing question and will lead to an important concept in this book, what we'll come to call "psychic harmonization."

1. Sound and Vision

Like Anchises' speech in the *Aeneid*, Scipio's speech in the *Somnium* shows a keen awareness of Plato's *Timaeus*. The Platonic idea of the relationship between souls and stars is the fundamental component in the worldview of the *Somnium*. This concept develops across the dialogue, starting with Scipio Africanus' initial protreptic at *Somn.* III:5 [*Rep.* 6.13]:

³ In this chapter I have benefited from fairly lengthy email discussion with Andrew Barker. My thanks to him for clarifying some points. He is not, of course, responsible for any controversial points relating to those instances where I diverge from his views.

sed quo sis, Africane,⁴ alacrior ad tutandam rem publicam, sic habeto: omnibus qui patriam conservaverint adiuerint auxerint, certum esse in caelum definitum locum, ubi beati aevo sempiterno fruuntur.

‘But, Africanus, so that you may be keener to protect the Republic, be sure of this: for all those who have saved or helped or increased the power of their native land, there is *a place set apart for them in heaven*, for them to enjoy eternal life in happiness.’ (Powell 1990)⁵

As in the *Timaeus* (pp. 107–08 above), souls return to the heavens, having also set out from there—*hinc profecti huc revertuntur*, “[beginning] their journey from here [i.e. the heavens] . . . hither they return,” *Somn.* III:5 [*Rep.* 6.13]). In the *Timaeus*, we remember, the Demiurge “divided the mixture into a number of souls equal to the number of stars and assigned each soul to a star,” διεῖλεν ψυχὰς ἰσαρίθμους τοῖς ἄστροις, ἐνεμὲν θ’ ἐκάστην πρὸς ἕκαστον (*Tim.* 41d8–e1). In the *Somnium*, soul is given to men *ex illis sempiternis ignibus quae sidera et stellis vocatis, quae globosae et rotundae, divinis animatae mentibus, circulos suos orbesque conficiunt celeritate mirabili*, “out of these eternal fires which you call stars and planets, each of which revolves with a wonderful speed in its own circular orbit, being itself round and spherical and animated by a divine mind” (*Somn.* III.7 [*Rep.* 6.15]). In the *Timaeus* the Demiurge “showed [each soul] the nature of the universe,” τὴν τοῦ παντὸς φύσιν ἔδειξεν (*Tim.* 41e2). The nature of the universe is precisely what will be demonstrated in the *Somnium*.

The whole sequence of Scipio’s revelation of the universe seems to me to grow out of ideas about the function of sight and hearing in the *Timaeus*. Plato explains the aetiology of sight and hearing at *Timaeus* 47b6–d1:

θεὸν ἡμῖν ἀνευρεῖν δωρήσασθαι τε ὄψιν, ἵνα τὰς ἐν οὐρανῷ τοῦ νοῦ κατιδόντες περιόδους χρησαίμεθα ἐπὶ τὰς περιφορὰς τὰς τῆς παρ’ ἡμῖν διανοήσεως, συγγενεῖς ἐκείναις οὔσας, ἀταράκτοις τεταραγμένας, ἐκμαθόντες δὲ καὶ λογισμῶν κατὰ φύσιν ὀρθότητος μετασχόντες, μιμούμενοι τὰς τοῦ θεοῦ πάντως ἀπλανεῖς οὔσας, τὰς ἐν ἡμῖν πεπλανημένας καταστησαίμεθα. φωνῆς τε δὴ καὶ ἀκοῆς περὶ πάλιν ὁ αὐτὸς λόγος, ἐπὶ

⁴ Confusingly, Scipio addresses his grandson by the *cognomen* “Africanus,” which the two heroes shared: Scipio Africanus I and Scipio Africanus II (the latter is Scipio Aemilianus).

⁵ The edition of the *Somnium* used here is that of Powell (1990). All translations are Powell’s. I have adopted the slightly cumbersome dual numbering of Powell (1990) because it takes account of both the independent tradition of the *Somnium*, and its transmission as part of Cicero’s fragmentary larger work, the *Republic* (on the two traditions, see Powell 1990: p. 119).

ταῦτὰ τῶν αὐτῶν ἔνεκα παρὰ θεῶν δεδωρῆσθαι. λόγος τε γὰρ ἐπ’ αὐτὰ ταῦτα τέτακται, τὴν μεγίστην συμβαλλόμενος εἰς αὐτὰ μοῖραν, ὅσον τ’ αὖ μουσικῆς φωνῇ χρησίμιον πρὸς ἀκοὴν ἔνεκα ἀρμονίας ἐστὶ δοθέν.

The god invented sight and gave it to us so that we might observe the orbits of intelligence in the heavens and apply them to the revolutions of our own understanding. For there is a kinship between them, even though our revolutions are disturbed, whereas the universal orbits are undisturbed. So once we have come to know them and to share in the ability to make correct calculations according to nature, we should stabilize the straying (*peplanēmenas*) revolutions within ourselves by imitating the completely unstraying (*aplaneis*) revolutions of the god. Likewise, the same account goes for sound and hearing—these too are the gods’ gifts, given for the same purpose and intended to achieve the same result. Speech was designed for this very purpose—it plays the greatest part in its achievement. And all such composition as lends itself to making audible musical sound is given in order to express harmony, and so serves this purpose as well.⁶

The vision of the world in Cicero’s *Somnium* is given to the younger Scipio through two media, sight and sound, the revelation by sight being a vision of the globe with its five zones; the revelation by sound, the description of the harmony of the spheres.⁷ Together these evoke the visual and auditory aspects of the universe. But although the conception of his argument is *au fond* Platonic, Cicero exploits later “scientific” ideas. Far from being a spontaneous epiphanic outpouring, the *Somnium* is a tightly structured exposé of contemporary “science.”

(i) Vision: the Zones of the Earth

Scipio appeals to sight through his exposition of the earth with its five zones. This is a telling instance of Cicero’s updating of the Platonic model. While the system of the universe Scipio has already described at *Somn.* VI:13 [*Rep.*

⁶ All translations of Plato’s *Timaeus*, here as elsewhere, are from Zeyl (2000).

⁷ Boyancé (1936): 104: “Après avoir une première fois déroulé sous les yeux de Scipion le tableau de l’univers, Cicéron fait ensuite entendre à ses oreilles le chant des sphères” (“Having unrolled before Scipio’s eyes the tableau of the universe, Cicero then reveals to his ears the harmony of the spheres”). The sensory presentation of the vision is not, presumably, for the benefit of Africanus himself: he, unlike his auditor, Scipio Aemilianus, is a disembodied soul and in no need of images that rely upon sense perception. But Aemilianus, like Aeneas in *Aen.* 6, belongs only temporarily in the eschatological setting; therefore, as a living soul, he must understand the universe through the senses.

6.17] mirrors, in its planetary circles, Plato's description of its construction at *Tim.* 38c3–e3, his description of the earth nested within those circles is based on the post-Platonic five-zone model (*Somn.* VI:13 [*Rep.* 6.21]):⁸

cernis autem eandem terram quasi quibusdam redimitam et circumdatam
cingulis, e quibus duos maxime inter se diversos, et caeli verticibus ipsis ex
utraque parte subnixos, obriguisset pruina vides, medium autem illum et
maximum solis ardore torreri? duo sunt habitabiles, quorum australis ille
in quo qui insistent adversa vobis urgent vestigia, nihil ad vestrum genus;
hic autem alter subiectus aquiloni quem incolitis, cerne quam tenui vos
parte contingat.

Do you see, further, that this same earth is as it were girded and surrounded
by a number of belts? The two furthest apart of these, which are placed under
the poles of the sky at either side, are frozen with ice; the central one, which
is the largest, is burnt by the heat of the sun. Two of them are habitable; the
southern one of these, where they stand with their footsteps opposite to
yours, has nothing to do with your race; and as for this other one, over which
the North wind blows, see what a small part of it is of concern to you!

The detail of Cicero's description of the zones is closest to the *Hermes* of the
Hellenistic geographer and poet Eratosthenes (*Hermes* fr. 16.3–19; ed. Powell
1925):⁹

πέντε δέ οἱ ζῶναι περιειλάδες ἐσπεύρηντο·
αἱ δύο μὲν γλαυκοῖο κελαινότεραι κυάνοιο,
ἡ δὲ μία ψαφαρή τε καὶ ἐκ πυρὸς οἶον ἐρυθρή.
Ἦ μὲν ἔην μεσάτη, ἐκέκαυτο δὲ πᾶσα περι<πρὸ>
τυπτομένη φλογμοῖσιν, ἐπεὶ ῥά ἐ Μαΐραν ὑπ' αὐτὴν
κεκλιμένην ἀκτῖνες ἀειθερέες πυρώσιν·
αἱ δὲ δύο ἐκάτερθε πόλοισ περιπεπτηνῆαι,
αἰεὶ κρυμαλέαι, αἰεὶ δ' ὕδατι νοτέουσαι·
οὐ μὲν ὕδωρ, ἀλλ' αὐτὸς ἀπ' οὐρανόθεν κρύσταλλος

⁸ On the post-Platonic model of the zones, see pp. 81n33 above. On the use of the zones in the political context in the *Somnium*, see Hiatt (2008): 21–23.

⁹ On the *Hermes*, see Geus (2002): 110–28. Geus mentions in passing (p. 128) the *Hermes* as a source for Cicero's *Somnium*. For more on the significance of Eratosthenes' accounts of the zones as a model for Cicero's *Somnium*, see Hiatt (2008): 16–17.

κεῖτ', αἶάν τ' ἀμπίσχε, περὶ ψῦχος δ' ἐτέτυκτο.
 Ἀλλὰ τὰ μὲν χερσαῖα . . .
 . . . ἀνέμβατοι ἀνθρώποισι.
 δοιαί δ' ἄλλαι ἔασιν ἐναντίαι ἀλλήλησι
 μεσσηγὺς θερέος τε καὶ ὑετίου κρυστάλλου,
 ἄμφω εὐκρητοί τε καὶ ὄμπνιον ἀλδήσκουσαι
 καρπὸν Ἐλευσίνης Δημήτερος· ἐν δέ μιν ἄνδρες
 ἀντίποδες ναίουσι.

Five zones are ranged around, encircling it;
 two of these are darkened with a bluish sheen,
 one is dusty red as though after a fire.
 This one is in the middle, all burned up, struck
 through with flame when the ethereal rays
 set it on fire at the setting of Maira [the Dog Star] herself;
 but the two that fall around the poles on either side
 are always frosted and slick with water:
 what underlies them is not so much water, as heaven-driven ice
 which holds the earth in its grip, a band of frost hammered around.
 But the things found on land . . .
 . . . inaccessible to humans;
 the two others are opposite each other
 midway between summer, and winter's ice,
 both temperate and capable of nourishing
 Eleusinian Demeter's fruit of corn; in one live
 the people of the antipodes. (my trans.)

The god Hermes looks down from the heavens and contemplates the zones of the earth. But what he sees is not the metaphysical skeletal structure of the Platonic universe, but state-of-the-art Hellenistic geography.¹⁰ The zone model also figures in Eratosthenes' geographical works.¹¹ It is a function of

¹⁰ Eratosthenes' zone model "represents a significant addition to the scheme of the *Timaeus*," Solmsen (1942): 207.

¹¹ On the relationship of the *Hermes* to Eratosthenes' geography, see Heidel (1937): 119n262; Solmsen (1942); Hiller (1872): 79–99. On Eratosthenes' geography in general see Heidel (1937): 122–28; Dueck (2000): 56–58; Dueck (2012): 72–73 (measurement of the earth), 86 (the zones), 97 (divisions of the *oikoumene*); Geus (2002), (2003), and (2004); Roller (2010). Strabo mentions Eratosthenes' "map" of the *oikoumene*, τὸν τῆς οἰκουμένης πίνακα, at *Geography* 2.1.1 (see p. 53 above): for a reconstruction see Roller (2010): 250.

his geographical system as a whole, based on his measurement of the circumference of the earth, from which it is possible to calculate the dimensions of the zones.¹²

Cicero stays close to Eratosthenes. His language clearly echoes Eratosthenes's description of the zones.¹³ For instance, his duplication of the terms of encirclement, *redimitam et circumdatam*, recalls Eratosthenes' tautological expression for circularity, περιελάδες ἐσπεύρηγντο, "ranged around encircling it." Cicero's *quasi quibusdam . . . cingulis* translates Eratosthenes' ζῶναι, with the addition of *quasi*, "so to speak," "as we say," a characteristic Ciceronian signpost of translation from Greek to Latin. Cicero's *duos maxime inter se diversos et caeli verticibus ipsis ex utraque parte subnixos* is close to αἱ δὲ δύο ἐκάτερθε πόλοις περιπεπτηῖαι, "the two that fall around the poles on either side," with *ex utraque parte* mirroring Eratosthenes' ἐκάτερθε. Cicero's vision of the world is the Eratosthenic one: not a spindly collection of metaphysical circles but rather a mensurable object suspended in space.¹⁴ It is *this* world, now, with which the virtuous soul must harmonize.

(ii) Sound: The Harmony of the Spheres

Scipio's revelation by sound takes the form of a description of the harmony of the spheres, *Somn.* V:10 [*Rep.* 6.18]:

"Quid hic?" inquam, "quis est qui complet aures meas, tantus et tam dulcis sonus?" "Hic est," inquit, "ille qui intervallis coniunctus imparibus, sed tamen pro rata parte ratione distinctis, impulsu et motu ipsorum orbium

¹² Solmsen (1942): 208–10.

¹³ For further parallels see Zetzel (1995) on *Rep.* 6.21.1–3. Virgil also imitated this purple passage of Eratosthenes at *Georgics* 1.233–44 (see pp. 89–90 above); see Thomas (1988) Introductory note on *Geo.* 1.231–56: "These lines are based, at times very exactly, on a passage from the *Hermes* of Eratosthenes (fr.16 Powell)." The late antique commentator Probus also recognized the debt: *hanc tamen universam descriptionem certum est Vergilium transtulisse ab Eratosthene, cuius liber est hexametris versibus scriptus, qui Hermes inscribitur*, "It's certain that Virgil lifted this description of the universe from Eratosthenes, whose book, called the 'Hermes,' is written in hexameter verses" (see Hiller 1872: 57–58). Clearly the *Hermes* was well known in first-century BCE Rome.

¹⁴ Zetzel (1995), Introductory n. to *De re publica* Book 6, at p. 224: "C. makes a considerable effort to lend verisimilitude to the *Somnium*. . . . There are no whorls and spindles here [Zetzel refers to Plato's Spindle of Necessity, discussed at pp. 189–217 below], but precise information about the earth and the universe, derived not only from Plato, but from Aristotle, the Platonist Heracleides of Pontus, the Stoics, and the Hellenistic scientific poets Eratosthenes and Alexander of Ephesus." Some have seen the rational geography and astronomy of the *Somnium* as a response to widespread ancient criticism of Plato's Myth of Er as too esoteric: see Zetzel (1995): Introduction p. 14 n.35.

efficitur, et acuta cum gravibus temperans varios aequabiliter concentus efficit. nec enim silentio tanti motus incitari possunt, et natura fert ut extrema ex altera parte graviter, ex altera autem acute sonent. quam ob causam summus ille caeli stellifer cursus, cuius conversio est concitatio, acuto et excitato movetur sono, gravissimo autem hic lunaris atque infimus; nam terra nona immobilis manens una sede semper haeret, complexa medium mundi locum. illi autem octo cursus, in quibus eadem vis est duorum, septem efficiunt distinctos intervallis sonos, qui numerus rerum omnium fere nodus est.”

“What is this loud and sweet sound that now fills my ears?” I said. “That,” he said, “is the sound made by those very spheres as they move and are driven onwards, producing varied harmonies smoothly by mixing high and low notes; it is composed of a series of unequal intervals which are nevertheless marked off from each other in a strict proportion. For it is not possible for such great movements to be produced in silence; and it is ordained by nature that the furthest parts at one extreme should sound at a high pitch, while the other extreme sounds at a low pitch. Thus the highest orbit, that of heaven, carrying the stars, since its revolution is faster, moves with a high and lively note; the lunar sphere, the lowest, sounds the lowest note, for the earth, the ninth in order, remains immovable and is held constantly in one position, containing within itself the central point of the universe. In this way the eight orbits, of which two have the same effect, make seven distinct notes, separated by intervals; now the number seven is crucial in virtually everything.”

This is what we know as the “harmony of the spheres,” the sound made by the heavenly bodies as they travel the celestial ring road around the earth.¹⁵ But what, exactly, *is* the harmony of the spheres, and why should it find itself at home in an *afterlife* text?

The harmony of the spheres is often said to be a Pythagorean idea. The attribution is based on passages such as those of Aristotle, Pliny, and Macrobius that we’ll see later in this chapter. In fact, all the evidence is later.

¹⁵ On the harmony of the spheres see Reinach (1900); Heath (1913): 105–15; Duhem (1913–59), vol. 2: 8–17; Burkert (1972): 350–68. On the harmony of the spheres in the Roman tradition specifically, see Boyancé (1936): 104–15; Wille (1967): 438–42 and 439n313; and Powell (1990) on Cicero, *Somn.* V:10 [*Rep.* 6.18], with a complete list of ancient sources from the first century BCE to late antiquity. On Cicero’s sources see further Pease (1955–58) on *DND* 3.27.

The attribution to Pythagoras himself is unverifiable and may well (like so much of what is called “Pythagorean”) be mythical, although it’s possible that the idea of the harmony of the spheres *may* already exist, in some form, in the fifth-century BCE Pythagorean Philolaus.¹⁶ According to Burkert, the idea must be later than Eudoxus of Knidos (fourth century BCE), since in his view it implies a uniform motion of the planets as they circle about the earth: “When one considers that before Eudoxus there was no mathematical theory of the planets based on the concept of uniform circular movement, one cannot help suspecting that it is a mistake to assume the existence of an earlier mathematical astronomy that served as a basis for the idea of the music of the spheres.”¹⁷ The idea was attractive to the Neoplatonists and medieval thinkers in particular, whose need to give it good genetic credentials meant retrojecting it onto Pythagoras as a founding father.¹⁸

More important, for us, than provenance is the *meaning* given to the theory in our ancient authors. Its critical aspect is the Platonic connection between the universe and the human soul. At *Tim.* 43c7–e4, we’re told that the human soul is a little copy of the world soul. The idea that the soul and the universe are composed of the same “intervals” is what gives value to the theory of the harmony of the spheres in the eschatological context: it is a demonstration of the interconnectedness of soul and cosmos.

The source for Cicero’s exposition of the harmony of the spheres in his *Republic* might, by virtue of the name alone, naturally seem to be Plato’s *Republic*; thus Boyancé: “Il n’y a pas à se demander longuement d’où l’idée est venue à Cicéron; nous avons dit que c’est de la *République*” (“There’s no need to spend a long time asking where the idea came to Cicero from: we’ve said it’s from the *Republic*”).¹⁹ Boyancé is no doubt referring to Plato’s vision of the Spindle of Necessity, *Rep.* 617b5–10:²⁰

στρέφεσθαι δὲ αὐτὸν ἐν τοῖς τῆς Ἀνάγκης γόνασιν. ἐπὶ δὲ τῶν κύκλων αὐτοῦ ἄνωθεν ἐφ’ ἐκάστου βεβηκέναι Σειρήνα συμπεριφερομένην, φωνήν μίαν ἰεῖσαν, ἓνα τόνον· ἐκ πασῶν δὲ ὀκτῶ οὐσῶν μίαν ἁρμονίαν συμφωνεῖν.

¹⁶ See Philolaus fr. 449, *KRS* (doubtful); Kahn (2001): 25–26, with 26n4; Burkert (1972): 350–56; Barker (1989): 33; Powell (1990) on Cicero, *Somn.* V:10 [*Rep.* 6.18]; West (1992): 233–42; Huffman (1993): 279–88. On Pythagorean music theory in general see *GMW* (*Greek Musical Writings*), vol. 2, pp. 28–52; Barker there describes Pythagoras as “more a myth than a man” (p. 28).

¹⁷ Burkert (1970): 352.

¹⁸ Spitzer (1963) is the classic work on the later history of the idea.

¹⁹ Boyancé (1936): 104.

²⁰ *GMW*, vol. 2, pp. 56–58; on this passage see pp. 189–217 below.

The Spinde itself revolved on the knees of Necessity. On top of each of its circles stood a Siren revolving around with it producing a single sound on one note, and from all eight of them the sounds blended into a single harmony. (Emlyn-Jones and Preddy 2013)

Plato's Spindle, while it may represent the planetary system, is not intended as a working model, but rather a symbolic account of the planets.²¹ On the other hand, in Cicero's *Somnium*, Scipio, as we've seen, views the actual, "scientific" cosmos.

Cicero's divergence in detail from his Platonic source is sufficient to lead other commentators to assert that "C[icero]'s source was clearly not Plato."²² Whereas Plato's Spindle of Necessity presents a mystical vision of the universe (as we'll see later, in chapter 6), in his version of the harmony of the spheres Cicero apparently draws on the great rationalizer, Aristotle. At *De caelo* 2.9.290b12–29 (= Philolaus fr. 449 KRS), Aristotle has the sounds supposedly made by the spheres explained by the (presumably) Pythagorean proponents of the theory (with whom Aristotle disagrees) mechanistically, i.e. as a result of their motion:

φανερὸν δ' ἐκ τούτων ὅτι καὶ τὸ φάναι γίνεσθαι φερομένων ἀρμονίαν, ὡς συμφώνων γινομένων τῶν ψόφων, κομπῶς μὲν εἴρηται καὶ περιττῶς ὑπὸ τῶν εἰπόντων, οὐ μὴν οὕτως ἔχει τάληθές. δοκεῖ γάρ τισιν ἀναγκαῖον εἶναι τηλικούτων φερομένων σωμάτων γίνεσθαι ψόφον, ἐπεὶ καὶ τῶν παρ' ἡμῖν οὔτε τοὺς ὄγκους ἔχόντων ἴσους οὔτε τοιοῦτῳ τάχει φερομένων· ἡλίου δὲ καὶ σελήνης, ἔτι τε τοσούτων τὸ πλῆθος ἄστρον καὶ τὸ μέγεθος φερομένων τῷ τάχει τοιαύτην φορὰν ἀδύνατον μὴ γίνεσθαι ψόφον ἀμήχανόν τινα τὸ μέγεθος. ὑποθέμενοι δὲ ταῦτα καὶ τὰς ταχυτήτας ἐκ τῶν ἀποστάσεων ἔχειν τοὺς τῶν συμφωνιῶν λόγους, ἐναρμόνιον φασὶ γίνεσθαι τὴν φωνὴν φερομένων κύκλῳ τῶν ἄστρον. ἐπεὶ δ' ἄλογον ἐδόκει τὸ μὴ συνακούειν ἡμᾶς τῆς φωνῆς ταύτης, αἴτιον τούτου φασὶν εἶναι τὸ γινομένοις εὐθὺς ὑπάρχειν τὸν ψόφον, ὥστε μὴ διάδηλον εἶναι πρὸς τὴν ἐναντίαν σιγὴν· πρὸς ἄλλα γὰρ φωνῆς καὶ σιγῆς εἶναι τὴν διάγνωσιν· ὥστε καθάπερ τοῖς

²¹ On the Spindle, see Jones (2017a): 175–84. Although Jones expresses the view (p. 180) that "it is clear that Plato did not mean the Spindle and its whorls to be identified with our cosmos, beheld as it were from outside. Rather it is an idealised *model* of our cosmos"; nevertheless his Fig. 7.5 and Table 7.6 (pp. 177–78), show how the speeds of Plato's whorls "match up with" the heavenly bodies. It seems to me that Jones does in fact lean toward a concrete interpretation of the Spindle, when he goes on to discuss it in the light of actual physical models of the planetary system.

²² Zetzel (1995) on *Somn.* V:10 [*Rep.* 6.18].

χαλκοτύποις διὰ συνήθειαν οὐθὲν δοκεῖ διαφέρειν, καὶ τοῖς ἀνθρώποις ταὐτὸ συμβαίνειν.

These results clear up another point, namely that the theory that music (*harmonia*) is produced by their movements, because the sounds they make are harmonious (*symphōnōn*), although ingeniously and brilliantly formulated by its authors, does not contain the truth. It seems to some thinkers that bodies so great must inevitably produce a sound by their movement: even bodies on the earth do so, although they are neither so great in bulk nor moving at so high a speed, and as for the sun and the moon, and the stars, so many in number and enormous in size, all moving at a tremendous speed, it is incredible that they should fail to produce a noise of surpassing loudness. Taking this as their hypothesis, and also that the speeds of the stars, judged by their distances, are in the ratios of musical consonances (*symphōniōn*), they affirm that the sound of the stars as they revolve is concordant (*enharmonion*). To meet the difficulty that none of us is aware of this sound, they account for it by saying that the sound is with us right from birth and has no contrasting silence to show it up; for voice and silence are perceived by contrast with each other, and so all mankind is undergoing an experience like that of a coppersmith, who becomes by long habit indifferent to the din around him. (Guthrie 1939)

Aristotle's agenda is to discredit this theory. In so doing he deploys his own peculiar brand of literal-mindedness. The harmony of the spheres is treated not as a beautifully symbolic idea but as a concrete thing: if there's a harmony (in Aristotle's thinking) it must be a real noise; so the harmony of the spheres must be (as it were) like the humming of a great machine. Aristotle channels his own mechanistic explanation for the theory through its supposed proponents.

Cicero's treatment of the harmony of the spheres in the *Somnium* exemplifies both the essential difference between the Platonic and Aristotelian world views, and the early synthesis between the two.²³ Although the *Somnium* is in some sense a "translation" of Plato's Myth of Er, Cicero's spheres, unlike Plato's, don't lurk under the allegorical disguise of Sirens. They are a "real" phenomenon: there's a mechanism by which harmony is produced—*hic [sonus] est . . . ille, qui . . . impulsu et motu ipsorum orbium*

²³ On the synthesis of Plato and Aristotle see p. 115.

efficitur, “That . . . is the sound made by those very spheres as they move and are driven onward” (*Somn.* V:10 [*Rep.* 6.18]).²⁴

The mechanism is the same one Aristotle described. Cicero employs the language of Aristotelian causality rather than that of Platonic myth. So Cicero’s *efficitur*, “is made,” translates Aristotle’s γίγνεσθαι at *De caelo* 290b16, “bodies so great must inevitably *produce* a sound by their movement.” In addition, Cicero seems to be responding to the view that Aristotle credits to the Pythagorean originators of the theory, that we do not hear the sound because we are innured to it (*Somn.* V:11 [*Rep.* 6.19], *obsurduerunt*). Cicero “Aristotelianizes” the harmony of the spheres: he makes Plato’s myth concrete.

However, in reality Cicero’s relationship with Aristotle too is one of opposition. The explanation of “learned deafness” that Aristotle ascribes to the proponents of the harmony of the spheres, to account for our failure to hear this sound, is put forward by Aristotle in the nature of a rationalization to cover the absurdity of their position. But Cicero takes Aristotle’s explanation as fact.²⁵ Without apparent discomfort Cicero is able to recycle Aristotle’s debunking as a credible explanation, to be placed in the mouth of the elder Scipio.

On the general level, then, Cicero takes up technical exposition—that of Eratosthenes in the case of the zones and of Aristotle in that of the harmony of the spheres—and reinserts it into the context of Platonic eschatological myth. Cicero seems blithely immune to the disharmony between Platonic symbolism and Aristotelian materialism.

2. Soul Harmony

So far, we have gone some way toward answering one of the questions posed earlier in this chapter, i.e. what is the harmony of the spheres? This

²⁴ Powell (1990) on *Somn.* V:10 [*Rep.* 6.18] comments that Cicero gives a more “mechanistic” explanation for the music of the spheres than Plato, *Rep.* 617b. On the mechanism, see Zetzel (1995) on *Rep.* 6.18.3; Burkert (1972): 353; Boyancé (1936): 111–12. According to Zetzel (loc. cit.), “C. understands the relative speed of the spheres in terms of their daily revolutions around the earth: the fixed stars, being furthest away, must traverse the greatest distance in 24 hours, while the moon, being the closest, has the shortest distance to travel.”

²⁵ So too in his second-century CE musical treatise, the *Enchiridion*, the musicologist Nicomachus, interweaving his explanations of the consonances with the idea of the harmony of the spheres, appears to take Aristotle’s account as a starting point. The topos of “learned deafness” appears here too: see *Enchirid.* 3.242 (GMW, vol. 2, p. 253).

preliminary exploration has also given us a partial answer to the second question, namely what the theory is doing in an eschatological text: Cicero's account responds to, at the same time as it modifies, Plato's allegorical account of celestial harmony in the Myth of Er. However, we are still a long way from answering (except in this narrow *Quellenforschung* sense) that second question. Further exploration is required, of both what the harmony of the spheres is, and the significance of that to the afterlife. We'll discover, I hope, that it's a system based on an idea of "perfect consonances," an ideal to which the intervals in the human soul aspire to respond. The harmony of the spheres is "eschatological" in the true sense, in that it represents not only a field of knowledge but a goal of human life.

Let's examine Cicero's presentation of the theory a little more closely. Cicero describes celestial harmony (*Somn.* V:10 [*Rep.* 6.18]) as a sound that is (1) *intervallis coniunctus imparibus*, produced from unequal intervals; (2) these intervals, although unequal, are arranged systematically, *sed tamen pro rata parte ratione distinctis*; and (3) it results in various concords produced by a blend of high and low notes, *acuta cum gravibus temperans varios aequabiliter concentus efficit*.

Scholarship traditionally interprets Cicero's harmony of the spheres as "une gamme celeste," "a heavenly scale," i.e. a sequence of notes proceeding more or less by step.²⁶ It is my view that this cannot be so. Moreover, the fact that Cicero's harmony is *not* a scale will become significant.

The earliest passage on which the scale argument seems to rest is Pliny, *Naturalis historia* 2.84 (first-second century CE):²⁷

Sed Pythagoras interdum et musica ratione appellat tonum quantum absit a terra luna, ab ea ad Mercurium dimidium eius spatii, et ab eo ad Venerem tantundem, a qua ad solem sescuplum, a sole ad Martem tonum, id est quantum ad lunam a terra, ab eo ad Iovem dimidium, et ab eo ad Saturnum dimidium, et inde sescuplum ad signiferum; ita septem tonis effici quam diapason harmoniam vocant, hoc est universitatem concentus; in ea Saturnum Dorio moveri phthongo, Iovem Phrygio, et in reliquis similia, iucunda magis quam necessaria subtilitate.

²⁶ Reinach (1900): 433, followed almost without exception in later scholarship; see for instance Heath (1913): 113; Boyancé (1936): 110. Powell (1990) on Cicero *Somn.* V:10 [*Rep.* 6.18] says that the spheres "produce the notes of an ascending seven-note *scale*" (my emphasis).

²⁷ On this passage of Pliny see Duhem (1913–59), vol. 1: 13–14; Heath (1913): 113; Boyancé (1936): 108n1; Wille (1967): 441. For later, probably derivative, versions of the scale in Boethius, Censorinus, and Martianus Capella see Boyancé (1936): 104–15.

But occasionally Pythagoras draws on the theory of music, and designates the distance between the earth and the moon as a whole tone, that between the moon and Mercury a semitone, between Mercury and Venus the same, between her and the sun a tone and a half, between the sun and Mars a tone (the same as the distance between the earth and the moon), between Mars and Jupiter half a tone, between Jupiter and Saturn half a tone, between Saturn and the zodiac a tone and a half: the seven tones thus producing the so-called diapason, i.e. universal harmony; in this Saturn moves in the Dorian mode, Jupiter in the Phrygian, and similarly with the other planets—a refinement more entertaining than convincing. (Rackham 1938)

Pliny evinces an Aristotelian skepticism at the end of this passage, and with good cause: his argument makes no sense. He says that a *harmonia* across an octave (*diapason harmoniam*²⁸) is produced by all the notes of the planets together. This sequence is produced by the sequence of intervals he describes: tone, semitone, semitone, tone and a half or minor third,²⁹ tone, semitone, semitone, minor third. Using anachronistic modern designations for the notes, Powell (1990) on *Somn.* V:10 [*Rep.* 6.18] optimistically cites the series of notes given by Pliny as a sort of scale of C, with notes C, D, D sharp, E, G, A, A sharp, B, and C, which in stave notation would look like Figure 6 (the diagram is my own):



Figure 6 Musical scale (a), with thanks to Mary Woodcock Kroble, University of St. Andrews

This sequence fits neatly within the octave. Its disadvantage is that it does not fit what Pliny actually says: the last note is wrong. If the distance between Saturn and the zodiac is a minor third (*sescuplum*), as Pliny seems to say it

²⁸ Rackham glosses *diapason harmoniam* in his translation as “the so-called diapason, i.e. universal harmony.” His somewhat clumsy phrasing indicates that the expression is rather complex to translate. *Dia pasōn* or *diapason* means lit. “through all” [i.e., strings of the lyre], i.e. from the top to bottom (or vice versa) of a scale. *Harmonia* means (generally speaking) the pattern of notes that could go to make up a particular scale or mode (see Barker 2007: 309; Gentili 1988: 25; *GMW*, vol. 1, pp. 163–68; Michaelides 1978: 127–29).

²⁹ Lewis and Short, *sescuplus*, lit. is “once and a half,” or one and a half tones, i.e. a minor third in modern musical parlance.

is, then the scale ends on D not C, and is a tone larger than an octave, i.e. it overshoots the *diapason* (octave) by one note—as in Figure 7:



Figure 7 Musical scale (b), with thanks to Mary Woodcock Kroble, University of St. Andrews

In any case, Pliny was confused: his account doesn't stack up, because two different musical concepts are involved: it seems that he envisages both a *diapason harmonia*, "scale through the octave," and multiple *harmoniai* produced by the planets, at the same time. Although he says all of the planets have their sounds within the range of an octave (*diapason*), he also says, *Saturnum Dorio moveri phthongo*, *Iovem Phrygio*, *et in reliquis similia*, 'Saturn moves in the Dorian mode, Jupiter in the Phrygian, and similarly with the other planets.'

The word Pliny uses is *phthongus*, the Latin transliteration of the Greek φθόγγος, lit. "sound." If this simply means "note," how can any note in isolation be Dorian, Phrygian, and so on? These were the names given to the different *harmoniai*, or "modes."³⁰ An individual note by itself can't take on a particular character unless embedded in a context with other notes, as a scale or mode. Andrew Barker suggested to me that to solve the problem you might envisage Pliny as referring to the "keynote" or "tonic" of a particular mode.³¹ For us, this would be the first note of a scale, e.g. C for C major, E for E minor, etc. For the Greeks it could be either the first or the fourth note of a mode. Whatever Pliny means precisely by *phthongus*, it seems that he is imagining the planets as tuned "in" particular modes. The catch is that each one seems to be tuned to the keynote of a *different* mode: Dorian, Phrygian, etc. This would result in not one scale but multiple ones. But this doesn't square with what he's just said about notes played by the planets as themselves forming a *diapason harmoniam*, "a *harmonia* across an octave." You can either have a sequence formed of the planets' individual notes, or you can have multiple sequences played by each planet tuned to a different mode: it's difficult to conceive of both happening at the same time.

³⁰ See Barker (2007): 309.

³¹ Email correspondence, November 19, 2017. The usage of *phthongus* seems to be unique to this passage. The only possible parallel I've found is Vitruvius, *De architectura* 5.4.5, who seems to define it as "note" within a scale, without the further descriptor "Dorian" etc.

In any case, either way, assuming all the notes are sounding together (because all the stars are moving together), you would end up with an unbelievably horrible dissonance, worse even than the opening chords of Stravinsky's *Rite of Spring* (which reportedly provoked a riot at its first performance in 1913) and unprecedented in ancient music theory, which had rigorous and limited ideas of consonance (see discussion later in this chapter).

Powell (1990) on *Somn.* V:10 [*Rep.* 6.18] attempts some damage limitation: "There is apparently no way of avoiding the supposition that these notes were imagined as sounding continuously and simultaneously. . . . But in fact, if one plays the notes given by Pliny together on one of the softer registers of an organ, the sound, though it can hardly be described as musical, is not unpleasant." However, given that Pliny's version of the harmony of the spheres can be discredited on at least two counts, there's no need to try to justify the dissonance of the result by playing it quietly, or even by saying that it doesn't "really" sound at all! The simplest solution, in my own view, given the inconsistencies in this passage, is that Pliny simply does not understand basic musical principles.

This, then, discredits Pliny as a model for subsequent scalar interpretations of Cicero, including those of modern scholarship. On musical grounds, we must liberate ourselves from the concept of a scale.³² This gives us the freedom to try to ascertain what Cicero really did mean in his account of the harmony of the spheres and, in turn, why this is important in the afterlife setting.

Once we discard our preconception that the harmony of the spheres must be a scale, it becomes obvious linguistically, too, that Cicero was not talking about one. Twice he uses the term "intervals" in the passage quoted. He refers to the intervals as *pro rata parte ratione distinctis*, separated according to appropriate proportions. To my mind, this phrasing would not naturally describe the step motion of a scale but rather a series of concordant *intervals*. I believe Cicero means us to hear the harmony of the spheres as a "chord" in the sense of consonant notes sounding together.

Concentus—consonance—is the basic concept in *Somn.* V:10. It must be implied in *any* description of the harmony of the spheres that the spheres sound *together* (*con-centus*), not one after another, since it is a function of the celestial mechanism that all the planets perform their movements at the same time. So I am taking it that the notes of Cicero's harmony of the

³² Also on historical grounds: "None of the explanations of the celestial gamut known in the tradition of later antiquity has any claim to be authentic," Burkert (1970): 352.

spheres sound together. This means we must be talking about *harmonic* (in the modern sense) rather than *melodic* consonance. If the notes of a scale are sounded together, there is no way that could produce a consonance (*concentus*). But if concordant *notes* are sounded together, that can produce a consonance.

According to Aristotle, in the passage we've already seen, *De caelo* 2.9.290b22 (see pp. 137–38 above): “The speeds of the stars, judged by their distances, are in the ratios of musical consonances (*symphōniōn*).”³³ This term is apparently held, in first-century BCE Rome, to be equivalent to Cicero's *concentus*: Cicero's near-contemporary Vitruvius tells us that *concentus* is the Latin translation of *symphōnia*.³⁴

What are these *concentus* or *symphoniae*, these particular intervals that make up the harmony of the spheres? The notion of *symphōnia* is something very specific in ancient music theory: it refers to the “perfect consonances.”³⁵ The ratios that produce these were established early: “The numerical ratios of the fourth (4:3), the fifth (3:2), the tone (9:8) and the octave (2:1) had been clearly established by the fourth century BC.”³⁶ These ratios refer to the relative frequencies of each note in a pair (see further below, p. 203). In antiquity these were the *only* intervals considered to be consonant, unlike, say, the major third, which is now considered consonant but until the Renaissance was considered dissonant. These are the very intervals that make up the harmony of the spheres.

This is the interpretation of Macrobius in his commentary on the passage of the *Somnium* we're discussing (*Comm.* 2.1, on *Somn.* V:10 [*Rep.* 6.18]). Macrobius first tells a famous myth of how Pythagoras discovered the ratios of consonant intervals by listening to blacksmith's hammers.³⁷ He then moves

³³ This is perhaps also what Plato means when he uses συμφωνεῖν (*symphōnein*) of the Spindle of Necessity at *Rep.* 617b7 (see further p. 197 below).

³⁴ Vitruvius glosses the Latin word with the Greek at *De architectura* 5.4.7: *concentus*, quos natura hominis modulari potest, *graece quae symphoniae dicuntur*, “the *concord*s (in Greek *symphoniae*) which the human voice can modulate are six” (Granger 1931–34). West (1992): 160 defines *symphōnia* as “concordant intervals.” For an ancient definition see [Aristotle], *Problemata* 19.38.921a2–3: συμφωνία δὲ χαίρομεν, ὅτι κρᾶσις ἐστὶ λόγον ἐχόντων ἐναντίων πρὸς ἄλληλα, “But we enjoy concord (*symphōnia*), because it is a mix of opposites that stand in a ratio to each other” (as translated by Mayhew 2011; cf. *GMW*, vol. 1, p. 200). See further Barker (2007): 316–18 for a discussion of this “problematic” term.

³⁵ On *symphōnia* used in music theory to designate the perfect consonances, see Maclachlan (1991): 11: “Aristoxenus uses *symphōnia* to refer to the “concord”s, the intervals of a fourth, a fifth and the octave discovered by his predecessors.”

³⁶ Burkert (1972): 377.

³⁷ The myth of Pythagoras' hammers was also told by Nicomachus, *Enchiridion* 6.246–48: see *GMW*, vol. 2, pp. 256–58.

to Pythagoras' practical application of his findings to stringed instruments. Pythagoras is said to have tuned instruments so that strings *sounding together* were in the ratios of the perfect consonances (*Comm.* 2.1.13–14):

hic Pythagoras, tanti secreti compos, deprehendit numeros ex quibus *soni sibi consoni* nascerentur, adeo ut, fidibus sub hac numerorum observatione compositis, certae certis aliaeque aliis convenientium sibi numerorum concordia tenderentur, ut, una impulsula plectro, alia, licet longe posita sed numeris conveniens, *simul* sonaret. ex omni autem innumera varietate numerorum pauci et numerabiles inventi sunt qui sibi ad efficiendam musicam convenirent. sunt autem hi sex omnes: epitritus, hemiolius, duplaris, triplaris, quadruplus et epogdous.

After discovering this great secret, Pythagoras chose the numbers from which [notes consonant with one another] might be produced so that when stringed instruments had been adjusted with regard to these numbers, certain ones might be pitched to [certain notes] and others to other notes, numerically harmonious; then when one was struck with a plectrum another, though set off at a distance, yet numerically attuned, might sound forth *at the same time*. Of the infinite store of numerical combinations those that would unite to produce harmony were found to be few and simple. They are six: [the fourth, the fifth, the octave, octave-and-fifth, double octave and tone].³⁸

Macrobius goes on (2.1.15–20) to explain what he means by each designation. The tone, while it might seem out of step, is actually the difference between the fourth and the fifth, and is numerically quite easy to arrive at.³⁹ You might argue that the interval of a tone is not “consonant”: however, it seems that we are treading a line, here, between audible and mathematical

³⁸ All translations of Macrobius are from Stahl (1952); the text is from Armisen-Marchetti (2001–3). The Greek and Latin terms used by Macrobius refer to the numerical ratios used to produce these intervals. For the meaning of the Greek terms see West (1992): 160–61; Barker (2007): 22, 264. They denote the number of strings you pass across to obtain the given interval: e.g. *diapason* = “over all”; *dia tessearon* = “over four,” etc. I have simplified the terms used in Stahl’s translation. I diverge in particular from his translation of the last term, *epogdous*, which means not “superoctave” or double octave, as in Stahl’s translation, but “in the ratio of 9:8,” i.e. a tone (cf. Lewis and Short *epigdous*; *LSJ* ἐπόγδοος). Stahl’s translation is also immediately contradicted by the definition that follows in Macrobius’ text (see *Comm.* 2.1.20). On the ratios, the following article is useful: http://www.phys.uconn.edu/~gibson/Notes/Section3_2/Sec3_2.htm.

³⁹ Barker (2007): 302–3.

consonance, and that it's enough for Vitruvius that the tone is mathematically consonant. The rationale for this may become clearer after reading chapter 6 below.

Macrobius also talks about consonances (*symphoniae*) at *Comm.* 2.1.24:

sunt igitur symphoniae quinque, id est διὰ τεσσάρων, διὰ πέντε, διὰ πασῶν, διὰ πασῶν καὶ διὰ πέντε, καὶ δις διὰ πασῶν. sed hic numerus symphoniarum ad musicam pertinet quam vel flatus humanus intendere vel capere potest humanus auditus. ultro autem se tendit harmoniae caelestis accessio, id est usque ad quarter διὰ πασῶν καὶ διὰ πέντε.

And so the consonant chords are five in number, the fourth, the fifth, the octave, the octave and fifth, and the double octave. The number of consonant chords has to do only with the music that the human breath can produce or the human ear can catch; beyond this there is still the range of celestial harmony, which reaches even four times above the octave and the fifth.

Macrobius' commentary shows that he understands the music of the spheres in *Somn.* V:10 [*Rep.* 6.18] in the light of the perfect consonances. The basic intervallic relations between the notes are those of the *symphoniae*.

Our interpretation of the intervals in Cicero's description of the harmony of the spheres as the perfect consonances is supported by the image Cicero himself uses: that of the lyre. Having described the harmony of the spheres, Cicero adds (*Somn.* V:10 [*Rep.* 6.18]), *quod docti homines nervis imitati atque cantibus, aperuerunt sibi reditum in hunc locum*, "All this, wise men have imitated with strings and voices, and have opened up for themselves a way back to this place [i.e. the heavens]." Cicero's image of strings (*nervis*) comes from the tuning of the lyre, a practice that would have been understood by his audience.⁴⁰ The strings of a tuned lyre, played in sequence, were in step, giving the particular mode or scale that a tune was to be played in. But this does not mean it was *tuned* in step. In practice the tuning was done by intervals, not string by string. Lyre tuning from an early period worked around three fixed points within the octave, namely the *hypate*, *mese*, and *nete*: what we might think of as the "tonic," the "subdominant" (the interval

⁴⁰ Hagel (2010): 134 argues, on the evidence of a passage from Quintilian, that "one could assume a general awareness of the principles of lyre scales in the educated public of the Roman empire in its heydays."

that forms a perfect fourth with the tonic and a perfect fifth with its octave), and the octave above the tonic (e.g. E-A-E').⁴¹ This is not a scale but a series of intervals in the relation of perfect consonances. A modern piano tuner does this too, tuning in the notes of the scale not in linear sequence but in a series of perfect fifths.

So it is likely that Cicero imagines the celestial spheres tuned, like a lyre, using the perfect consonances as anchor points. Because of the constant nature of stellar motion, these consonances would have *sounded together*, like a chord in modern harmony. I can see two possible objections to this interpretation: first, that “harmony” in that sense was unknown to the ancients; second, that a stack of pitches such as that made by the planets in the harmony of the spheres may not be consonant overall, even though the individual intervals formed by each pair of planets in relations to one another may be consonant in themselves (you have only to envisage a stack of perfect fifths to see the sense of this—C and G, and G and D' are consonant pairs respectively, but the overall chord C-G-D' is not an audible consonance, involving as it does the dissonant interval of an octave plus tone).

On the first point, a theoretician of ancient music may counter that harmony in our sense was unknown in antiquity.⁴² I do not stake a claim for harmonic progression in the sense of modern Western music (i.e. a complex set of rules by which certain chords “resolve into” other chords through modulations and cadences according to the rules of harmony and counterpoint): by “harmony” I simply mean notes sounding together simultaneously. I believe this concept was very much within the purview of ancient music. A few examples will suffice to show that the ancients were perfectly capable of conceiving of harmony in this sense, i.e. more than one note sounded together, at different, but harmonious, pitches.

⁴¹ On lyre tuning see Hagel (2010): 133–34. The *mese* was the basic note, the “leader” in lyre tuning. From it one tuned up a perfect fifth to the *nete* (high note) and a fourth downward to the *hypate* (low note), before filling in the intermediate notes of the mode. On the date of this tuning system see Hagel (2010): 442 (probably from near the end of the sixth century BCE). On the relations between the systems of tetrachords and the tuning of the lyre see Barker (2007): 15.

⁴² “The Greeks were completely unfamiliar with harmony and polyphony in the modern sense of the terms. Music for them was pure melody and excluded simultaneous combinations of sounds . . . Instrumental accompaniment faithfully followed the song line,” Gentili (1988): 25, quoted at Barker (1995): 41. Barker remarks, “The first part of this statement, that harmony and polyphony as we understand them today were unknown in ancient Greece, is unquestionably true. I shall argue, however, that the second part is not, that the simultaneous production of different notes by the singer and accompanist was in fact quite common . . .” It's in this latter sense that I define harmony, not in the sense of modern harmonic progression.

Barker and others have shown that it was not impossible for ancient musicians to conceive of different pitches sounding simultaneously. Barker says: “In practical music-making, accompanists sometimes—perhaps often—played notes other than those currently sounding in the melodic line.”⁴³ The practice of accompanying the notes of a melody with different notes was apparently common in Plato’s time, albeit Plato himself took a dim view.⁴⁴ It may predate Plato, indeed go back as far as the sixth century BCE.⁴⁵

An awareness of different notes sounding together is attested by the sources. The Pseudo-Aristotelian *Problemata* tell us (*Prob.* 19.39.921a) that singing at the octave (as would naturally happen with a choir constituted of men on the one hand and women or children on the other) is acceptable, whereas singing at the other concords is not, because concords of the fourth and fifth, while clearly *sympḥōnoi*, do not express “sameness” in a pure sense.⁴⁶ This implies it was at least theoretically *possible* to sing at the other concords, even though some were recognized as better than others.⁴⁷

There’s also an account in the *Problemata* of accompanists playing different notes from those of the singers, which goes almost as far as describing dissonance and resolution in the modern Western sense (*Prob.* 19.39.921a25–29).⁴⁸

καὶ γὰρ οὗτοι τὰ ἄλλα οὐ προσαυλοῦντες, ἐὰν εἰς ταὐτὸν καταστρέφωσιν, εὐφραίνουσι μᾶλλον τῷ τέλει ἢ λυποῦσιν ταῖς πρὸ τοῦ τέλους διαφοραῖς, τῷ [τὸ] ἐκ διαφορῶν τὸ κοινόν, ἥδιστον ἐκ τοῦ διὰ πασῶν γίνεσθαι.

And indeed, though these [accompanists] do not play [the singer’s] notes, if they conclude on the same note, they cause more delight at the end than they cause offense with the differences before the end, because after the diversity of notes the common note, arising from the octave, is most pleasing. (Mayhew 2011)

⁴³ Barker (2007): 7n4.

⁴⁴ At *Laws* 812d–e, Plato warns that those who want to take a crash course in music should not be exposed to techniques of melodic decoration and harmonization in the accompaniment, although his description clearly indicates that such techniques were available: see translation and Barker’s commentary at *GMW*, vol. 1, pp. 162–63; and cf. Barker (1995): 43–44.

⁴⁵ See West (1992): 67 and 205–7, for the arguments.

⁴⁶ On this passage, see *GMW*, vol. 2, pp. 94–95; Maclachlan (1991): 15. On the composition and date of the *Problemata* see Mayhew (2011): xviii (probably sometime between the latter half of the fourth century BCE and the second century BCE).

⁴⁷ Ancient music theory did recognize that some intervals were more consonant than others: see *Prob.* 19.39, *GMW*, vol. 2, pp. 94–95; Nicomachus, *Enchiridion* 12.262, *GMW*, vol. 2, p. 267; Barker (2007): 334–35.

⁴⁸ *GMW*, vol. 2, p. 95; cf. Barker (1995): 50–51. On this passage, Maclachlan (1991): 15–16 observes, “When the accompaniment plays notes differing from the melody and yet finishes on a common note, separateness is overcome.”

The author of the *Problemata* describes how the divergence of melody and accompaniment “resolves” to unison at the end. Such resolution after varying degrees of discord is what causes the frisson of enjoyment in the listener. This approaches what we’d think of as a harmonic progression, a series of more or less dissonant harmonies ending in a cadence. Indeed, it seems that ancient music was in practice perhaps not so narrow as we might think, in terms of the dissonances it was prepared to exploit.⁴⁹

Examples of “harmony” in the sense of differing notes sounding together could be multiplied: the evidence would go beyond what we need for the present argument. These examples show that harmony in the sense I have defined it was possible in antiquity and, moreover, that it could even be exploited in ancient music in a way which may even approach the dissonance-resolution idiom of the modern Western harmonic system.

I think the conclusion is clear, then, that Cicero’s description of the harmony of the spheres refers to harmony in the sense of a chord composed of notes produced by the motion of the heavenly bodies, which stand in the relation of the perfect consonances to one another. This leads back (briefly) to the second point: that a stack of pitches based on the perfect consonances may not be consonant as a whole. One solution to this problem will become clear in chapter 6: that the harmony of the spheres is one note composed of many “overtones,” not all of which are consonant with the fundamental but that together form one unified note. For the moment I think we have sufficiently answered the question, What is the harmony of the spheres? So what, then, is the *function* of this harmony?

Harmony (in the sense of *symphōnia*, *concentus*) is *agreement*, many sounds heard as one: “Diversity is resolved into a final, satisfying unity.”⁵⁰ In just this way, Plato in the *Symposium* has the doctor Eryximachus describe the *harmonia* of music as an “agreement” that comes with the blending of high and low notes in *symphōnia* (*Symp.* 187a1–c2):

μουσική δὲ καὶ παντὶ κατάδηλος τῷ καὶ σμικρὸν προσέχοντι τὸν νοῦν ὅτι κατὰ ταῦτὰ ἔχει τούτοις, ὥσπερ ἴσως καὶ Ἡράκλειτος βούλεται λέγειν, ἐπεὶ τοῖς γε ῥήμασιν οὐ καλῶς λέγει. τὸ ἐν γάρ φησι “διαφερόμενον αὐτὸ αὐτῷ συμφέρεσθαι,” ὥσπερ ἁρμονίαν τόξου τε καὶ λύρας.” ἔστι δὲ πολλὴ ἀλογία ἁρμονίαν φάναι διαφέρεσθαι ἢ ἐκ διαφερομένων ἔτι εἶναι. ἀλλὰ ἴσως τὸδε

⁴⁹ See West (1992): 207.

⁵⁰ Barker (1995): 53. Cf. MacLachlan (1991): 12, “Music provides a mechanism for overcoming . . . separateness and communicates the resolution directly to the ears.”

ἐβούλετο λέγειν, ὅτι ἐκ διαφορομένων πρότερον τοῦ ὀξέος καὶ βαρέος, ἔπειτα ὕστερον ὁμολογησάντων γέγονεν ὑπὸ τῆς μουσικῆς τέχνης. οὐ γὰρ δῆπου ἐκ διαφορομένων γε ἔτι τοῦ ὀξέος καὶ βαρέος ἀρμονία ἂν εἴη· ἢ γὰρ ἀρμονία συμφωνία ἐστίν, συμφωνία δὲ ὁμολογία τις—ὁμολογίαν δὲ ἐκ διαφορομένων, ἕως ἂν διαφέρωνται, ἀδύνατον εἶναι· διαφορόμενον δὲ αὐτὸ καὶ μὴ ὁμολογοῦν ἀδύνατον ἀρμόσαι—ὥσπερ γε καὶ ὁ ρυθμὸς ἐκ τοῦ ταχέος καὶ βραδέος, ἐκ διενηνεγμένων πρότερον, ὕστερον δὲ ὁμολογησάντων γέγονε.

Music also, as is plain [even] to the least curious observer, is in the same sort of case: perhaps Heraclitus intends as much by those perplexing words: “The One at variance with itself is drawn together, like harmony of the bow or lyre” [cf. Heraclitus fr. 51 KRS]. Now it is perfectly absurd to speak of a harmony at variance, or as formed from things still varying. Perhaps, however, he meant, however, that from the [low] and [high] which were varying before, but which afterwards came to agreement, the harmony was by musical art created. For surely there can be no harmony of [high] and [low] while still at variance: harmony is a consonance (*harmonia symphōnia estin*), and consonance is a kind of agreement; and agreement of things varying, so long as they are at variance, is impossible. On the other hand, when a thing varies with no disability of agreement, then it may be harmonized; just as rhythm is produced by fast and slow, which in the beginning were at variance but later come to agree. (Lamb 1975)

Note Plato’s formulation ἐκ διαφορομένων πρότερον τοῦ ὀξέος καὶ βαρέος, ἔπειτα ὕστερον ὁμολογησάντων γέγονεν ὑπὸ τῆς μουσικῆς τέχνης, “from the [low] and [high] which were varying before, but which afterwards came to agreement, the harmony was by musical art created.” In the light of this idea, Cicero’s formulation for the harmony of the spheres at *Somn.* V:10 [*Rep.* 6.18], *acuta cum gravibus temperans varios aequabiliter concentus* [= *symphōnias*] *efficit*, “[the sound of the spheres] produces various consonances equally by balancing high and low notes,” makes more sense. *Aequabiliter* is usually translated as “equally.” But actually it is Plato’s idea of *agreement* (ὁμολογησάντων). You make things “equal” by making them “agree,” smoothing out the points of difference—singing from the same hymn sheet. This is the force of Plato’s quotation of the Heraclitus fragment in the quotation just cited: that a unity can be made from oppositional forces. We might better translate Cicero’s expression as follows: “by harmonizing [lit.

‘tempering,’ *temperans*] high and low notes [the sound of the spheres] creates various concords *in agreement with one another (aequabiliter)*.” Consonance is a concord, accord, resolution, agreement.

Terms such as these also have ethical and political implications: the Oslo *accord*, the Good Friday *agreement*. It’s for this reason, perhaps, that a musical system based on the idea of the perfect consonances is so apt too for Cicero’s purpose in the *Somnium*. We’ve seen that, in the Platonic worldview, it’s essential for souls to understand the nature of the universe. This involves its auditory as well as its visual nature. The system of the harmony of the spheres is the auditory map of the universe, just as the system of zones was a visual map of the earth. By understanding it, the soul understands the nature of the universe, as a prerequisite for understanding its own nature and destiny. But this goes further for Cicero: the nature and destiny of the soul is essential for an ethical statesmanship; i.e. a statesmanship in line with the principles of the universe. The *Roman* lesson of the *Somnium*, drawn from Plato’s universal lesson of knowledge of the universe, is the harmonizing role of the statesman in the *Republic*, which is analogous to the presence of harmony in the cosmos.

3. Scipio and the Cycles of the Universe

We’ve seen already that Cicero modifies Plato in various ways. At the same time as he splices contemporary “scientific” visions of the world into Plato’s “sight and hearing” frame, Cicero co-opts the Platonic premise of relationship between souls and stars into the service of the Roman *Republic*. We saw at *Somn.* III:5 [*Rep.* 6.13] (pp. 129–30 above) that some souls have a reserved seat in the heavens. Plato too said that “if a person lived a good life throughout the due course of his time, he would at the end return to his dwelling place in his companion star,” καὶ ὁ μὲν εὖ τὸν προσήκοντα χρόνον βιούς, πάλιν εἰς τὴν τοῦ συννόμου πορευθεὶς οἴκησιν ἄστρου (*Tim.* 42b3–4). The rationale for the return of souls to stars in Cicero is different. In Cicero, the primary way to “live a good life” and get back to the stars is to help the Roman Republic: the place in heaven is open *omnibus qui patriam conservaverint adiuverint auxerint*, ‘to all those who have saved or helped or increased the power of their native land.’

We must bear this end in mind when we consider the fate of Scipio. Scipio’s goal is the heaven: his aim is for his soul to become part of the universe. At

Somn. II:4 [*Rep.* 6.12], Scipio Africanus predicts that the crux of his life will come for Scipio Aemilianus at the age of eight times seven (i.e. fifty-six).⁵¹

nam cum aetas tua septenos octiens solis anfractus reditusque converterit, duoque hi numeri quorum uterque plenus alter altera de causa habetur, circuitu naturali summam tibi fatalem confecerint, in te unum atque in tuum nomen se tota convertet civitas.

For when your life has accomplished eight times seven revolutions and returnings of the sun, and these two numbers, which are both for diverse reasons thought to be perfect, have in their natural circuit completed for you the appointed sum of years, then the whole state will turn towards you and call upon your name.

You might have thought that Africanus' formulation "eight times seven revolutions and returnings of the sun" was an oracular and slightly garrulous old man's way of saying that Scipio will die at the age of fifty-six. But Africanus' number symbolism is significant, because it connects Scipio to the cosmos. The numbers seven and eight are implicated in the very structure of the universe, as Macrobius points out at *Comm.* 1.6.45–47:

nam primo omnium hoc numero anima mundana generata est, sicut Timaeus Platonis edocuit. . . . non parva ergo hinc potentia numeri huius ostenditur quia mundanae animae origo septem finibus continetur, septem quoque vagantium sphaerarum ordinem illi stelliferae et omnes continenti subiecit artifex fabricatoris providentia, quae et superioris rapidis motibus obviarent et inferiora omnia gubernarent.

It was by this number [seven] first of all, indeed, that the world soul was begotten, as Plato's *Timaeus* has shown. . . . The fact that the origin of the world soul hinges upon seven steps is proof that this number has no mean ability; but in addition to Creator, in his constructive foresight, arranged seven errant spheres beneath the [eighth] star-bearing celestial sphere, which embraces the universe, so that they might counteract the swift motions of the sphere above and govern everything beneath.

⁵¹ On the numerology of Scipio's life in Africanus' prophecy and its mirroring in the harmony of the spheres see Zetzel (1995) on *Rep.* 6.12.3.

Here Macrobius is referring to the world soul of the *Timaeus* (on which see further below pp. 204–14). But we remember, also, that it is these numbers which produce the harmony of the spheres: the motion of the seven planetary spheres against the sphere of the fixed stars. Scipio's life, the harmony of the spheres, and the ratios that make up the world soul are all connected through number.

Commenting on *Somn.* II:4 [*Rep.* 6.12], the passage on Scipio's life, Macrobius remarks that the human soul is in fact derived from the musical consonances: *item nullus sapientum animam ex symphoniis quoque musicis constituisse dubitavit*, "Moreover, all wise men admit that the soul was also derived from musical concords (*symphoniae*)" (*Comm.* 1.6.43). Macrobius glosses Cicero's text from a Neoplatonic viewpoint to show how universe, soul, and celestial harmony are aligned in the *Somnium*.

Scipio focalizes the principle of alignment in himself. Not only does the numerology connected with his age reflect that of the spheres, but also, the arc of Scipio's lifespan is described using the terms of egress and return of the sun between the solstitial points (*anfractus reditusque*).⁵² This is the "tropic model" of existence, applied to Scipio's individual life.⁵³ Like the sun, Scipio embodies the principles of egress and return.⁵⁴ Like the sun, he also simultaneously embodies circular motion. Note *converterit . . . convertet* in *Somn.* II:4 [*Rep.* 6.12]: "when your life *has accomplished* eight times seven revolutions and returnings of the sun" then "the whole state *will turn* towards you." Like the motion of the sun, Scipio's life-motion is both lateral (*anfractus reditusque*) and cyclic (*converterit*).⁵⁵ Similarly, the sun moves *between* the solstitial points, as well as diurnally *around* the earth (in geocentric astronomy).

It's not just an individual life at stake, however. *Converto* describes both the trajectory of Scipio's life and the movement of the Roman state around him. In the passage just quoted, Cicero echoes *converterit* with *convertet*. It's as

⁵² Zetzel (1995) on *Rep.* 6.12.3 remarks that "'turn and return' describes the annual course of the sun from winter to summer solstice and back."

⁵³ On the "tropic model" see pp. 168–70 below.

⁵⁴ "Scipio's prospective role in Rome corresponds to that of the sun in the universe," Zetzel (1995) ad *Rep.* 6.12.3.

⁵⁵ *Converto* is the usual verb for the revolution of the planets: thus of the moon's revolution around the earth, at *Rep.* 6.17.4; see further Zetzel (1995) on *Rep.* 6.12.3. This verb carries the same range of significance as the Greek *περίοδος* (*periodos*) and *περιφορά* (*periphora*), discussed at pp. 163–68 below. It can indicate temporal as well as spatial motion of the heavenly bodies, as in the description of the Great Year at *Somn.* VII:16 [*Rep.* 6.12.3], *cuius quidem anni nondum vicesimam partem scito esse conversam*, "of that year you are to know that not yet a twentieth part has elapsed."

though Scipio attracts the Roman Republic into his gravitational pull: when his own orbit will have turned appropriately (*converterit*), then the Republic will turn (*convertet*) around him.

In Stoic thought, the sun, while not the center of the universe, was its *hegemonikon*, ruling principle. So Scipio's leadership of the Roman Republic will be analogous to the ordering capacity of the sun in the world.⁵⁶ It is perhaps also for this reason that he must embody the principles of the harmony of the spheres within himself. We saw that the span of his life is described using the verb *converto*; the cognate noun *conversio* occurs in the description of the harmony of the spheres at *Somn.* V:10 [*Rep.* 6.18] to describe the rotation of the sphere of the fixed stars: *summus ille caeli stellifer cursus, cuius conversio est concitator*, "the highest orbit, that of heaven, carrying the stars, [of which the] revolution is faster . . ."

The sun is itself a harmonizing force whose power can be expressed in musical terms. The Stoic Cleanthes called the sun the "plectrum" (πλῆκτρον) that strikes the cosmos on its "harmonious course" (ἐναρμόνιον πορείαν).⁵⁷ In the later Stoic Cleomedes, *On the Heavens* 2.1.396–98, the sun's harmonizing power is expressed in musical terms:⁵⁸

καὶ μὴν διὰ τοῦ ζφδιακοῦ ἰὼν καὶ τοιαύτην τὴν πορείαν ποιούμενος, αὐτὸς ὅλον ἀρμόζεται τὸν κόσμον καὶ συμφωνοτάτην παρέχεται τὴν τῶν ὅλων διοίκησιν, αὐτὸς αἴτιος γινόμενος τῆς περὶ τὴν διάταξιν τῶν ὅλων διαμονῆς.

Also, as it goes through the zodiacal circle (that is, as it effects this type of course), the sun by itself harmonizes the cosmos, and so, by being the exclusive cause of continuing stability in the comprehensive ordering of the whole cosmos, it provides the whole cosmos with an administration that is fully concordant (*symphōnotaten*). (Bowen and Todd 2004)⁵⁹

⁵⁶ For the sun as *hegemonikon* (corresponding to Cicero's *dux*, *princeps*, *moderator* in *Somn.* IV: 9 [*Rep.* 6.17]) see Thom (2006): 89n248; Zetzel (1995) on *Rep.* 6.17.3; Coleman (1964): 3–4; Boyancé (1936): 78–104.

⁵⁷ Cited by Clement of Alexandria (second-third century CE), *Stromateis* 5.848.1 = SVF 1.502. See Thom (2006): pp. 78–79 with n188.

⁵⁸ On the date of Cleomedes, see Bowen and Todd (2004): xi: "The sole surviving treatise by the Stoic Cleomedes may belong chronologically to some time around 200 CE, but philosophically it is rooted in the Hellenistic period: in the third century BCE, when Stoicism was first established, and in the first century BCE when that school underwent a renaissance at the hands of Posidonius of Apamea." See further Bowen and Todd (2004): 2–4.

⁵⁹ Text from Todd (1990).

Thus the harmony of the spheres in the *Somnium* is an image for Scipio himself, in his role as a sun-like harmonizer; harmony is also the goal of his life, and by extension the goal of all human lives: eschatology in its true sense.

Conclusion

This chapter has been an exploration of Cicero's *Somnium Scipionis* as an afterlife text. We've seen how Cicero takes Plato's sound and vision template and reapplies it to the models of contemporary "science". This in itself illustrates the flexibility of the afterlife landscape as a way of thinking about the world. But more than that, it illustrates the idea that the soul and the world, whatever world we envisage at any point in time, are connected.

It's for this reason that we find "scientific" content in *all* afterlife representations, whether that content be cosmological, geographic, or musicological. The afterlife can not only accommodate scientific material but in fact requires it, as a means of representing a fundamental human need for alignment between soul and universe.

Here let's recall a term we'll be seeing a lot of in the remainder of this book: psychic harmonization. I use this term to mean the goal of alignment between the soul and the universe. Afterlife landscapes are a way of talking about the need to express the soul through the universe, and vice versa: that essential human trait of simultaneous projection and introjection of the world.

The connection between soul and universe is apt for Cicero's political agenda in the *Somnium*. Concord—"agreement"—is unity: one from many. A perfect sound is not a blend but a unitary entity formed of diverse elements: musical concord arises from "diverse or even mutually hostile elements being integrated in a harmonious and admirable unity."⁶⁰ In the *Somnium*, the unity that harmony represents becomes also a metaphor for the state under good governance. But it is not only political unity we are thinking of here. The notion of the harmony of the spheres is ultimately subservient not to the politics of one state but to the politics of humanity.

⁶⁰ Barker (2007): 345.

Intermezzo

Cycles

Just as the sun, by its own motion and in accordance with its own inner law, climbs from morn till noon, crosses the meridian and goes its downward way until evening, leaving its radiance behind it, and finally plunges into all-enveloping night, so man sets his course by immutable laws and, his journey over, sinks into darkness, to rise again in his children and begin the cycle anew.

—C. G. Jung, *Symbols of Transformation*

Introduction: Widening the Circle

This chapter is the node or meridian point of this book: our vision of the universe. In the previous chapter, we considered the vision of the universe in Cicero's *Somnium Scipionis*. The revelation is not unique to the *Somnium*. The necessity for knowledge of the nature of the universe is a prerequisite in afterlife accounts. We've seen its revelation in various forms, in *Aeneid* 6 and in Cicero's *Somnium*; in Claudian's *De raptu Proserpinae*; we'll see it in the Platonic texts studied in ensuing chapters (*Republic*, *Phaedo*, *Phaedrus*); in the *De facie in orbe lunae* of Plutarch; and finally in Dante's *Commedia*, where in *Paradiso* XXVIII the poet presents a definitive vision of the structure of the world.

The apparent need for a vision of the universe is the key to understanding the doubling of eschatological space: within any afterlife journey must come the revelation, in which the world is glimpsed in sum. That moment is always there, whether we speak of it in terms of revelation, dream, or *ekphrasis*. It is necessary because the soul's ultimate aim is identification with the universe, the phenomenon I have called "psychic harmonization" (see pp. 5–6 above). For this, it must understand the universe.

The function of the vision in the afterlife narrative is that it should stand as a corrective to the “planetary” nature of the soul. When our souls are with their stars (see *Timaeus* 41d8–42b5 at pp. 107–08 above), they are aligned with the circles of the universe by virtue of the fact that they are part of the celestial mechanism: large model (universe) and small copy (soul) are exactly in synch. It is only on embodiment that the problems begin.

The problem with being human is that our souls wander (the basic meaning of the verb *planaō*). We remember that at *Tim.* 47b6–d1 (see pp. 130–31 above), the god gave us sight so that we could observe the unwandering—unplanetary (*aplaneis*)—revolutions of the heavens, in order to stabilize our own planetary (*peplanēmenas*) revolutions. Our souls are copies of the universe, little animated armillary spheres inside of us. They will only work properly if they are exactly aligned with the universe. For this to happen, we must understand the universe: hence the vision in our afterlife texts.

The roots of the vision in the afterlife tradition lie in Plato’s *Timaeus*. After the Demiurge made human souls, we remember, “He showed them the nature of the universe” (τὴν τοῦ παντὸς φύσιν ἔδειξεν, *Tim.* 41e2; see p. 107 above). He did this in order to confer on souls the power of self-determination. The god makes sure that the souls are equipped to exercise free will responsibly by knowing what the universe is like. In this way he simultaneously exonerates himself: he is ἀναίτιος (*anaitios*)—can’t be blamed—for any subsequent evil (*Tim.* 42d4). The same rationale lies behind the revelation of the Spindle of Necessity in Plato’s *Republic* (see chapter 6 below). There, the souls are given a symbolic revelation of the universe before going on to draw lots for their next incarnation. The speech of the Prophet that follows concludes at *Rep.* 617e4–5 with the words αἰτία ἐλομένου· θεὸς ἀναίτιος, “The causes (*aitia*) [of evil] lie with the one choosing [their next life]: the god is not responsible (*anaitios*).”

The god’s strangely defensive demonstration of the nature of the universe, his abdication of further responsibility, confers free will and consequence: we as souls make our beds, we lie in them. We have the choice of striving toward alignment with the universe, which we now understand, by choosing to live virtuous lives. Human morality is contingent on understanding the nature of the universe, because (as Cornford put it) “True morality is not a product of human evolution, still less the arbitrary enactment of human wills. It is an order and harmony of the soul; and the soul itself is a counterpart, in miniature, of the soul of the world, which has an everlasting order and harmony of

its own, instituted by reason. This order was revealed to every soul before its birth; and it is revealed now in the visible architecture of the heavens.”¹

What is this universe that the soul must understand and with which, ultimately, it must identify? Its fundamental characteristic is circularity. It was a salient principle of most ancient astronomy that the sun, moon, and planets, divine heavenly bodies, must move with uniform speed along circular paths. Thus the first-century BCE astronomical writer Geminus, *Introduction to the Phenomena* 1.19–21:²

οἱ γὰρ Πυθαγόρειοι πρῶτοι προσελθόντες ταῖς τοιαύταις ζητήσεσιν ὑπέθετο ἐγκυκλίους καὶ ὁμαλὰς ἡλίου καὶ σελήνης καὶ τῶν ἑπταπλανητῶν ἀστέρων τὰς κινήσεις. τὴν γὰρ τοιαύτην ἀταξίαν οὐ προσεδέξαντο πρὸς τὰ θεῖα καὶ αἰώνια, ὥς ποτὲ μὲν τάχιον κινεῖσθαι, ποτὲ δὲ βράδιον, ποτὲ δὲ ἐστηκέναι· οὐς δὴ καὶ καλοῦσι στηριγμοὺς ἐπὶ τῶν ἑπταπλανητῶν ἀστέρων. . . αἱ γὰρ τοῦ βίου χρεῖαι τοῖς ἀνθρώποις πολλάκις αἰτίαι γίνονται βραδυτῆτος καὶ ταχυτῆτος. περὶ δὲ τὴν ἀφθαρτον φύσιν τῶν ἀστέρων οὐδεμίαν δυνατὸν αἰτίαν προσαχθῆναι ταχυτῆτος καὶ βραδυτῆτος. δι’ ἣντινα αἰτίαν προέτειναν οὕτω, πῶς ἂν δι’ ἐγκυκλίων καὶ ὁμαλῶν κινήσεων ἀποδοθεῖ τὰ φαινόμενα.³

The Pythagoreans, who first approached such investigations, hypothesised that the movements of the sun, moon, and the 5 wandering stars are circular and uniform. For they did not accept, in things divine and eternal, such disorder as moving sometimes more quickly, sometimes more slowly, and sometimes standing still. These are called “stations” for the 5 wandering stars. . . . The business of life is often the cause of slowness or swiftness for men. But in the case of the incorruptible nature of the stars, it is not possible to adduce any cause of swiftness or slowness. For this reason, they put forward the question, how would the phenomena be accounted for by means of uniform and circular motions? (Evans and Berggren 2006).

For the “Pythagoreans,” the idea of any irregularity in the heavenly bodies was anathema. Apparent irregularities must be shown to be regular,

¹ Cornford (1937): 6.

² For Geminus’ date see Evans and Berggren (2006): 19.

³ Text of Geminus from Aujac (1975).

assimilated into a system of perfect circular motions.⁴ Geminus' contrast between human and celestial motion is telling. Celestial motion must be "pure," free from the vicissitudes that mark human existence. Any impurities within it must be rationalized. This is what is happening across the period covered by our texts. During the course of this process of rationalization, the universe expands, as it were, to incorporate larger and larger areas in which apparently disorderly motions are converted into an orderly circular system around the earth (a system that would, of course, all ultimately be exploded by the advent of Copernican theory and Galilean practice). The result is the familiar diagram of the pre-Copernican universe, with the static earth in the center, surrounded by the concentric circles representing the paths of the planets around it, working outward from the moon, and ending with the sphere of the fixed stars, the area of greatest order, defined by its perfect circular motion from east to west.⁵

There's a basic distinction, perhaps from the Presocratics, certainly after Aristotle, between sub- and supralunary regions.⁶ An assumption develops that, if something is supralunary, it must have some kind of inbuilt order.⁷ This idea of the vertical (or outward) hierarchy of the universe lies behind Cicero, *De natura deorum* 2.56 :

nulla igitur in caelo nec fortuna nec temeritas nec erratio nec vanitas inest contraque omnis ordo veritas ratio constantia, quaeque his vacant ementita et falsa pleneque erroris, ea circum terras infra lunam, quae omnium ultima est, in terrisque versantur.

So the heavens contain no chance or random element, no erratic or pointless movement; on the contrary, all is due order and integrity, reason, and

⁴ The same rationale lay behind Eudoxus' planetary theory. See Jones (2017a): 187: "The fundamental idea was that a heavenly body's motion could be broken down into a combination of circular revolutions performed at constant speed and all centered on the earth though in different planes." This is the commutation of apparent disorder into order. On Eudoxus see also Dicks (1970): 151–89; Heath (1913): 190–212.

⁵ A good schematic representation: Jones (2017b): fig. I-10, with the sun in the fourth circle from the earth. On the order of the spheres see Jones (2017a): 115. The order Jones gives there reflects that of Geminus; in practice there was some variation in the sequence of lower spheres, reflected in Jones' later comments about Plato's Spindle of Necessity (Jones 2017a: 177 with fig. 7.5); see also Lehoux (2017): 108.

⁶ On the history of the distinction between sub- and supralunary regions, see Pease (1955–58) on *DND* 2.56. The idea is attributed by late sources to Empedocles, Heraclitus, and Pythagoras; perhaps found in Philolaus; developed in Aristotle: see e.g. *De caelo* 1.269b, where *aither* is described as "more divine" than the sublunary elements. The idea is ubiquitous in the Neoplatonists.

⁷ See Williams (2012): 273–78 on the sub-versus supralunary interpretation of comets.

regularity. All that lacks these qualities, and misleads with falsehood and abounds in error, belongs to the vicinity of the earth below the moon, the lowest of the heavenly bodies, and to the earth itself. (Walsh 1997)

Further up is best. What happens when the soul's aspirations are incorporated into this model? The result is a vertical axis, a "hierarchy of world perception."⁸ The soul, in its knowledge of the celestial apparatus, heads for the point of greatest order. If a soul is aspiring to become part of that universe, it must aim for the highest level, the stars, akin to itself (as at Cicero, *Tusculan Disputations* 1.43):

accedit ut eo facilius animus evadat ex hoc aëre, quem saepe iam appello, eumque perrumpat, quod nihil est animo velocius: nulla est celeritas, quae possit cum animi celeritate contendere. qui si permanet incorruptus sui que similis, necesse est ita feratur, ut penetret et dividat omne caelum hoc, in quo nubes, imbres ventique coguntur, quod et humidum et caliginosum est propter exhalationes terrae. quam regionem cum superavit animus naturamque sui similem contigit et agnovit, iunctis ex anima tenui et ex ardore solis temperato ignibus insistit et finem altius se efferendi facit. cum enim sui similem et levitatem et calorem adeptus est, tamquam paribus examinatus ponderibus nullam in partem movetur, eaque ei demum naturalis est sedes, cum ad sui simile penetravit, in quo nulla re egens aletur et sustentabitur iisdem rebus, quibus astra sustentantur et aluntur.

Add that the soul comes to make its escape all the more readily from our air, which I have frequently so named, and breaks its way through, because there is nothing swifter than the soul: there is no sort of speed which can match the speed of the soul. If it survives unadulterated and unchanged in substance, it is of necessity carried away so rapidly as to pierce and part asunder all this atmosphere of ours, in which clouds, storms and winds collect because of the moisture and mist produced by evaporation from the earth. When the soul has passed this tract and reaches to and recognizes a substance resembling its own, it stops amongst the fires which are formed of rarefied air and the modified glow of the sun and ceases to make higher ascent. For when it has reached conditions of lightness and heat resembling its own, it becomes quite motionless, as though in a state of equilibrium

⁸ Williams (2012): 23.

with its surroundings, and then, and not before, finds its natural home, when it has pierced to conditions resembling its own, and there, with all its needs satisfied, it will be nourished and maintained on the same food which maintains and nourishes the stars. (King 1927)

Assimilation of the soul to the universe can be an *eschatological* phenomenon, as here: something to aim for after death. But it can also be done while embodied, and in fact *should* be done at this time, as a corrective to the forgetfulness brought about by embodiment; thus Seneca, *Quaestiones naturales* 1 pref. 11–12:

sursum ingentia spatia sunt, in quorum possessionem animus⁹ admittitur, et ita si secum minimum ex corpore tulit, si sordidum omne deterisit et expeditus levisque ac contentus modico emicuit. cum illa tetigit, alitur, crescit ac velut vinculis liberatus in originem redit et hoc habet argumentum divinitatis suae quod illum divina delectant, nec ut alienis, sed ut suis interest. secure spectat occasus siderum atque ortus et tam diuersas concordantium uias; obseruat ubi quaeque stella primum terris lumen ostendat, ubi columnen eius summumque cursus sit, quousque descendat; curiosus spectator excutit singula et quaerit. quidni quaerat? scit illa ad se pertinere.

Spaces in the heavens are immense; but your mind is admitted to the possession of them only if it retains very little of the body, only if it has worn away all sordidness and, unencumbered and light, flashes forth, satisfied with little. When the mind contacts those regions it is nurtured, grows and returns to its origin just as though freed from its chains. As proof of its divinity it has this: divine things cause it pleasure, and it dwells among them not as being alien things but things of its own nature. Serenely it looks upon the rising and setting of the stars and the diverse orbits of bodies precisely balanced with one another. The mind observes where each star first shows its light to earth, where its culmination, the highest altitude of its course, lies and how far it descends. As a curious spectator the mind separates details and investigates them. Why not do this? It knows that these things pertain to itself. (Corcoran 1971)¹⁰

⁹ Although *animus* is translated here as “mind,” it is a species of soul (see for instance Cicero, *Tusc.* 1.42).

¹⁰ Translations of Seneca in this chapter are from Corcoran (1971).

Whether the celestial journey is envisaged as actual (*Tusc.*) or virtual (*QN*), the soul is implicated in celestial space. There is a spatial hierarchy involved. As we move outward through the concentric circles of the universe, we also move from a state of lesser, to one of greater, order. The outermost circle, that of the fixed stars, appears to maintain a constant diurnal motion, rising and setting around the north celestial pole (from the point of view of an observer in the northern hemisphere); the stars rise and set at the same time in the solar year.¹¹ The planets, while following overall the motion of the fixed stars around the earth, stop and start, and sometimes go backward; the sun's regular diurnal pattern is tempered by a seasonal back-and-forth movement along the horizon. The circle of the moon, nearest the earth, represents the path of a heavenly body that was most irregular: the moon's orbit around the earth is eccentric (off-center); it appears to move through the zodiac at varying speeds; it also has phases; and its months as timed by these phases are incommensurate with the length solar year.¹² Moving outward from the moon to the fixed stars, then, represents a progressive shedding of disorder.

The notion of order rests on astronomical motions. The orderliness of any astronomical cycle is contingent on the degree to which it combines—harmonizes—lateral and circular motion. All heavenly bodies combine these two types of motion to some extent. They can be accommodated within the cycle of a single body or across the cycles of various bodies. Attempts to harmonize the paths of the heavenly bodies gave rise to calendrical cycles combining various heavenly bodies: the sun and the moon, the planets, sun and stars. In this, the regularity or irregularity of a heavenly body was determined vis-à-vis the others.

The earliest bodies to be “harmonized” in this way were the easiest to see—the sun and the moon. Order ripples outward: once we ascertain the underlying principle of order of one heavenly body or set of relations, we move outward to a new sphere of apparent disorder. We harmonize our souls with bigger and bigger circles in the search for a final, unquestionable, order. We can orient our cycles with reference to the solar year (the path of the sun around the earth over the course of 365¼ days); the planetary year (the moving apart and return to their starting points of all of the planets together,

¹¹ This is an idealization of the sphere of the fixed stars: we'll see presently that the fixed stars are not, in fact, quite as regular as all that!

¹² See Jones (2017a): 120–22, “The Moon's Variable Motion.”

over a much longer period, c. thirteen thousand years¹³); or the almost unimaginably long precessional cycle. Notions of the afterlife expand alongside increasingly ambitious conceptions of the universe's scope.

1. Two Kinds of Motion

By two kinds of motion, I mean circular and lateral (or rectilinear). These are typically opposed to one another in the tradition. In Plato, every part of the universal structure, including humanity, displays a certain amount of circular motion. In *Tim.* 47b6–d1 (discussed at pp. 130–31 above) Plato referred to alignment between the “orbits” (*periodous*) in the universe and our own psychic “revolutions” (*periphoras*). Both of these terms designate circular motion.¹⁴

Characteristically, *periodos* refers to one single traversing of the circle, one orbit; *periphora* to ongoing circular motion of the totality. The terms can be used of either space or time. Used spatially at *Tim.* 39b3–c1, *periodos* refers to one individual circle or orbit in space, that of the sun, which lies within the *periophora*, the circular system of the whole; used temporally at *Tim.* 39c5, τῶν δ' ἄλλων τὰς περιόδους, “the *periods* (*periodous*) of the other bodies,” *periodos* designates motion in time, specifically planetary *period*, i.e. the time it takes for each planet to complete its unique course in the universe (see discussion at p. 174). Spatial or temporal, *periodos* seems to refer to one component within a larger whole.

Plato refers to both circular (orbital) and cyclic (periodic) motion; these concepts are applied to the movements both of the universe and of the soul; perfect circular motion is the ideal in each. So for instance at *Tim.* 44b2–7 both are used of the *soul*:

πάλιν δὲ αἱ περίοδοι λαμβανόμεναι γαλήνης τὴν ἑαυτῶν ὁδὸν ἴωσι καὶ καθιστῶνται μᾶλλον ἐπιόντος τοῦ χρόνου, τότε ἦδη πρὸς τὸ κατὰ φύσιν ἰόντων σχῆμα ἐκάστων τῶν κύκλων αἱ περιφοραὶ κατευθυνόμεναι.

¹³ On the different periods assigned in antiquity to the “Great” or “Long” year see Powell (1990) on *Somn.* 24; Regali (1983–90): 187.

¹⁴ Scholars usually define these terms as “revolution” and “circular motion” respectively. Cornford (1937): 105n1, defines περίοδος as “revolution” and περιφορά as circular motion, the latter dependent on the notion of a spherical universe; likewise Brisson (1998b): 416 defines περίοδος as “une révolution” and περιφορά as “un mouvement circulaire.” Cf. Halliwell (1988) on Plato, *Rep.* 616c5.

The soul's orbits (*periodoi*) regain their composure, resume their proper courses, and establish themselves more and more with the passage of time, their revolutions (*periphorai*) are set straight, to conform to the configuration each of the circles takes in its natural course (Zeyl 2000).¹⁵

In this case, it looks as though the soul is an exact model of the universe: within the overall rotating structure (*periphora*) is a substructure composed of individual orbits, *periodoi*. A similar conception seems to be at work at *Tim.* 90c7–d7, which strikes a precise parallel between soul and universe:¹⁶

τῷ δ' ἐν ἡμῖν θείῳ συγγενεῖς εἰσὶν κινήσεις αἱ τοῦ παντὸς διανοήσεις καὶ περιφοραί· ταύταις δὴ συνεπόμενον ἕκαστον δεῖ, τὰς περὶ τὴν γένεσιν ἐν τῇ κεφαλῇ διεφθαρμέναν ἡμῶν περιόδους ἐξορθοῦντα διὰ τὸ καταμανθάνειν τὰς τοῦ παντὸς ἀρμονίας τε καὶ περιφοράς, τῷ κατανοομένῳ τὸ κατανοοῦν ἑξομοιωῖσαι κατὰ τὴν ἀρχαίαν φύσιν, ὁμοιώσαντα δὲ τέλος ἔχειν τοῦ προτεθέντος ἀνθρώποις ὑπὸ θεῶν ἀρίστου βίου πρὸς τε τὸν παρόντα καὶ τὸν ἔπειτα χρόνον.

And the motions that have an affinity to the divine part within us are the thoughts and revolutions (*periphorai*) of the universe. These, surely, are the ones that each of us should follow (*sun-hepomenon*). We should redirect the revolutions (*periodous*) in our heads that were thrown off course at our birth, by coming to learn the harmonies and revolutions (*periphoras*) of the universe, and so bring into conformity with its objects our faculty of understanding, as it was in its original condition.

Here we need to bring the individual “revolutions” (*periodous*) in ourselves into line with the overall rotations (*periphorai*) of the universe: our psychic goal is conformity between the two.

But there is a second type of motion, lateral or rectilinear. Everything in the universe, including—or especially—the soul, is tempered by varying degrees of lateral motion. We've seen the metaphor, in *Tim.* 47b6–c4, of our “planetary” souls (p. 157 above). Plato deploys the same metaphor speaking of the implantation of souls in bodies, at *Tim.* 43a4–b5:

¹⁵ All translations of Plato *Timaeus* in this chapter are from Zeyl (2000).

¹⁶ On this passage, see Rohde (1925): 471; Cornford (1937): 352–55; Brisson (1998b): 416–20.

τὰς τῆς ἀθανάτου ψυχῆς περιόδους ἐνέδουν εἰς ἐπίρρυτον σῶμα καὶ ἀπόρρυτον. αἱ δ' εἰς ποταμὸν ἐνδεθεῖσαι πολὺν οὐτ' ἐκράτουν οὐτ' ἐκρατοῦντο, βίᾳ δὲ ἐφέροντο καὶ ἔφερον, ὥστε τὸ μὲν ὅλον κινεῖσθαι ζῶον, ἀτάκτως μὴν ὅπῃ τύχοι προῖέναι καὶ ἀλόγως, τὰς ἐξ ἀπάσας κινήσεις ἔχον· εἷς τε γὰρ τὸ πρόσθε καὶ ὀπίσθεν καὶ πάλιν εἰς δεξιὰ καὶ ἀριστερὰ κάτω τε καὶ ἄνω καὶ πάντῃ κατὰ τοὺς ἐξ τόπους πλανώμενα προῆιν.

And [the gods] went on to invest this body—into and out of which things were to flow—with the orbits of the immortal soul. These orbits, now bound within a mighty river, neither mastered that river nor were mastered by it, but tossed it violently and were violently tossed by it. Consequently the living thing as a whole did indeed move, but it would proceed in a disorderly, random, and irrational way that involved all six of the motions. It would go forward and backward, then back and forth to the right and the left, and upward and downward, wandering (*planōmena*) every which way in these six directions.

The souls are “wandering,” *planōmena*, 43b5. This appears to mean something quite specific: that the soul circles take on the six *rectilinear* motions (up and down; backward and forward; left to right) as well as the “correct” circular motion. We might call this “squeaky wheel syndrome.” When our souls are implanted in mortal bodies, they move on a wobbly circle, an asymmetrical orbit with side-to-side motion as well as circular motion, like a misaligned wheel (43e1–4):

πάσας δὲ κλάσεις καὶ διαφθορὰς τῶν κύκλων ἐμποιεῖν, ὅσα χῆπερ ἦν δυνατόν, ὥστε μετ' ἀλλήλων μόγῃς συνεχόμενας φέρεσθαι μέν, ἀλόγως δὲ φέρεσθαι, τοτὲ μὲν ἀντίας, ἄλλοτε δὲ πλαγίας, τοτὲ δὲ ὑπτίας.

[Sensory disturbances] mutilated and disfigured the circles in every possible way so that they barely held together and though they remained in motion, the circles moved without rhyme or reason, sometimes in the opposite direction, sometimes sideways and sometimes upside-down.

It is different from how the universe itself moves, *Tim.* 34a1–5:

κίνησιν γὰρ ἀπένεμεν αὐτῷ τὴν τοῦ σώματος οἰκείαν, τῶν ἐπτά τὴν περὶ νοῦν καὶ φρόνησιν μάλιστα οὔσαν· διὸ δὴ κατὰ ταῦτα ἐν τῷ αὐτῷ καὶ ἐν

ἑαυτῷ περιαγαγὼν αὐτὸ ἐποίησε κύκλῳ κινεῖσθαι στρεφόμενον, τὰς δὲ ἔξ ἀπάσας κινήσεις ἀφεῖλεν καὶ ἀπλανὲς ἀπηργάσατο ἐκείνων.

In fact, he awarded it the movement suited to its body—that one of the seven motions which is especially associated with understanding and intelligence. And so he set it turning continuously in the same place, spinning around upon itself. All the other six motions he took away, and made its movement free of their wanderings (*aplanes*).

The motion of the universe is a pure circle, unlike the side-to-side motion of the unaligned soul.

In these passages, forms of *πλανάω* (*planaō*) specifically designate a type of wandering shared between souls and the heavenly bodies of that name, as opposed to the “fixed” stars. The metaphor is calculated to equate souls and heavenly bodies. Aristotle, discussing the soul in the *Timaeus* at *De anima* 1.407a2–3, understands this: ὡς οὖσας τὰς τοῦ οὐρανοῦ φορὰς τὰς τῆς ψυχῆς κινήσεις, “thus [Plato] identifies the movements of the soul with the spatial movements of the heavenly bodies” (Hett 1935).¹⁷ What is the precise significance of the metaphor of the *planets* when used of the soul?

The ancient *topos* is that the motion of the planets was irregular. Planets move both on a circle, following the sphere of the fixed stars around from east to west, but also from side to side in relation to the stars, corkscrewing and describing figure eights relative to the surface of the starry sphere.¹⁸ Before and during the process of alignment, souls move like planets. The aim is that their movements should mirror the pure circular movements of the outer sphere of the universe.

Everything in the embodied universe, not only the human soul, has its ideal circular motion counteracted by lateral motion. Consider the account of respiration at *Tim.* 81a2–b2:

ὁ δὲ τρόπος τῆς πληρώσεως ἀποχωρήσεώς τε γίγνεται καθάπερ ἐν τῷ παντὶ παντὸς ἢ φορὰ γέγονεν, ἦν τὸ συγγενὲς πᾶν φέρεται πρὸς ἑαυτό. τὰ μὲν γὰρ διὰ περιεστῶτα ἐκτὸς ἡμᾶς τήκει τε αἰεὶ καὶ διανέμει πρὸς ἕκαστον εἶδος τὸ ὁμόφυλον ἀποπέμποντα, τὰ δὲ ἔναιμα αὖ, κερματισθέντα ἐντὸς

¹⁷ Similarly Spitzer (1963): 13, in regard to *Tim.* 47d: “περίοδοι [*periodoi*] are the periods of the life of the soul that are comparable to those celestial revolutions that produce the harmony of the spheres.”

¹⁸ On planetary motion, see Jones (2017a): 161–99, “The Wanderers.”

παρ' ἡμῖν καὶ περιειλημμένα ὥσπερ ὑπ' οὐρανοῦ συνεστῶτος ἐκάστου τοῦ ζώου, τὴν τοῦ παντὸς ἀναγκάζεται μιμεῖσθαι φορὰν.

Now [the process (*tropos*) of replenishment and the depletion follows] the manner of the movement of anything within the universe at large: everything moves toward that which is of its own kind. In this case, our external environment continually wastes us away and distributes our bulk by dispatching each [element] towards its own sort. The ingredients in our blood, then, having been chopped up inside us and encompassed by the individual living thing as by the frame of the heavens, of necessity imitate the universe's motion.

Respiration shares the ongoing cyclical motion of the universe. Plato draws the analogy between organism and universe: the membranous casing of the physical organism is likened to a “heaven” within which spatial and temporal events take place. But there's another element in it, which we don't find at the most perfect level of the universe: the notion of turning (*tropos*). This kind of movement is what we find when physiology goes wrong (82e7–83a2):

παλιναίρετα γὰρ πάντα γεγονότα καὶ διεφθαρμένα τό τε αἷμα αὐτὸ πρῶτον διόλλυσι, καὶ αὐτὰ οὐδεμίαν τροφήν ἔτι τῷ σώματι παρέχοντα φέρεται πάντῃ διὰ τῶν φλεβῶν, τάξιν τῶν κατὰ φύσιν οὐκέτ' ἴσχοντα περιόδων.

These are all [retrograde] products and agents of destruction. To begin with they corrupt the blood itself, and then also they do not supply the body any further with nourishment. They move everywhere throughout the veins, no longer keeping to the order of natural circulation (*periodōn*).

Under less-than-ideal circumstances, circulation takes on rectilinear rather than circular movements, pushed by the “retrograde” (παλιναίρετα, *palinaireta*) substances. The image of retrogradation is pointed. When physiology is out of alignment, malign substances move like planets in the sick body. Embodied existence is a constant struggle for regular circular motion, against the rectilinear forces that push us off track.

But in fact, one has to be realistic: in an embodied world, lateral motions, or “turnings” (*[peri]tropai*), as they are described at *Republic* 546a4–6, are actually as much a part of life as is circular motion:

οὐ μόνον φυτοῖς ἐγγείοις, ἀλλὰ καὶ ἐπιγείοις ζώοις φορὰ καὶ ἀφορία ψυχῆς τε καὶ σωμάτων γίνονται, ὅταν περιτροπαὶ ἐκάστοις κύκλων περιφορὰς συνάπτωσι . . .

Not only plants that grow in the ground, but also living creatures that roam the earth have times of fertility or infertility in both their soul and their body each time the [turnings (*peritropai*) of their circle (*periphoras*)] are completed (*sunaptōsi*) . . .

I have modified Emlyn-Jones and Preddy's new Loeb translation to retain the force of the Greek terms *peritropai* ("turnings," "processes"), and "circle" (*periphoras*). The metaphor describes a relation between the "turnings" of living things, within an overall "cycle." There is a cycle involving recurring "processes," and each cycle is complete when it returns to its starting point in a larger cycle (the force of *sunaptōsi*—lit. "join up," "close the circle"). The analogy for the growth of living things in the passage just quoted is the motions of the *sun*.

2. The Solar Year

This brings us to the solar year, the first of the cycles with which human life can be identified. The basic usage of *[peri]trope* (pl. *[peri]tropai*), cognate with *trepō*, "to turn," is to denote the solstitial points, the sun's "turning"-points. *Tropē* is already used like this at Hesiod, *Works and Days* 479, ἡλίοιο τροπῆς, *helioio tropēis*, of the winter solstice.¹⁹ Plato at *Rep.* 546a4–6 hints at the connection between life cycles and the solar year.

The concept is that the sun has two kinds of motion: an overall ongoing circle (*periphora*), that of its constant diurnal motion from east to west, and the seasonal phases within it (*peritropai*), according to its points of rising and setting across the year. The combination of circular and lateral movement constitutes, as it were, the "squeaky wheel syndrome" of the sun. Its orbit around the earth is not a perfect circle but instead a corkscrew motion, in which, over the course of the seasons, its points of rising and setting move back and forth along the horizon between the tropics or solstitial

¹⁹ Cf. *Works and Days* 564, 663; Aratus *Phaenomena* 499; LSJ, τροπή. Compare the use of *tropos* at *Tim.* 81a2–b2 (pp. 166–67 above).

points.²⁰ The *tropai* are where it “turns around,” reversing the direction of its movement from north to south, and vice versa. The Tropic of Capricorn and Tropic of Cancer are so called because those are the constellations that accompany the sun as it turns, in winter and summer respectively.

It is the sun’s lateral motion that creates the solar year, the time from one solstice or equinox to the next solstice or equinox of the same kind.²¹ The solar year is thus divided into four seasons, marked by the sun’s passage from summer solstice to autumn equinox, autumn equinox to winter solstice, winter solstice to spring equinox, and spring equinox to summer solstice. In fact, these seasons are all slightly different lengths. In other words, in geocentric terms, the sun slows down and speeds up across the course of a year.²² This was a problem in ancient astronomy, since (as we’ve seen from Geminus, p. 158 above), the idea of the heavenly bodies having an irregular velocity met with sustained resistance on philosophical grounds. Solutions were found, which explained the sun’s apparently irregular motions by eccentric or epicyclic orbits, an approach we’re more familiar with in connection with explanations of the motions of the planets. This approach at least regularized the irregularities, giving us “a way of conceiving the sun’s anomaly as a continuous process,” i.e. one whose irregularities can resolve into regularity over time.²³

In addition to its corkscrew orbit, the sun has a retrograde motion in relation to the sphere of the fixed stars, because that sphere appears (in geocentric terms) to move slightly faster around the earth than the sun does. As a consequence, as well as its east-to-west diurnal motion in relation to the earth, the sun describes a slow west-to-east motion in relation to the stars, as it “slips back” through the zodiac. Inscribed calendars (*paraepgmata*) with peg holes were a means of relating the variable motions of the sun (and in some cases also the moon) to the permanent positions of the stars.²⁴

If human cycles are assimilated to those of the sun, as in the case of Scipio’s life in Cicero’s *Somnium Scipionis* (p. 153 above) or, more broadly, in the

²⁰ In our heliocentric terms, this lateral motion is a result of the tilt of the earth’s axis.

²¹ On the solar year, see Jones (2017a): 111–14, “The Meaning and Length of the Solar Year.” It can also be calculated by the sun’s entry into different zodiacal constellations: the time from when the sun is just far enough in the zodiac from a constellation so that the constellation can be seen before sunrise, to the next occurrence of this situation in a solar year. These two ways of seeing the solar year are not the same process, although in antiquity they are treated as though they were.

²² Jones (2017a): 114–19, “The Sun’s Variable Speed.”

²³ Jones (2017a): 117. See also the diagram in Evans and Berggren (2006): 122.

²⁴ See Lehoux (2017): 104–9, and Jones (2017b) fig. 1–2. On calendars combining sun and stars (the “paraepgmatic year”) see Jones (2017a): 97–107.

passage of Plato's *Republic* quoted on pp. 167–68, what does this actually mean? The sun, in ancient thinking, is a planet, a “wanderer,” because it has rectilinear, as well as circular, movement.²⁵ You might think it a poor analogy for human aspiration, because it is irregular. But actually the solar year is a good template to map the cycles of life onto, because of its connection with generation and decay. When the sun approaches the Tropic of Cancer (in summer) it causes generation; when it retreats (in winter), approaching the Tropic of Capricorn, it causes decay. It is not surprising that it becomes a metaphor for the cycles of human life. This is the “tropic” notion of existence (p. 125 and p. 153 above). Life can be understood as a combination of two motions: the alternating *tropai* of individual growth and decay, set against an ongoing progression (*periphora*) of the whole, or of the species.

3. The Lunisolar Calendar

The solar or seasonal year is the easiest compound cycle (by which I mean, in this context, one composed of two motions) to understand. Its extent can be grasped purely through observation, and it occurs many times in a human life. For this reason, the solar year is the simplest kind of astronomical calendar by which we can understand cycles of birth and death.

The cycle of the solar year involves only one heavenly body. When we start to introduce others, things get more complicated. Second in complexity to the solar year is the lunisolar cycle. This is the attempt to form a single system out of two heavenly bodies, the motions of which are in reality unrelated to one another. The rationale of the “lunisolar” calendar is “that the succession of days was organized into months whose beginnings were on or close to a certain phase of the moon, and into years comprising a series of complete months, in such a way that the beginning of the calendar year was always close to the same stage of the natural seasons [i.e. the solar year].”²⁶

Both the sun and the moon display recurring phenomena. But while the solar year, as we've seen, is based on the sun's motion between the tropic points, the lunar month is a shorter period based on the recurrent phases of the moon, i.e. the shape of the earth's shadow falling on the moon at a particular angle in relation to the respective positions of the two

²⁵ In antiquity both moon and sun were considered planets.

²⁶ Jones (2017a): 67. Cf. Heath (1913): 284–97, “Greek Months, Years, and Cycles.”

bodies.²⁷ The problem is that a whole number of lunar months will not fit into a solar year: twelve lunar months, at 354 days, is too short; thirteen, at 384, too long.²⁸ From the fifth century BCE intercalation was practiced, whereby a certain number of days was added to a calendar year based on lunar months, to make it commensurate with the solar year of $365\frac{1}{4}$ days. In particular, the nineteen-year cycle devised by Meton was a pattern of twelve- and thirteen-month years across a nineteen-year period, which meant that the calendar and solar years “harmonized” at the end of each period.²⁹

The Metonic cycle still meant that the calendar year based on lunar months was slightly “out” as regards the solar year (the Metonic cycle gave a year of $365\frac{5}{9}$ days, as opposed to the true solar year of $365\frac{1}{4}$ days). In the fourth century BCE the correspondence was improved upon by the Kallippic cycle of seventy-six years, or four nineteen-year-cycles, “Kallippic periods,” which brings the 235 lunar months involved in at just over nineteen solar years.³⁰

We can see from this the necessity for temporal expansion when correlating the cycles of two different heavenly bodies. Because of the complexity of the correlations involved, they may not work over a short period; they work better over longer periods, given time to “chime” at the end of a period: thus, first the Metonic nineteen-year cycle, then the more accurate seventy-six-year Kallippic cycle. Compound motions (defined in the sense both of rectilinear and circular, and of those movements in respect of two different heavenly bodies) need a certain number of cycles, e.g. four times nineteen, to become realigned.

For this reason, perhaps, Jones maintains that “biological and meteorological phenomena are more appropriately correlated with stages of the solar year than with a lunisolar calendar.”³¹ But in my view it’s not surprising that this more complex cycle was in fact applied to the cycles of biological existence at the exact period of the development of these intercalation cycles, in a text contemporary with the development of the Kallippic cycle, namely Aristotle’s *On the Generation of Animals* 4.10.777b18–24:

²⁷ On the phases of the moon, see Jones (2017a): 122–27.

²⁸ Dicks (1970): 86.

²⁹ On the Metonic cycle see Jones (2017a): 79; Dicks (1970): 87–88; Heath (1913): 293–95.

³⁰ See Heath (1913): 295–96. Heath’s statement that Kallippus’ cycles never came into practical use was later disproved. Evidence for the use in practice of the Kallippic cycle is found in Geminus 8.50–55 and confirmed by the Antikythera mechanism: see Jones (2017): 81; Lehoux 2017: 97; Dicks (1970): 193–94;

³¹ Jones (2017a): 96.

εὐλόγως δὲ πάντων οἱ χρόνοι καὶ τῶν κήσεων καὶ γενέσεων καὶ τῶν βίων μετρεῖσθαι βούλονται κατὰ φύσιν περιόδοις. λέγω δὲ περίοδον ἡμέραν καὶ νύκτα καὶ μῆνα καὶ ἐνιαυτὸν καὶ τοὺς χρόνους τοὺς μετρομένους τούτοις, ἔτι δὲ τὰς τῆς σελήνης περιόδους. εἰσὶ δὲ περίοδοι σελήνης πανσέληνός τε καὶ φθίσις καὶ τῶν μεταξὺ χρόνων αἱ διχοτομίαι· κατὰ γὰρ ταύτας συμβάλλει πρὸς τὸν ἥλιον· ὁ γὰρ μείς κοινὴ περίοδος ἐστὶν ἀμφοτέρων.

In all cases, as we should expect, the times of gestation and formation and of lifespan aim, according to nature, at being measured by “periods” (*periodois*). By a “period” I mean day and night and month and year and the times which are measured by these; also the moon’s “periods” which are: full moon and waning moon, and the bisections of the intervening times, since these are the points at which it stands in a definite “aspect” with the sun, the month being a joint period of both moon and sun (Peck 1943).

Aristotle’s definition of *periodos* here is as a unit within a cycle (see p. 163 above), whether that cycle is of the sun or of the moon. Aristotle is explicit that life cycles are measured by the “periods” of the sun *and* moon.

Further, life itself is a direct effect of the sun and moon. The lunisolar cycle is the basis for what Aristotle goes on to say about generation and decay (*Gen. Anim.* 4.10.777b28–778a7):

αἱ γὰρ θερμότητες καὶ ψύξεις μέχρι συμμετρίας τινὸς ποιοῦσι τὰς γενέσεις, μετὰ δὲ ταῦτα τὰς φθοράς· τούτων δ’ ἔχουσι τὸ πέρασ καὶ τῆς ἀρχῆς καὶ τῆς τελευτῆς αἱ τούτων κινήσεις τῶν ἄστρον. ὥσπερ γὰρ καὶ θάλατταν καὶ πᾶσαν ὁρῶμεν τὴν τῶν ὑγρῶν φύσιν ἰσταμένην καὶ μεταβάλλουσαν κατὰ τὴν τῶν πνευμάτων κίνησιν καὶ στάσιν, τὸν δ’ ἀέρα καὶ τὰ πνεύματα κατὰ τὴν τοῦ ἡλίου καὶ τῆς σελήνης περίοδον, οὕτω καὶ τὰ ἐκ τούτων φυόμενα καὶ τὰ ἐν τούτοις ἀκολουθεῖν ἀναγκαῖον· κατὰ λόγον γὰρ ἀκολουθεῖν καὶ τὰς τῶν ἀκυροτέρων περιόδους ταῖς τῶν κυριωτέρων. βίος γάρ τις καὶ πνεύματος ἐστὶ καὶ γένεσις καὶ φθίσις. τῆς δὲ τῶν ἄστρον τούτων περιφορᾶς τάχ’ ἂν ἔτραι τινες εἶεν ἀρχαί. βούλεται μὲν οὖν ἡ φύσις τοῖς τούτων ἀριθμοῖς ἀριθμεῖν τὰς γενέσεις καὶ τὰς τελευτάς ...

As we know, it is heat and cooling in their various manifestations which up to a certain due proportion bring about the generations of things, and beyond that point their dissolution; and the limits of these processes, both as regards their beginning and their end, are controlled by the movements

of these heavenly bodies. Just as we observe that the sea and whatever is of a fluid nature remains settled or is on the move according as the winds are at rest or in motion, while the behaviour of the air and the winds in turn depends upon the period (*periodos*) of the sun and moon, so too the things which grow out of them and are in them are bound to follow suit (as it is only reasonable that the periods (*periodous*) of things of inferior standing should follow those which belong to things of higher standing) since even the wind has a sort of lifespan (*bios*)—a generation and a decline. And as for the revolution (*periphora*) of these heavenly bodies, there may very well be other principles which lie behind them. Nature's aim, then, is to measure the generations and endings of things by the measures of these bodies . . . [my emphasis]

Everything in the world has a “life span” (*bios*), even winds. The big-picture continuity of these life spans, following in unbroken series one from another, is like the continuity of circular movement (*periphora*) in the heavens. A *periodos* is an individual period or circuit within that overall continuity. The “life spans” of individual things—their “period”—follow those of the sun and moon. Aristotle hints at a material cause for this—the “pull” of the heavenly bodies on life cycles is like a tidal effect. The point is that the complex life spans of living things—individual “circuits” in a cyclic continuum—run in parallel to the cycles of the sun and moon. Life cycles on earth, just like the individual cycles of the sun and moon, are units within a larger mechanism.

4. The “Great Year”

The harmonization of the periods of sun and moon is the reconciliation of only two “planetary” cycles. We’ve already mentioned that this takes time. The more heavenly bodies you try to reconcile, the longer the cycle needed. We would expect the reconciliation—bringing together—of the periods of all the planets to need much more time than just those of the sun and moon. And in fact, the Great Year,³² or planetary year, is way beyond the scope of a single human observer, as Cicero notes at *Somn.* VII:16 [*Rep.* 6.24]:

³² On the “Great Year,” also called the “long year” or “planetary year,” see Lehoux (2017): 109–12; Callatây (1996) *passim*; Hahm (1976): 185–99; Duhem (1913–59): vol. 1: 65–85.

homines enim populariter annum tantummodo solis, id est unius astri, reditu metiuntur; cum autem ad idem, unde semel profecta sunt cuncta astra redierint, eandemque totius caeli discriptionem longis intervallis rettulerint, tum ille vere vertens annus appellari potest, in quo vix dicere audeo quam multa hominum saecula teneantur.

Men commonly measure a year only by the return of the sun to its place—that is, of one star; but when all the stars have returned to the place from which they started, and after a long interval have brought back the same configuration of the whole heaven, that cycle can truly be called a year, in which I hardly dare say how many generations of men are contained. (Powell 1990)

Cicero refers here to what is called the “Great Year,” which can be defined as the period required for all seven planetary spheres to come into perfect conjunction with the eighth, the sphere of the fixed stars, so that they are realigned with one particular point on its surface. Like the sun and moon, each planet has a different individual “period”: each planet, seen from the earth, takes a different amount of time to return to its apparent starting point vis-à-vis the stars, looping its way around the sky. As the whole celestial apparatus moves from east to west, so do the planets; but in relation to the “fixed stars,” the planets also move in rectilinear fashion, slipping in and out of proximity to the sun and to particular constellations: these motions are called a planet’s “synodic phenomena.” In our terms this is, of course, because they are really orbiting the sun and not the earth.³³ A planet’s phenomena always happen in the same order; this is the “synodic cycle,” equivalent to its individual “year” or period.³⁴ One complete cycle takes nearly thirteen thousand years.³⁵

We first see the concept in Plato, *Tim.* 39d2–e2, who refers to the “Great Year” as the “Perfect Year”:³⁶

³³ “The synodic phenomena are consequences of the fact that each planet orbits the sun while we observe it from the earth, which is also orbiting the sun at a different distance and speed” (Jones 2017a: 164).

³⁴ Cicero gives the notional length of each planetary period at *DND* 2.52–53. His list is schematic rather than accurate: the periods he gives are all related to the number six: see Callatäy (1996): 46.

³⁵ See Callatäy (1996): viii, 36, 48–58. Callatäy gives a figure of 12,960 years (on the basis of the planetary periods given in Cicero, *DND* 2.51).

³⁶ On this passage of the *Timaeus*, and the numbers involved, see Heath (1913): 171–73. Callatäy (1996): 15 calculates Plato’s Great Year at 25,920 years, a longer period than usually given.

ἔστιν δ' ὅμως οὐδὲν ἦττον κατανοῆσαι δυνατόν ὡς ὃ γε τέλος ἀριθμὸς χρόνου τὸν τέλεον ἐνιαυτὸν πληροῖ τότε, ὅταν ἀπασῶν τῶν ὀκτῶ περιόδων τὰ πρὸς ἄλληλα συμπερανθέντα τάχῃ σχῇ κεφαλὴν τῷ τοῦ ταύτου καὶ ὁμοίως ἰόντος ἀναμετρηθέντα κύκλῳ. κατὰ ταῦτα δὴ καὶ τούτων ἕνεκα ἐγεννήθη τῶν ἄστρον ὅσα δι' οὐρανοῦ πορευόμενα ἔσχεν τροπὰς, ἵνα τόδε ὡς ὁμοιότατον ἦ τῷ τελέῳ καὶ νοητῷ ζῶν πρὸς τὴν τῆς διαιωνίας μίμησιν φύσεως.

It is nonetheless possible to discern that the perfect number of time brings to completion the Perfect Year at that moment when the relative speeds of all eight periods have been completed together and, measured by the circle of the Same that moves uniformly, have achieved their consummation. This, then, is how as well as why those stars were begotten which, on their way through the heavens, would have turnings (*tropas*). The purpose was to make this living thing as like as possible to that perfect and intelligible Living Thing, by way of imitating its sempiternity.

Plato has shortly before described the planetary cycles as *periodoi* (39b5). Here he uses *tropai*, referring to the phases of the planets (cf. *peritropas*, *Rep.* 546a4–6, of the *sun*, p. 167 above). Like the sun, the planets combine circular with rectilinear motion.

Of these cycles, Plato then tells us, we only really understand those of the sun and moon—the others are a mystery. Hence he describes the cycles of the other planets as πλάνας . . . πεποικιλμένας (*planas* . . . *pepoikilmenas*, 39d1–2), lit. “variegated [i.e. complex] wanderings.” The participle, from the verb ποικίλλω, imparts also a sense of color that we’ll see elaborated in the account of the Spindle of Necessity in Plato’s *Republic* (see chapter 6 below).³⁷ The planets’ combined motion is, as it were, a movement from monochrome to polychrome and back again, a weaving in and out of the rainbow. As the

³⁷ The meaning of ποικίλλω (*poikillō*) is “to work in various colours, work in embroidery, embroider garments”; “to diversify, vary” (*LSJ*). The verb and its cognate noun and adjectival forms seem to have had cosmic significance from early on. It is already used in Homer of the making of the Shield of Achilles, an emblem of the earth: ἐν δὲ χορὸν ποικίλλε, “on it he wrought (*poikille*) a dance” (*Iliad* 18.590). In Plato, *Phaedo* 110b7, the earth is described as ποικίλη (*poikile*); its colors shine ἐν τῇ τῶν ἄλλων χρωμάτων ποικιλίᾳ, “among the multiplicity (*poikiliai*) of other colors,” 110d1–2, so that the whole thing presents one unified polychrome (*poikilon*) appearance (110d2–3). In *Rep.* 529c7–8 the stars are the decorative coating of the visible world, and in the *Republic* the outermost whorl of the Spindle of Necessity, which represents the sphere of the fixed stars, was *poikilos*, “painted,” “variegated” (*Rep.* 616e9; see p. 193 below).

Hellenistic astronomical poet Aratus puts it, the Great Year is also a movement from many εἰς ἓν, “to one” (Aratus, *Phaenomena* 454–59):

οἱ δ' ἐπιμιξ ἄλλοι πέντ' ἀστέρες οὐδὲν ὅμοιοι
 πάντοθεν εἰδῶλων δυοκαίδεκα δινεύονται.
 οὐκ ἂν ἔτ' εἰς ἄλλους ὁρόων ἐπιτεκμήραιο
 κείνων ἤχι κέονται, ἐπεὶ πάντες μετανάσται.
 μακροὶ δὲ σφεῶν εἰσιν ἐλισσομένων ἐνιαυτοί,
 μακρὰ δὲ σήματα κεῖται ἀπόπροθεν εἰς ἓν ἰόντων.

But there are five other stars among [the fixed stars], but quite unlike them, that circulate all the way through the twelve figures of the zodiac. You cannot in this case identify where these lie by looking at other stars, for they all change their positions. The years of their orbits are long, and at long intervals are their configurations when they come from afar into conjunction [lit. “into one”]. (Kidd 1997)

The Neoplatonic commentator Proclus (fifth century CE) describes planetary periods as “planet lives,” presumably on the analogy of different life spans for different creatures (Proclus, *Commentary on the Timaeus* ed. Diehl (1903–06) vol. 3 p. 56, lines 10–11, on *Timaeus* 38c):

ἔπεται γὰρ ἄλλα ἄλλων ἀποκαταστάσε<σ>ι καὶ κατ' ἄλλα μέτρα τὰς
 ἑαυτῶν συμπεραίνει ζωάς.

For one thing depends upon the completion of the cycle of others and each one's life is attained together with different measures. (Baltzly 2013: 116–7)

Proclus' expression συμπεραίνει ζωάς (*sumperainei zōas*)—lit. “brings together its lives,” “gathers up its life spans”—is striking. Proclus seems to be thinking of the planets as ζῶα (*zōa*), “living things,” i.e. combinations of bodies and souls, as Plato himself described them at *Tim.* 38e5–6: δεσμοῖς τε ἐμψύχοις σώματα δεθέντα ζῶα ἐγεννήθη (“bound by bonds of soul, these bodies had been begotten with life”).³⁸ Each planet has its own unique life.

³⁸ Proclus seems to use the same terminology of the return of soul circles: ...ἐπειδὴ τὸ ζωτικὸν τῆς ψυχῆς νοερόν ἐστι καὶ ἀποκαταστατικόν . . . , “ . . . since the vitality (*to zōtikon*) of the soul is intellectual and such as to return to its starting-point (*apokatastatikos*) . . . ” (Baltzly 2009: 234); text from Diehl (1903–05) vol. 2 p. 248, lines 18–19, on *Tim.* 36b–c).

We might imagine “planet lives” as being like “human lives” and “cat lives.” One human year is the equivalent of approximately seven “cat years” (or, to put it another way, one cat year is traditionally one seventh of a human year), because it takes a human life about seven times as long as a cat’s life to come full circle (a cat might live to fifteen, a human to ninety-five). My cat becomes seven years older in the time it takes my son to become one year older. Planets are organisms with different “lives,” like humans and cats.

In Proclus there’s a congruent idea of “bringing together,” gathering up the threads—not only of an individual life span, perhaps, but of many related life spans. Proclus must surely be thinking of the Great Year, the bringing to a close of many planet lives simultaneously. The final solution to each cycle comes when each one of the planets is at the point where it started, relative to each of the other heavenly bodies: one complete “period” of the celestial mechanism, one full rotation of the hands of the clock, one Great Year.

The Seasons of the Great Year

At *Somn.* VII:16 [*Rep.* 6.24] (above p. 153n35), Cicero made a comparison between the solar year, which is within humans’ grasp, and the planetary year, which is a much longer period. He explained the Great Year on the analogy of the solar year. The solar year is based on the progress and return of one heavenly body; the planetary year works on the same principle, only it is bigger and more complex because it involves the movements of many heavenly bodies.

Given that the Great Year (or planetary year) is a kind of “year” on the analogy of the solar year, you might expect the idea to develop that it has “seasons.” And it is no great leap from the idea of the “seasons” of the planetary year to the notion that cycles of generation and destruction also occur over the course of the Great Year, just as they do over the course of the solar year.³⁹ This is in fact what happens. Seneca, for instance, makes planetary conjunction in Cancer or Capricorn the “summer” and “winter” of the Great

³⁹ The idea of the world’s periodic destructions may originate in Plato, *Tim.* 22c7–d3: τὸ δὲ ἀληθές ἐστι τῶν περὶ γῆν κατ’ οὐρανὸν ἰόντων παράλλαξις καὶ διὰ μακρῶν χρόνων γιγνομένη τῶν ἐπὶ γῆς πυρὶ πολλῶ φθορά, “there is a deviation in the heavenly bodies that travel around the earth, which causes huge fires that destroy what is on the earth across vast stretches of time.” (Zeyl 2000)

Year, when we can expect fires or floods respectively, just like we would in the summer and winter of the solar year (QN 3.28.7–29.1).⁴⁰

aqua et ignis terrenis dominantur; ex his ortus, ex his interitus est. ergo, quandoque placere res novae mundo, sic in nos mare emittitur desuper, ut fervor ignisque cum aliud genus exitii placuit. Berosos, qui Belum interpretatus est, ait ista cursu siderum fieri. adeo quidem affirmat ut conflagrationi atque diluvio tempus assignet. arsura enim terrena contendit, quandoque omnia sidera quae nunc diuersos agunt cursus in Cancrum conuenerint, sic sub eodem posita uestigio ut recta linea exire per orbis omnium possit; inundationem futuram, cum eadem siderum turba in Capricornum convenerit. illic solstitium, hic bruma conficitur; magnae potentiae signa, quando in ipsa mutatione anni momenta sunt.

Water and fire dominate earthly things. From them is the origin [*ortus*], from them death [*interitus*]. Therefore whenever a renewal for the universe is decreed, the sea is sent against us [*in nos*] from above, just as is heat and fire when an alternative form of destruction is decided upon. Berosus, who translated Belus,⁴¹ says that these catastrophes occur with the movement of the planets; he is, indeed, so certain that he assigns a date for the conflagration and the deluge. For earthly things will burn, he contends, when all the planets which now maintain different orbits come together in the sign of Cancer, and are so arranged in the same path that a straight line can pass through all of them. The deluge will occur when the same group of planets meets in the sign of Capricorn. The [summer] solstice is caused by Cancer, winter by Capricorn; they are signs of great power since they are the turning-points in the change of the year itself.

Here Seneca expresses planetary motion on the analogy of the solstitial movement of the sun: the *momenta* of the Great Year are its turning points, its *tropai*. Just as the solar year marks one cycle of individual generation and decay in nature, so, here, the Great Year marks cycles of birth and death for the *race*, periodically destroyed by cataclysms linked to conjunctions of the planets and tropic constellations within the Great Year. During planetary

⁴⁰ On this passage see Williams (2012): 110–16, 124–32. On the Stoic ideas of Great Year and cataclysm that inform this passage, see Callatäy (1996): 59–66; Hahm (1976): 185–99.

⁴¹ Berosus (or Berossus, fourth-third century BCE) is said to have translated Belus, the legendary founder of astrology; see Keyser and Irby-Massey (2008): 191–92.

“summer” and “winter,” the appropriate cataclysms of fire or flood are sent against us (*in nos*).⁴² The eschatological destiny of the individual, and of the race, is equally dependent on celestial cycles.

5. The Taming of the Planets: The Precessional Year

The planets are not really irregular: even Plato knew this.⁴³ It's just that we must work hard to reconcile their apparent rectilinear motions with the ideal of perfect circularity. For this reason, the planets are ambivalent: even while the harmonization of their movements into perfect circles is taking place, they can retain their symbolic value. For a long time they remain symbolic of irregularity regardless of the mathematical understanding of them. Thus we've seen that the misaligned soul can be described, with negative connotations, as “planetary.”

But some time between Plato in the fourth century BCE and Proclus in the fifth century CE there is an extraordinary change vis-à-vis the symbolism of the planets: from uncertainty and disorder, the planets became emblematic of certainty. In Proclus, the planets come to be anchors of order, the superhero-like *Cosmocrators* (Proclus, Commentary on the *Timaeus* ed. Diehl (1903–05) vol. 3 p. 94 lines 10–14, on *Tim.* 39d–e):

... ὁ κόσμος τελειότερος γέγονε διὰ τῆς τοῦ χρόνου γενέσεως τὸ παντελὲς ζῶον μιμησάμενος κατὰ τὸ αἰώνιον καὶ ἡ γένεσις ὑπέστη διὰ τὴν ἑπτὰ κοσμοκρατόρων φορὰν (ἀπὸ γὰρ ταύτης ἡ ποικιλία κατὰ τὴν γένεσιν ἀνεφάνη) ...

... The cosmos has become more perfect due to the genesis of time (since it has imitated All-perfect Living Being with respect to its eternity) and also the genesis was established due to the motion of the seven rulers of the

⁴² On mankind in this passage as the particular target of Nature's vicissitudes, see Williams (2012): 113 and 127.

⁴³ On the planets' underlying regularity see Plato, *Laws* 822a4–8: οὐ γὰρ ἐστὶ τοῦτο . . . τὸ δόγμα ὁρθὸν περὶ σελήνης τε καὶ ἡλίου καὶ τῶν ἄλλων ἄστρον, ὡς ἄρα πλανᾶται ποτε, πᾶν δὲ τοῦναντίον ἔχει τοῦτου—τὴν αὐτὴν γὰρ αὐτῶν ὁδὸν ἕκαστον καὶ οὐ πολλὰς ἀλλὰ μίαν αἰὲ κύκλῳ διεξέρχεται, φαίνεται δὲ πολλὰς φερόμενον.” The opinion . . . that the Sun and the Moon and the rest of the stars “wander” is not correct; the truth is precisely the opposite: each of them always travels in a circle one and the same path—not many paths, although it *appears* to move along many paths” (Bury 1926, my emphasis); cf. Cicero, *DND* 2.51, with Gee (2013a): 119.

cosmos [Cosmocrators] (for the variety with respect to genesis that was established results from this) . . . (Baltzly 2013: 173)

According to Proclus, the order of the world would not exist without the planets, because we need both unity and variety in the universe. The planets are what give us the “variegation” (*poikilia*) that is one aspect of the world’s perfection. The world instantiates the principle of unity through diversity.

How did it happen that the planets came to represent a principle of order in the universe? One answer is that successive planetary theories, such as those of Eudoxus and Ptolemy, came up with more and more satisfactory explanations for the planets’ apparently irregular motions in terms of perfect circles. Another answer is that the universe had simply “got bigger” between Plato and Proclus. By this I mean that the planets were no longer the final frontier of disorder.

Plato’s Great Year was the result of the seven planetary spheres revolving in opposition to the eighth, the sphere of the fixed stars. So their irregular motions had to be reconciled with the sphere of the fixed stars as an immovable index of order. But what happens when the sphere of the fixed stars is *itself* discovered to revolve? First, planetary disorder becomes insignificant in comparison; second, we must find a larger area of order: the sphere of the “fixed” stars becomes a *trompe l’oeil*, a tapestry-like concealment in front of the real immutability of yet another circle.

It was Hipparchus in the second century BCE who discovered that the fixed stars move very slowly eastward relative to the solstitial and equinoctial points.⁴⁴ This means that the places where particular stars rise and set on the horizon gradually shift to the north or south in exactly the same way that the sun’s points of rising and setting shift along the horizon during the course of a solar year, but the stars’ points of rising and setting shift position over a much longer period. In fact, the constellations appear gradually to move in a slow-motion circle of about one degree every one hundred years. They appear to do this because of the slow circling of the earth’s axis, what we call precession of the equinoxes.⁴⁵ This cycle takes about thirty thousand years to complete, before the stars return to their original positions.⁴⁶

⁴⁴ Hipparchus’ discovery is described by Ptolemy (second century CE) at *Almagest* 7.2 ed. Toomer (1984).

⁴⁵ On precession, see Jones (2017a): 112–13; Neugebauer (1969): 191–207; Neugebauer (1975a), vol. 1: pp. 292–98; Duhem (1913–59), vol. 2: 180–266.

⁴⁶ Hipparchus gave a figure of once every thirty-six thousand years. The modern value is 25,765 years (see Heath 1913: 172).

Although it happens over a long period, this shift is not an insignificant phenomenon. In the course of a precessional cycle, three signs of the zodiac actually move from the northern to the southern hemisphere.⁴⁷ So too, the position of the Great Bear, an important point of orientation in the heavens, was significantly different in the time of Hipparchus (second century BCE) from what it had been in the time of Eudoxus (fourth century BCE).⁴⁸

The result of the discovery of precession is that the outermost starry sphere is not the fixed point of reference we thought it was: the so-called fixed stars *move*, in the sense that they participate in *rectilinear* motion: “The uniform movement of the starry sphere, this very standard by which Plato meant to measure all the other revolutions, is now believed to pertain to the *motus irrationalis*.”⁴⁹ This idea was as much of a break with the security of tradition as the heliocentric theories of Copernicus and Galileo would later be. Perhaps for this reason, it had limited impact during the period between Hipparchus and Ptolemy. Or perhaps, like most “scientific” developments, it took a while to catch on in the wider culture. By Proclus’ time, however, it had had a chance to filter through. Increasing disorder (having more things that move) is progressively assimilated into a larger area of order. So, just as the cycles of sun and moon could, through reconciliation of their cycles, be rendered orderly, while those of the planets remain inexplicable (see Plato *Tim.* 39c–d), so, later, the planets become orderly in relation to the more profound disorder of the sphere of the fixed stars. Thus for Proclus, the planets can be an essential component of the world’s order.

By Dante’s time, the planets are a familiar index of *order* (*Par.* X.13–21):

Vedi come da indi si dirama
l’oblico cerchio che i pianeti porta
per sodisfare al mondo che li chiama:
ché se la strada lor non fosse torta,
molta virtù nel ciel sarebbe in vano
e quasi ogni potenza qua giù morta,

⁴⁷ Callatäy (1996): 178.

⁴⁸ Heath (1913): 8.

⁴⁹ Callatäy (1996): 169.

e se dal dritto più o men lontano
fosse 'l partire, assai sarebbe manco
e giù e sù de l'ordine mondano.

See branching off from these the oblique
circle that carries the planets, so as to satisfy
the world that calls for them:

for if their path were not twisted, much
of the power in the heavens would be in vain,
and dead almost every potentiality down here,
and if its departure from the straight were
greater or smaller, much would be lacking, both
below and above, in the order of the world. (DM)

Dante justifies the corkscrew paths of the planets as necessary for the proper functioning of the universe. He knows that there are even greater cycles involved (*Purgatorio* XI.100–8):

Non è il mondan romore altro ch'un fiato
di vento, ch'or vien quinci e or vien quindi,
e muta nome perché muta lato.

Che voce avrai tu più, se vecchia scindi
da te la carne, che se fossi morto
anzi che tu lasciassi il "pappo" e 'l "dindi"
pria che passin mill' anni? ch' è più corto
spazio a l'eterno ch'un muover di ciglia
al *cerchio che più tardi in cielo è torto*.

The clamor of the world is nothing but a breath
of wind that comes now from here and now from
there, and changes names because it changes
directions.

What more acclaim will you have if you strip off
your flesh when it is old, than if you had died
before you left off saying *pappo* and *dindi*,

before a thousand years have passed? which is a
briefer space compared with eternity than the
blinking of an eye to the circle that turns slowest in the sky.

The *cerchio che più tardi in cielo è torto*, “the circle that turns slowest in the sky” (*Purg.* XI.108), refers to the precessional cycle.⁵⁰ In Dante, it is this cycle that becomes an index of the insignificance of human concepts of time. As a period of a thousand years stands in relation to eternity, so is the blink of an eye in relation to the turning of the precessional cycle (i.e. tantamount to the relationship between a microsecond and about thirty thousand years).

Compare Dante’s analogy with the passage of Cicero’s *Somnium* quoted on pp. 173–74. There, Cicero referred to the Great or planetary year in relation to the puniness of human cycles; here, Dante refers to the *precessional* year in the same connection. You can immediately see from this how the conceptual ambit of the universe has expanded between the first century BCE and the Middle Ages. The precessional cycle is the new kind of Great Year, an image of the harmonization of the greatest area of disorder in the universe, over the longest temporal cycle.

By Dante’s time the universe had expanded to an extent that would have shocked Plato, or even Cicero. In Dante’s *Convivio*, his prose scientific digest, precessional motion *itself* becomes the successor to Proclus’ planetary cycles as a symbol of order (*Conv.* 2.14.10–11):

Ancora: per li due movimenti significa queste due scienze. Ché per lo movimento nello quale ogni die si rivolge e fa nova circolazione di punto a punto, significa le cose naturali corruttibili, che cotidianamente compiono loro via, e la loro materia si muta di forma in forma: e di queste tratta la Fisica. E per lo movimento quasi insensibile che fa da occidente in oriente per uno grado in cento anni, significa le cose incorruttibili, le quali ebbero da Dio cominciamento di creazione e non averanno fine.

Moreover, by its two movements [the visible starry sphere] signifies these two sciences. For by the movement which constitutes its daily revolution, completing a new orbit from one starting point to the next, it signifies natural corruptible things, which daily complete their course, and their matter changes from form to form—and physics deals with these. And by its almost imperceptible movement from west to east, one degree every hundred

⁵⁰ Thus Moevs (2005): 16; *DM* ad loc. *DM* are however in error to designate the 36,000 year period which they themselves ascribe to the precessional cycle, as the “Great Year.”

years, it signifies incorruptible substances, which had their beginning in being created by God and will have no end. (Frisardi 2018)⁵¹

In this final startling reversal of the Platonic ideal, rectilinear precessional motion, the circumaxial “wobble” of the stars, their “squeaky wheel syndrome,” is said to symbolize the straight line set in progress by the Christian creation, as opposed to the cyclicity of human affairs.

In the *Convivio*, Dante gives a history of how this change came about. At *Conv.* 2.3.3, Dante laments the shortcomings of Aristotle’s celestial model:⁵²

Aristotile credette, seguitando solamente l’antica grossezza delli astrologi, che fossero pur otto cieli, delli quali lo estremo, e che contenesse tutto, fosse quello dove le stelle fisse sono, cioè la spera ottava; e che di fuori da esso non fosse altro alcuno.

Aristotle believed, having only the old crudeness of the astronomers to go by, that there were only eight heavens, of which the farthest, containing everything, was the one where the fixed stars are, namely the eighth sphere; and beyond that there was no other.

Dante relates how “Ptolemy” recognized precession (*Conv.* 2.3.5):⁵³

Tolomeo poi, acorgendosi che l’ottava spera si movea per più movimenti, veggendo lo cerchio suo partire dallo diritto cerchio, che volge tutto da oriente in occidente, constretto dalli principii di filosofia, che di necessitate vuole uno primo mobile semplicissimo, puose un altro cielo essere fuori dello Stellato, lo quale facesse questa rivoluzione da oriente in occidente: la quale dico che si compie quasi in ventiquattro ore. . .

Ptolemy, then, aware that the eighth sphere had more movements, seeing its circle deviate from the straight circle, which revolves only from east to west, constrained by the principles of philosophy, which necessarily require an utterly simple Prime Mover, posited another heaven outside that of the

⁵¹ All translations and text of Dante’s *Convivio* in this chapter are from Frisardi (2018).

⁵² In particular in *De caelo*, Book 2.

⁵³ Presumably Dante actually means Ptolemy’s reference to Hipparchus’ discovery of precession (see p. 180 above).

Fixed Stars, which causes this revolution from east to west (which, I will add, is complete in nearly twenty-four hours . . .)

Ptolemy's solution to the discovery of the lateral motion of the sphere of the fixed stars was, according to Dante, to posit another fixed sphere, beyond that of the formerly fixed stars, a ninth sphere (see *Conv.* 2.3.6). The rationale is that the principles of philosophy dictate that the *primum mobile* must always be as simple as possible, i.e. completely regular.

And that's not all. For Dante, there is even a tenth sphere. Dante posits this tenth sphere on theological grounds (*Conv.* 2.3.7–8):

Ed è l'ordine del sito questo: che lo primo che numerano è quello dove è la Luna; lo secondo è quello dove è Mercurio; lo terzo è quello dove è Venere; lo quarto è quello dove è lo Sole; lo quinto è quello di Marte; lo sesto è quello di Giove; lo settimo è quello di Saturno; l'ottavo è quello delle Stelle; lo nono è quello che non è sensibile se non per questo movimento che è detto di sopra, lo quale chiamano molti Cristallino, cioè diafano o vero tutto trasparente. Veramente, fuori di tutti questi, li cattolici pongono lo cielo Empireo, che è a dire cielo di fiamma o vero luminoso; e pongono esso essere immobile per avere in sé, secondo ciascuna [sua] parte, ciò che la sua materia vuole.

And this is the order of the placement of the heavens: the heaven of the Moon is the first in number; the second that of Mercury; the third, of Venus; the fourth, of the Sun; the fifth, of Mars; the sixth, of Jupiter; the seventh, of Saturn; the eighth, of the Stars; and the ninth, not perceptible to the senses except for the movement that is mentioned above, is what many call Crystalline—diaphanous or totally transparent. However, outside of all these spheres, Catholics posit the Empyrean heaven, that is to say, the heaven of flame or the luminous heaven; and they assert that it is motionless by having within itself, with respect to each of its parts, all that its matter wants.

Outside the ninth or crystalline sphere, is another, the Empyrean, which we'll meet again later in this book. This sphere has no motion—in fact, no sensible presence at all. Why? Because “E quieto e pacifico è lo luogo di quella somma Deitate che sola [sé] compiutamente vede,” “Tranquil and peaceful is the place of that supreme Deity that alone completely sees itself” (*Conv.*

2.3.10). Dante gives a theological justification for the final encapsulation of the universe within an overriding unseen order.

Conclusion

Over time, as the reach of human concepts of the universe expands, human cycles are assimilated into an increasingly expansive universe. The solar year is the easiest compound cycle to which human cycles of birth and death can be assimilated: and it is on the analogy of the solar year that the planetary year becomes the largest cycle to measure our lives against. Later, the planets cease to be an index of disorder; they become assimilated into a wider harmonization of circular and lateral motion that now includes the sphere of the “fixed” stars vis-à-vis the precessional cycle.

It is the need to accommodate ever-larger areas of lateral motion within a fundamental casing of order that causes the universe to “expand.” As we discover more areas of disorderly motion, the outer skin of order just gets bigger, reducing the significance of the original areas of disorder. Time-wise too, the period of the longest cycle increases in step with the universe’s spatial expansion. Congruently, the soul’s arena of activity expands alongside this expanding model of the universe.

Postscript: The Galactic Year

Why stop here? Why should we not add to the cycles we’ve seen in this chapter the modern concept of the Galactic Year, in which *our whole solar system* cycles once every roughly 220 million years around the black hole at the center of our galaxy the Milky Way?⁵⁴ This is now the biggest cycle: it makes the cycles of the planets vis-à-vis the “fixed” stars, and even the precessional cycle, look small in comparison. Are we tempted to assimilate our souls to this? How big does the universe have to be before our desire for harmony gets lost in it?

⁵⁴ Blatner (2013): 150: the galactic year is the time it takes for the solar system to orbit once around the galactic center (i.e., the center of the Milky Way galaxy).

PART 3

PLATO'S SOULSCAPES

6

Interplanetary Harmonies¹

Is there a kind of cosmic fugue, with themes and counterpoints, dissonances and harmonies, a billion different voices playing the life music of the cosmos?

—Carl Sagan, *Cosmos*

Introduction

Plato's Myths of the Soul

The following three chapters deal with the *Republic*, *Phaedrus*, and *Phaedo* respectively. The *Phaedo*, *Phaedrus*, and *Republic*, along with the *Gorgias*, are almost always grouped as Plato's "eschatological" dialogues.² But in fact, the significance of Plato's so-called eschatological myths is ultimately not so much about what happens after death as about being *alive*: myths of eschatology express the nature of the human soul in the here-and-now, primarily in terms of its connection with the cosmos.³

There are differences among Plato's "eschatological" myths.⁴ There's debate about whether they belong in the same *quadro teoretico-simbolico* or whether

¹ Title after Sun Ra and his Myth Science Arkestra, "Interplanetary Music," from *We Travel the Space Ways* (1967).

² See e.g. Halliwell (1988): introd. n. on Plato, *Rep.* 614a5–616b1: "The myth of Er belongs to a great 'family' of Platonic eschatological visions, whose other members are the myths found in the *Gorgias*, *Phaedo* and *Phaedrus*." Frutiger (1976): 30 designates *Gorg.* 522e–527e, *Phaedo* 107d–115a, *Rep.* 614a–621d, and *Phaedrus* 246a–257b as "les quatre grands mythes eschatologiques." On their grouping see also Annas (1982). Jones (1980): 40–42 begins his section on the eschatological myths of Plutarch with a useful comparison of the different elements in the various eschatological myths of Plato.

³ See Nightingale (2002): 235: "Eschatology is not necessarily concerned with the afterlife"; 240: "Part of the business of the eschatological narratives is to negotiate both the boundaries and the limits of the human."

⁴ Nightingale (2002): 247n60, "Plato's eschatologies are themselves quite disparate, each being based on a different generic subtext." On the differences see further Calabi (2007): 282–84.

each merely fulfils a specific function within its dialogue.⁵ In the *Gorgias* the souls have a simple choice between Tartarus and the Isles of the Blessed; topography is not elaborated (hence this dialogue is not treated here).⁶ The *Phaedo* differs from the other dialogues in that both Tartarus and the Isles of the Blessed are part of *our* world (p. 267 below). The Myth of Er in the *Republic* makes more emphatic gestures toward *Odyssey* 11 (p. 220 below); the myth of the *Phaedrus* leans more toward the mysteries (pp. 236–38 below). Across the *Republic*, *Phaedrus*, and *Phaedo* we see Plato oscillating between an “epic” underworld, to representations of the afterlife that involve both the underworld and the heavens, to celestial notions of the soul’s origin and destiny. There is no strict down-up hierarchy. All three eschatological dialogues make varying use of “scientific” information.

Above all, each one of Plato’s soul myths is about some aspect of harmony. In this chapter we’ll examine the Spindle of Necessity from the Myth of Er at the end of Book 10 of Plato’s *Republic*. Musical harmony is one kind of “scientific” knowledge; it’s also a particularly apposite image for the integration of the soul into a universe that functions along the lines of harmonic principles. In the *Republic*, Plato works his cosmic material into an allegory, the Spindle of Necessity, which at once represents astronomical and musical harmony.

In chapter 5 I argued for an interpretation of the harmony of the spheres in the *Somnium* as “harmonic” (in a vertical sense) rather than scalar or melodic. In the present chapter I will argue for an interpretation of the harmony of the spheres in Plato’s *Republic* as representing not just harmony in this sense but also as the mathematical principle that underlies harmony: what we call, in modern terminology, the “harmonic series.” This interpretation of the Spindle differs from the consensus. In the scholarship on our texts there is only a solitary reference to the harmonic series. Powell on Cicero, *Somn.* V:10 [*Rep.* 6.18], commenting on the discord produced by the usual “scalar” interpretation of Cicero’s account of the harmony of the spheres (see pp. 140–43 above), says, “A traditionally trained modern musician would regard this as inevitably cacophonous, and some scholars have accordingly tried to find alternative interpretations (such as supposing that the notes originally envisaged were not those of a scale but those of the harmonic series).” I have been unable to follow this idea any further in the Classical

⁵ De Luise (2007): 326–41 compares the various myths.

⁶ Cf. Pradeau (1996): 94: “Le *Gorgias* ne s’intéressait pas à la dimension cosmologique” (“The *Gorgias* is not interested in the cosmic dimension,” my translation).

scholarship, because Powell's reference to the harmonic series doesn't seem to accord with anything in the bibliography there cited.⁷ I believe the idea is worth exploring further, with the proviso that such exploration will be speculative and cut new ground in the scholarship.

1. The Astronomy of the Spindle of Necessity

The Spindle of Necessity⁸ (*Rep.* 616b1–617d1) is a figurative vision of the universe, set within an afterlife journey, the Myth of Er in *Rep.* 10. It represents the moment of cosmological revelation, that essential component of after-life narratives, in which souls are given knowledge of the universe (above, pp. 156–58). Plato's account of the Spindle uses an image from spinning wool to describe the structure of the universe. A spindle is an instrument used to turn a hank of wool into viable thread: essentially it is a winding device. At the bottom of a spindle is a weight that helps it to spin. This weight is called the "whorl."⁹

From antiquity people have recognized Plato's image of the Spindle as a representation of the celestial mechanism.¹⁰ The spindle shaft probably stands for the celestial axis;¹¹ the revolving whorl contains the planetary orbits.¹² We are probably to envisage these as concentric circles set one inside the other with the rims showing, like (say) gourds in cross section.¹³ The most common view is that each of the whorls represents the orbit of a heavenly body, i.e. that they represent the planetary motions: "These descriptions conceal a well constructed ordering of the circles of the heavenly bodies from a geocentric point of view. The order, moving from the smallest circle

⁷ Boyancé (1936): 104–15, Wille (1967): 438–42, and Reinach (1900). Jonathan Powell kindly answered my email inquiring about this, but could not shed any further light.

⁸ On the Spindle, see Duhem (1913–59), vol. 1: 59–64; Halliwell (1988): 19–20 and nn. on *Rep.* 616b–617c; Schils (1993); Calabi (2007); Repellini (2007); Jones (2017a): 175–80, 187–8. The Spindle is cited in a musical context, but without reference to the harmonic series, at *GMW*, vol. 2, pp. 56–8.

⁹ For a diagram see Waterfield (1993): 454; Schils (1993): 110; for a discussion of spindles see Campese (2007): 403–4.

¹⁰ See for instance Theon of Smyrna (second century CE), p. 195 below.

¹¹ For interpretations of the shaft, see Dicks (1970): 110; Halliwell (1988) ad loc.; Repellini (2007): 378.

¹² The image of the whorl contains "the real astronomy of the *Republic*," Heath (1913): 153. On the astronomy of the Spindle, see Heath (1913): 148–156; Dicks (1970): 108–14; Vlastos (1975): 43–51; Repellini (2007): 368.

¹³ Their shape is debated: see Heath (1913): 148–156; Dicks (1970): 109–10 and n.150.

outward, is moon, sun, then the five known planets (Venus, Mercury, Mars, Jupiter, Saturn), and finally the circle of the fixed stars.”¹⁴

The presentation of the planetary circles in the Spindle is highly allusive, however (*Rep.* 616c7–617b3):

τὴν δὲ τοῦ σφονδύλου φύσιν εἶναι τοιάνδε· τὸ μὲν σχῆμα οἷαπερ ἡ τοῦ ἐνθάδε, νοῆσαι δὲ δεῖ ἐξ ὧν ἔλεγεν τοιόνδε αὐτὸν εἶναι, ὥσπερ ἂν εἰ ἐν ἐνὶ μεγάλῳ σφονδύλῳ κοίλῳ καὶ ἐξεγλυμμένῳ διαμπερὲς ἄλλος τοιοῦτος ἐλάττων ἐγκέιτο ἀρμόττων, καθάπερ οἱ κάδοι οἱ εἰς ἀλλήλους ἀρμόττοντες, καὶ οὕτω δὴ τρίτον ἄλλον καὶ τέταρτον καὶ ἄλλους τέτταρας, ὁκτὼ γὰρ εἶναι τοὺς σύμπαντας σφονδύλους, ἐν ἀλλήλοις ἐγκειμένους, κύκλους ἄνωθεν τὰ χεῖλη φαίνοντας, νῶτον συνεχὲς ἐνὸς σφονδύλου ἀπεργαζομένους περὶ τὴν ἡλακάτην· ἐκείνην δὲ διὰ μέσου τοῦ ὀγδόου διαμπερὲς ἐληλάσθαι. τὸν μὲν οὖν πρῶτόν τε καὶ ἐξωτάτω σφόνδυλον πλατύτατον τὸν τοῦ χεῖλους κύκλον ἔχειν, τὸν δὲ τοῦ ἔκτου δεύτερον, τρίτον δὲ τὸν τοῦ τετάρτου, τέταρτον δὲ τὸν τοῦ ὀγδόου, πέμπτον δὲ τὸν τοῦ ἐβδόμου, ἕκτον δὲ τὸν τοῦ πέμπτου, ἑβδομον δὲ τὸν τοῦ τρίτου, ὀγδοον δὲ τὸν τοῦ δευτέρου. καὶ τὸν μὲν τοῦ μεγίστου ποικίλον, τὸν δὲ τοῦ ἐβδόμου λαμπρότατον, τὸν δὲ τοῦ ὀγδόου τὸ χρῶμα ἀπὸ τοῦ ἐβδόμου ἔχειν προσλάμποντος, τὸν δὲ τοῦ δευτέρου καὶ πέμπτου παραπλήσια ἀλλήλοις, ξανθότερα ἐκείνων, τρίτον δὲ λευκότατον χρῶμα ἔχειν, τέταρτον δὲ ὑπέρυθρον, δεύτερον δὲ λευκότητι τὸν ἕκτον. κυκλεῖσθαι δὲ δὴ στρεφόμενον τὸν ἄτρακτον ὅλον μὲν τὴν αὐτὴν φοράν, ἐν δὲ τῷ ὅλῳ περιφερομένῳ τοὺς μὲν ἐντὸς ἑπτὰ κύκλους τὴν ἐναντίαν τῷ ὅλῳ ἡρέμα περιφέρεισθαι, αὐτῶν δὲ τούτων τάχιστα μὲν ἰέναι τὸν ὀγδοον, δευτέρους δὲ καὶ ἅμα ἀλλήλοις τὸν τε ἑβδομον καὶ ἕκτον καὶ πέμπτον [τὸν] τρίτον δὲ φορᾶ ἰέναι, ὥς σφίσι φαίνεσθαι, ἐπανακυκλούμενον τὸν τέταρτον, τέταρτον δὲ τὸν τρίτον καὶ πέμπτον τὸν δεύτερον.

And the nature of the whorl is as follows: its shape is like the ones we use, but you have to imagine what it's like from [Er's] description of it, just as if in a large hollow whorl scooped out right through, another one of the same sort lies fitted inside it, and so on, just like boxes that fit into one another, with a third and a fourth and four more. The total number of the whorls is eight, each lying inside the other. Their edges seen from above are circles,

¹⁴ GMW, vol. 2, p. 57n8. Cf. Reppellini (2007): 385–89; James (1993): 51–59; Halliwell (1988) ad *Rep.* 616c5.

forming from the back a continuous single whorl around the shaft, the latter being driven right through the centre of the eighth. The first and outermost whorl is broadest in the circle of its rim, that of the sixth is second, that of the fourth is third, that of the eighth is fourth, that of the seventh is fifth, that of the fifth is sixth, that of the third is seventh, and that of the second is eighth. Furthermore, that of the largest is star-studded (*poikilon*), that of the seventh is brightest, and the colour of the eighth comes from the shining of the seventh. The colours of the second and fifth are nearly the same as each other, more yellow than the others; the third has the whitest light, the fourth is reddish, and the sixth is second in brightness. The whole of the spindle revolves in a circle on the same course, but in the whole revolution the seven inner circles revolve [gently¹⁵] in the opposite direction to the whole and the fastest of these is the eighth, second the seventh, sixth and fifth all moving together. The third fastest, so it seemed to them, was the fourth, and the third was fourth, and the fifth second. (Emlyn-Jones and Preddy 2013)¹⁶

I suspect Plato of playing with us a little here, in the mystique he gives to the image through the profusion—perhaps better, confusion—of numbers. There are two sets of ratios implied in the Spindle, arising from the relations between the breadths of the whorls, and their speeds of motion. It is either the distance between the spheres, as represented by the breadths of the rims, or the relative speeds of the whorls, which must stand in certain ratios to one another. But we can do nothing without absolute rather than relative numbers.

Unsurprisingly, scholars have struggled to derive hard astronomical data from this account.¹⁷ Dicks laments, “desperate attempts have been made to find some sort of scientific coherence in Er’s description. The difficulties, however, are insuperable.”¹⁸ Barker (2007): 318 is equally disappointed that the historian of Greek music can’t use the Spindle: “It is a literary tour-de-force, but its language is that of allegorical *myth*, not of *science*, and for all the

¹⁵ I have amended the translation of Emlyn-Jones and Preddy (2013) on the grounds that “silently” for ἡπείμω makes less sense, given the description of sound that follows. It’s possible that the translators are influenced by the account of the world soul in the *Timaeus* (see p. 205n50 below).

¹⁶ All translations of Plato’s *Republic* in this chapter are from Emlyn-Jones and Preddy (2013).

¹⁷ Perhaps the most comprehensive attempt was that of Heath (1913): 156. See the table of whorls, planets, breadths, order, relative speeds, and colors in Heath (1913): 157; also the tables in Halliwell (1988): 180; Schils (1993): 114; Reppellini (2007): 387.

¹⁸ Dicks (1970): 110.

ingenuity of devoted commentators it gives no purchase to detailed mathematical analysis.”¹⁹ The conflict between Plato's mythic slipperiness and scholars' desire to construct literalist readings of the Spindle is exemplified most recently in Jones (2017a). As Jones recognizes, it is probably not Plato's intention to provide “scientific” precision. Jones acknowledges that “the narrative of the journey of Er does not lend itself to a literal understanding of just where the Spindle of Necessity is situated in relation to our world, but it seems clear that Plato did not mean the Spindle and its whorls to be identified with our cosmos, beheld as it were from outside. Rather, it is an idealized model of our cosmos, by which the destinies of the cosmos and its inhabitants are controlled by the Fates.”²⁰ In other words, Jones rightly recognizes the Spindle as an *eschatological* landscape.

Elsewhere however Jones appears to lean toward an interpretation of the passage based on the notions of riddle and key: “There is not a single explicit astronomical term in this passage, but Plato must have expected his readers to solve at least part of his riddle and recognise the whorl, or rather the whorls, as an image of an imagined planetary system.”²¹ Likewise, “Plato's ancient readers . . . must have known the basic observable facts, so they would have recognised how the speeds of P's whorls *match up with* the heavenly bodies.”²² Jones goes further: he reconstructs the celestial system of Plato's Spindle in the form of the familiar concentric circles of the diagram of the geocentric universe and provides a table of exact correspondences between individual whorls and the actual heavenly bodies.²³ He goes so far as to strike a parallel between the Spindle and the planetary theory of Plato's contemporary Eudoxus (on which, see Intermezzo, p. 159n4): Eudoxus' outer sphere for each planet, it is said, “*corresponds to*” the outermost whorl of each planet in the Myth of Er.²⁴

Even more, Jones goes on to look for concrete representations of Plato's Spindle.²⁵ Among the evidence is the claim of the second-century CE

¹⁹ Barker (2007): 318 (my emphasis).

²⁰ Jones (2017a): 180.

²¹ Jones (2017a): 176.

²² Jones (2017a): 179 (my emphasis).

²³ Jones (2017a): 176 and 178, figs. 7.5 and 7.6.

²⁴ Jones (2017a): 187 (my emphasis). For the idea that Eudoxus' system of homocentric spheres is a possible model for the Spindle, see Vlastos (1975): 44.

²⁵ Jones (2017a): 181–82 and 240–41 (on what we know about the sphere of Archimedes). Jones' argument in this book is influenced by his agenda, which is to look for mechanical parallels for the Antikythera mechanism.

commentator Theon of Smyrna that he created a model of the Spindle as a teaching tool:

“ἐκ πασῶν ὀκτὼ οὐσῶν ἀρμονίαν συμφωνεῖν.” ταῦτα μὲν οὖν καὶ ὁ Πλάτων· ὧν τὴν ἐξήγησιν ἐν τοῖς τῆς Πολιτείας ποιούμεθα ὑπομνήμασιν. κατεσκευάσται δ’ ἡμῖν καὶ σφαιροποιία κατὰ τὰ εἰρημένα· καὶ γὰρ αὐτός φησιν ὁ Πλάτων ὅτι τὸ ἄνευ τῶν δι’ ὅψεως μιμημάτων [τῶν] τὰ τοιαῦτα ἐθέλειν ἐκδιδάσκειν μάταιος πόνος. ἐπὶ δὲ τῶν κύκλων <ᾶς> φησιν ἐφεστάναι Σειρήνας οἱ μὲν αὐτοὺς <φασι> λέγεσθαι τοὺς πλάνητας, ἀπὸ τοῦ σειριάζειν.²⁶

“From all eight of them the sounds blended into a single harmony”: Plato also said these things; we’ve given an account of them in the commentary on the *Republic*. And a model of the sphere has been made by us according to what was said: for Plato himself said that it’s a pointless task to want to teach such things without an *aide-memoire* for sight. And he said that, from the fact that Sirens are stationed upon the circles some say that the circles designate the planets, from the word “to shine” (*seiriazain*). (my translation)

Jones also adduces spheres made by Archimedes and Posidonius as described by Cicero at *DND* 2.88, *Tusc.* 1.63, and *Rep.* 1.22. The analogy is not altogether inapposite. It seems Plato did in fact know of working models of the planetary system, if *Tim.* 40c3–d3 is anything to go by:

χορείας δὲ τούτων αὐτῶν καὶ παραβολὰς ἀλλήλων, καὶ [περὶ] τὰς τῶν κύκλων πρὸς ἑαυτοὺς ἐπανακυκλήσεις καὶ προχωρήσεις, ἐν τε ταῖς συνάψεσιν ὅποιοι τῶν θεῶν κατ’ ἀλλήλους γιγνόμενοι καὶ ὅσοι καταντικρὺ, μεθ’ οὔστινάς τε ἐπίπροσθεν ἀλλήλοις ἡμῖν τε κατὰ χρόνους οὔστινας ἕκαστοι κατακαλύπτονται καὶ πάλιν ἀναφαινόμενοι φόβους καὶ σημεῖα τῶν μετὰ ταῦτα γενησομένων τοῖς οὐ δυναμένοις λογίζεσθαι πέμπουσιν, τὸ λέγειν ἄνευ δι’ ὅψεως τούτων αὖ τῶν μιμημάτων μάταιος ἂν εἴη πόνος.

To describe the dancing movements of these gods, the [conjunctions] and [retrogradations] and advances of their circular courses on themselves; to

²⁶ Text from Hiller (1878): 146. On the etymology of “Siren” from *seiriazain*, see Dupuis (1892): 239.

tell which of the gods come into line with one another at their conjunctions and how many of them are in opposition, and in what order and at which times they pass in front of or behind one another, so that some are occluded from our view to reappear once again, thereby bringing terrors and portents of things to come to those who cannot reason—to tell all this without the use of visible models would be labour spent in vain. (Zeyl (2000))²⁷

But it is not obvious that we are to think of an actual model in the case of the Spindle. Both in the passage just quoted and in the Spindle, Plato shies away from the concrete astronomical detail. It seems to me that this apparent evasiveness, in both cases, is consistent with his approach to “scientific” information in his myths. Numerical data is scattered around in them like a sprinkling of science: but we are expected to move beyond it. This is the attitude evinced in his account of the shortfall of optical astronomy at *Rep.* 529c7–d5 (p. 112 above).

As in astronomy, so in music. In *Rep.* 531b, following his discussion of the limitations of optical astronomy, he criticizes those empirical musicians (probably Pythagoreans²⁸) who insist on looking for smaller and smaller intervals (*Rep.* 531b10–c4):

ταῦτὸν γὰρ ποιοῦσι τοῖς ἐν τῇ ἀστρονομίᾳ· τοὺς γὰρ ἐν ταύταις ταῖς συμφωνίαις ταῖς ἀκουομέναις ἀριθμοὺς ζητοῦσιν, ἀλλ’ οὐκ εἰς προβλήματα ἀνίσχουσιν, ἐπισκοπεῖν τίνες σύμφωνοι ἀριθμοὶ καὶ τίνες οὐ, καὶ διὰ τί ἑκάτεροι.

[In respect of harmony] they do the same in as they do in astronomy; for they are searching for number in the concord of sounds, but they do not rise to the challenge and inquire which numbers are concordant and which aren’t, and why the differences.

The musicians are remiss in not moving beyond audible intervals to study the abstract principle of consonance and dissonance behind them. In any field of scientific knowledge, then, Plato is working toward the abstract and metaphysical. The function of an eschatological vision such as that represented by the Spindle consists in pushing beyond the limits of perception, across the line toward abstraction.

²⁷ All translations of Plato’s *Timaeus* in this chapter are from Zeyl (2000).

²⁸ See *GMW*, vol. 2, 56n5. On this passage see also West (1992): 225.

2. The Music of the Spindle

At the end of the account of the spindle whorls, we are told that the Spindle acts, as it were, like a giant zither, with the Sirens who ride upon it generating an audible harmony (*Rep.* 617b4–7):

ἐπὶ δὲ τῶν κύκλων αὐτοῦ ἄνωθεν ἐφ’ ἐκάστου βεβηκέναι Σειρῆνα
 συμπεριφερομένην, φωνὴν μίαν ἰεῖσαν, ἓνα τόνον ἐκ πασῶν δὲ ὀκτὼ οὐσῶν
 μίαν ἁρμονίαν συμφωνεῖν.

On top of each of its circles stood a siren revolving around with it producing a single sound on one note, and from all eight of them the sounds blended into a single harmony.

Barker’s view is that “fairly clearly the sense of *harmonia* here is octave scale.”²⁹ As in the case of scalar interpretations of Cicero’s harmony of the spheres (pp. 140–43 above) I think this explanation is problematic. To say that the harmony of the Spindle represents a scale brings us back to the problem discussed in chapter 5, that the notes of a scale, sounded simultaneously (and this must be the force of *symphōnein*), cannot be consonant. Barker himself notes this: “Commentators have often remarked that a “harmony” consisting of the eight notes of a scale, sounded together, would be better described as a cosmic cacophony.” His solution is to have it both ways: his scalar *harmonia* is both “sounded,” *and* representative of an abstraction: “Plato makes a distinction. Although the scalar *harmonia* is indeed sounded, it is not itself the celestial music, but constitutes the permanent framework, the reservoir of elements and relations, on which that music is based. Melody itself is moving, dynamic; the melodies of the Fates are not eternally self-same, but are musical representations of events in time. The *harmonia*, by contrast, is eternal. It stands to the melodies as a preordained syntax, grammar and vocabulary might stand to the sentences of a language.”³⁰ We have here moved seamlessly from scale into melody. The octave scale is said to be (as it were) the *langue* behind Barker’s melodic *parole*.

It is difficult to see what we are supposed to envisage, on this interpretation. Does each of the Sirens sing her own aleatoric melodic improvisation

²⁹ In *GMW*, vol. 2, p. 58n10.

³⁰ *GMW*, vol. 2, p. 58n11.

on the abstract scale, concurrently with those of the others? Since the spheres must move both constantly and together, a high degree of dissonance would still result. And if this is the case, why is Plato so ostentatiously careful about the ratios between the different circles on which the Sirens sit? A better interpretation, in my view, is that which takes a different abstraction as its basis: that of the harmonic series, in which a series of intervals stacked atop one another are heard as one note.

Here we must define the harmonic series.³¹ We remember that Macrobius (*Comm.* 2.1.24, p. 143 above) said that there are only a few perfect consonances, namely the fourth, the fifth, the octave, the octave-plus-fifth, and the double octave. There is a reason for this limitation. Every note we hear is composed of many notes: a fundamental (base note) and its related overtones. The latter form what we call the harmonic series. The series of overtones starting with fundamental C, for instance, can be notated as in Figure 8.³²

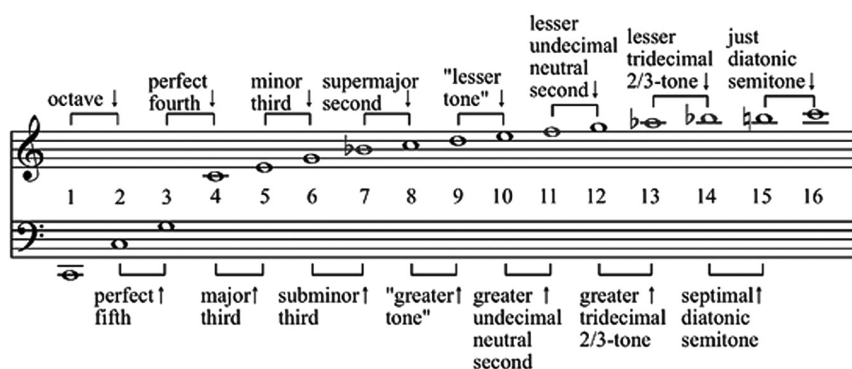


Figure 8 Harmonic series with intervals labeled. Wikimedia Commons.

Figure 8 notates only part of the harmonic series. Above the fundamental is an infinitely extensible series of tones in smaller and smaller intervals. These are the overtones or harmonics. Most are inaudible to us, beyond about the third harmonic.

³¹ Modern literature on the harmonic series is too extensive to cite comprehensively. The foundation is the work of Helmholtz, *On the Sensations of Tone*, in Ellis' seminal English edition of 1895. A classic work on music physics is Wood (1944); see also Miller (1922) and Benson (2007): 36–44. Duffin (2007) is an extraordinarily lucid and combative account of tuning, which is also a good introduction to the principles of music physics.

³² The stave notation of the harmonic series is found in most treatments of the subject, e.g. Duffin (2007): 22; Benson (2007): 145; Miller (1922): 64; Helmholtz (1895): 22.

Look now at the intervallic relations between the first few harmonics. The interval between the fundamental and the second harmonic is an octave; between the second and third harmonics, a perfect fifth; between the third and fourth harmonics a perfect fourth. As well as being the first few notes of the harmonic series, these are the intervals that the ancient theorists identify as consonant. There is thus a direct relationship between consonance and the harmonic series. The intervals of the octave, fifth, and fourth sound good together because they are in fact *already present* in a given harmonic series: sounding the higher notes reinforces what's already there.

The ratios shared by the perfect consonances and the first few harmonics are not random. They stand within a system of mathematical relations known as the “Fourier series,” which has broad applicability to wave forms in nature. Sound waves vibrate in *sections*, the relative lengths of which are determined by the Fourier series. Fourier’s propositions, cited by Helmholtz (1895): 34 are:³³

1. Any given regular periodic form of vibration can always be produced by the addition of simple vibrations, having pitch numbers which are once, twice, thrice, four times, etc., as great as the pitch numbers of the given motion.
2. Any vibrational motion of air in the entrance to the ear, corresponding to a musical tone, may be always, and for each case only in one single way, exhibited as the sum of a number of simple vibrational motions, corresponding to the partials of this musical tone.

This means that every note is in fact a composite of many notes, a fundamental and its overtones, of which the different but related frequencies are a result of the fact that waves are a “composite vibrational form” (Helmholtz loc. cit.). Secondly, the way the ear processes the composite vibrations means that we hear them as “one note”: one-from-many. We think we hear a “note,” but what we are hearing is actually a complex phenomenon made up of many separate vibrating wavelengths. Every note is made up of many other notes.

Helmholtz draws on the Fourier series to explain the story of Pythagoras’ supposed discovery of the perfect consonances (p. 145 above): “Ultimately, then, the reason for the rational numerical relations of Pythagoras is to be found in the theorem of Fourier, and in one sense this theorem can be

³³ For more on the Fourier series see Benson (2007): 36–50 (highly technical).

considered as the prime source of the theory of harmony.”³⁴ This theory brings a greater logic to Macrobius’ story at *Comm.* 2.1.13–14 of Pythagoras instinctively reaching toward some universal principle of harmony.

Harmony (in our sense; see p. 141 for ancient definitions) is a result of the naturally occurring building blocks in the harmonic series: “It is. . . thought that the prevalence of the octave, fifth, fourth, and major and minor thirds in the lower part of the harmonic series contributed to the development of our concept of harmony, in which those intervals form the most common components of chords. Chords in the Western (that is, European) musical tradition, therefore, are not merely a culturally evolved arrangement of musical sounds into a system but a natural phenomenon based on the physical science of acoustics.”³⁵

Harmony in this sense is thus a *natural* phenomenon; it is not the construct of any particular musical system. Its laws are as applicable to Greek music as to ours. It’s intuitive that ancient musicians must have known something about the harmonic series, as we’ll see later in this chapter. The question is, though, whether this is demonstrable. I detect a certain squeamishness in the scholarship around this question. Andrew Barker says, “. . . I have not found any unambiguous references to this phenomenon in Greek sources.”³⁶ The weight of tradition might have influenced Hagel’s withdrawal from his conclusion—in my view tenable—that the author of the Aristotelian *Problemata* 11.6 (p. 201 below) understands sound as made up of different components, some of which are of higher frequency. Hagel remarks, “. . . Even if this interpretation is accepted, I think it would go much too far to attribute to its author a clear conception that any kind of sound potentially comprises variously pitched components.”³⁷ Perhaps it is the absence of explicit terminology that makes such a reading difficult; thus Hagel again: “What remains puzzling is that the principle on which the present explanation is grounded is not explicitly stated,” adding that this is also so in other cases.³⁸

Such a position is reasonable, given that the harmonic series would not be fully “discovered,” and therefore fully articulable, until the nineteenth century. But I do not find it at all surprising that ancient musicians and theorists

³⁴ Helmholtz (1895): 229.

³⁵ Duffin (2007): 21.

³⁶ For the passage referred to, see *GMW*, vol. 2 p. 92, and further comments at pp. 203–04 below.

³⁷ Hagel (2015): 170. I thank Stefan Hagel for originally allowing me to see this article in its unpublished form and for subsequently sending a digital offprint.

³⁸ Hagel (2015): 168.

should know that a single tone comprises at least the first few harmonics and, on the analogy of that, possibly more. Nor is it surprising that ancient authors should be ill-equipped to talk about it, due to a lack of established terminology.

There's some evidence in support of this argument. First, there seems to be a recognition in antiquity that tones are composite in nature. We have evidence of this from perhaps around the fourth century BCE on (but that is not to say it wasn't possible earlier).³⁹ The texts cited in the following discussion are the Aristotelian *Problemata* and *De audibilibus*, products of the peripatetic School after Aristotle, although I suspect the concept goes back beyond the peripatetic tradition.

The Aristotelian *Problemata* 19.8.918a19–21 may suggest that notes are perceived as composites of more than one sound. The problem begins, *Διὰ τί ἡ βαρεῖα τὸν τῆς ὀξείας ἰσχύει φθόγγον*; “Why does the low note contain the sound of the high note?” (trans. Mayhew 2011). Barker remarks, “This might refer to the higher harmonics heard simultaneously with the sound's fundamental pitch,” although he immediately goes on to cast doubt on this statement (quotation on p. 200 above).

Similarly, *Probl.* 11.6.899a22–23 asks, *Διὰ τί πόρρωθεν αἱ φωναὶ ὀξύτεραι δοκοῦσιν εἶναι*; “Why do voices seem to be higher from far away?” Hagel argues that the latter passage seems to indicate a knowledge in its author that “sounds usually consist of components that are distributed over a wide frequency spectrum.”⁴⁰ What Hagel is, in effect, talking about here is the harmonic series: the fractional vibrations that make up a note.⁴¹

A passage of the Aristotelian *De audibilibus*, 803b34–804a2, cited by Hagel as a comparandum for *Probl.* 11.6, may also suggest some inkling of tones being composed of more than one component:⁴²

αἱ δὲ πληγαὶ γίνονται μὲν τοῦ ἀέρος ὑπὸ τῶν χορδῶν πολλαὶ καὶ κεχωρισμέναι, διὰ δὲ μικρότητα τοῦ μεταξὺ χρόνου τῆς ἀκοῆς οὐ δυναμένης συναισθάνεσθαι τὰς διαλείψεις, μία καὶ συνεχὴς ἡμῖν ἡ φωνὴ φαίνεται . . . τὸ δὲ αὐτὸ συμβαίνει τοῦτο καὶ περὶ τὰς συμφωνίας. διὰ γὰρ τὸ περισυγκαταλαμβάνεσθαι τοὺς ἑτέρους ἤχους ὑπὸ τῶν ἑτέρων,

³⁹ On the date of the *Problemata*, discussed in the ensuing paragraphs, see chapter 5, p. 148n46.

⁴⁰ Hagel (2015): 160.

⁴¹ Hagel studiously avoids using the term “harmonic series” throughout his article.

⁴² On this passage see Hagel (2015): 169–70 = *GMW*, vol. 2, p. 107. I here use Barker's translation from *GMW*.

καὶ γίγνεσθαι τὰς καταπαύσεις αὐτῶν ἅμα, λανθάνουσιν ἡμᾶς αἱ μεταξὺ γιγνόμεναι φωναί.

The impacts made on air by strings are many and separate, but because of the smallness of the time between them the ear is unable to detect the gaps. and hence the sound seems to us single and continuous . . . The same thing happens with concords (*sympḥōnias*): because the one set of sounds (*ēchous*) is included along with the other, and their cessations occur simultaneously, the intervening sounds escape our perception.'

In this passage, the author may be thinking of sounds as blocks, as it were, laid end to end in a succession too quick for us to separate its individual components or, as Barker puts it, "separate but imperceptible fragments laid side-by-side."⁴³ Barker takes these fragments in a horizontal sense, one after the other. But this notion may also pertain to the *vertical* property of sound, whereby tiny sequentially vibrating segments of a string make up the overtones (see further the discussion that follows).

So much for ancient recognition of the composite nature of tones. There's also some evidence for ancient knowledge of the contingent notion of the harmonic series. A passage of Macrobius we've already seen (*Comm.* 2.1.24, p. 146 above) contains the notion that there's an infinitely extensible harmony beyond singability and audibility (*Comm.* 2.1.24):

sed hic numerus symphoniarum ad musicam pertinet quam vel flatus humanus intendere vel capere potest humanus auditus. ultro autem se tendit harmoniae caelestis accessio, id est usque ad quarter διὰ πασῶν καὶ διὰ πέντε.

The number of consonant chords has to do only with the music that the human breath can produce or the human ear can catch; beyond this there is still the range of celestial harmony, which reaches even four times above the octave and the fifth.⁴⁴

In these terms, defining harmony is not so much a choice between concrete and abstract as a case of concrete shading into abstraction at the limits of perception. It's possible to infer from the existing harmonic ratios that you

⁴³ GMW, vol. 2, p. 107n39.

⁴⁴ All translations of Macrobius in this chapter are from Stahl (1952). The text is Armisen-Marchetti (2001–03).

could in theory have an infinite number of harmonic ratios, with the perfect consonances sitting at the bottom of a whole speculative harmonic superstructure. This is what Macrobius calls the *harmonia caelestis*, “harmony of the spheres.” Conceptually it’s an uncanny anticipation of the harmonic series: those unconsciously heard tones that make up the notes we hear.

Even if Macrobius’ interpretation of harmony represents some kind of anticipation of our harmonic series (an interesting speculation), can we say the same for Plato? As we’ve seen (p. 144 above), 2:1, 3:2, and 4:3 are the ratios of the perfect consonances: the octave, fifth, and fourth. These are also the ratios of the first few overtones in the harmonic series. These ratios were established by the fourth century BCE, probably earlier.⁴⁵ An empirical way of finding them involves strings and harmonics. This is how it works. Imagine a string is plucked and vibrates along its length. The vibrations produce a wave that our ears can process. According to the length of the string, the wave it produces will have a certain frequency, which we hear as pitch.

Strings vibrate *both* along their total length *and* in fractions determined by Fourier’s law (p. 199 above). These sectional vibrations also produce notes, which form part of the harmonic series. The fundamental tone is the total vibration of the string; the “partials” are the vibrations of its segments. These two together are what the ear processes into one unitary sound.

Remarkably, these vibrating segments can be *seen*.⁴⁶ There appear to be points along the length of a vibrating string where there is a certain stillness, which are actually the points between the vibrating fractions. We call these points of stillness the harmonic “nodes.” Partial stopping (touching) of the string at the harmonic nodes isolates certain overtone frequencies. The first few harmonics are easy to obtain in this way. If you touch the string lightly halfway along its length, you select for the second harmonic, the octave. The string will still vibrate along its entire length but also in two equal segments either side of where you touch it. You will then hear *two* notes, corresponding to the ratio of each of the vibrating segments to the whole string, in this case 2:1. If you stop the string at exactly one third along its length, the sound of the higher note is a perfect fifth above the fundamental, and so on.

There’s early evidence for the technique of partial stopping being exploited in ancient performance practice. The second harmonic, achieved by touching a lyre string at midpoint, was apparently available from the early fifth century

⁴⁵ Burkert (1972): 377.

⁴⁶ Miller (1922): 65–6 reproduces some wonderful photographs of vibrating strings.

BCE.⁴⁷ This technique may have been relatively well-known. In the case of *Problemata* 19.8 (p. 201 above), Barker thinks “[The author] is alluding to the fact that a string can produce not only its own pitch, but higher ones too when it is stopped at different points.”⁴⁸ It’s unclear whether Barker envisages this as partial or complete stopping, but the result is similar: in the former case, the fundamental plus harmonic will be heard; in the latter, the overtone will dominate.

It’s not a great leap of the imagination to think that players might have deduced that higher harmonics, i.e. smaller intervals, could be found in this way. In *Rep.* 531b3–4 Plato refers to empirical musicians as “torturing” their strings. It’s possible that they may be looking for smaller and smaller intervals or microtones; on the other hand, it’s not inconceivable that “partial stopping” is meant. Plato’s musicians may be working toward the goal of trying to identify more and more *harmonics*, much as Helmholtz was later to do by employing differently shaped resonators.

3. The Spindle and the World Soul

So far I’ve suggested that the harmonic series provides a more logical framework for understanding what Plato is trying to achieve in the Spindle of Necessity than does the notion of a scale, although these two ideas do not rule each other out, since a properly tuned scale is constructed using the harmonic series as an abstract harmonic point of reference. Even now, when piano tuners tune a piano, they do not proceed sequentially, note by note, but by constructing a framework of consonance based on octaves and fifths. They are trained to hear harmonics as a means to tuning. There’s some evidence for an ancient recognition of tones as composite, and for the limited use of harmonics in early performance. Macrobius, albeit late, implies that there may be much more. It is not beyond the power of reason that Plato may have been working toward the idea of the harmonic series.

⁴⁷ West (1992): 66 on lyre technique: “It is widely held that the left hand also served to modify the sounds produced by the plectrum, by damping certain strings and perhaps also by touching them lightly as they vibrated, so shortening the vibrating length and raising the note.” Cf. Mathieson (1999): 248: “It is also possible that the fingers might lightly touch one or more of the strings to produce harmonics.” The equivalent on flutes (*auloi*) is obtained by “overblowing”: see West (1992): 101: “So far we have considered only the instrument’s ‘fundamental’ notes, that is, those produced by the air column vibrating as an integral whole from reed to aperture. Another set of notes, ‘harmonics,’ can sometimes be elicited from pipes by ‘overblowing,’ a trick that causes the air column to break up into two, three, or more equal parts, resonating at twice, thrice (etc.) the frequency of the whole.” On harmonics in ancient performance practice, see further West (1992): 66.

⁴⁸ For this passage see *GMW*, vol. 2 p. 92n45.

Any interpretation of the Spindle of Necessity—as scale or series—must remain theoretical, on the grounds that Plato's use of number is so confusing as to seem almost designed to tease: the description of the whorls provides nothing like a key to their harmony. Plato's Spindle gives us only relative, not absolute, relations. In order to develop meaningful ratios out of it, you would have to say not x is the fastest/widest orbit, followed by y , etc., but rather, x 's velocity/width is z times that of y , with all terms expressed as integers.

It is a time-honored strategy to supplement the Spindle with another passage of Plato, the description in the *Timaeus* of how the world soul was constructed.⁴⁹ The *Timaeus* expresses the framework of the universe in *number* rather than sound.⁵⁰ To what degree does this numerical account allow us to formulate a hypothesis as to the nature of the harmony of the spheres that we can then project back onto the Spindle, creating sound from number?

In order to try to answer this question, let's look more closely at how the world soul is divided (*Tim.* 35b1–36b6):⁵¹

μειγνὺς δὲ μετὰ τῆς οὐσίας καὶ ἐκ τριῶν ποιησάμενος ἓν, πάλιν ὅλον τοῦτο μοίρας ὅσας προσῆκεν διένειμεν, ἐκάστην δὲ ἕκ τε ταύτου καὶ θατέρου καὶ τῆς οὐσίας μεμειγμένην. ἤρχετο δὲ διαιρεῖν ὧδε. μίαν ἀφείλεν τὸ πρῶτον ἀπὸ παντὸς μοῖραν, μετὰ δὲ ταύτην ἀφήρει διπλασίαν ταύτης, τὴν δ' αὖ τρίτην ἡμιολίαν μὲν τῆς δευτέρας, τριπλασίαν δὲ τῆς πρώτης, τετάρτην δὲ τῆς δευτέρας διπλὴν, πέμπτην δὲ τριπλὴν τῆς τρίτης, τὴν δ' ἕκτην τῆς πρώτης ὀκταπλασίαν, ἑβδόμην δ' ἑπτακαίκοσιπλασίαν τῆς πρώτης· μετὰ δὲ ταῦτα συνεπληροῦτο τὰ τε διπλάσια καὶ τριπλάσια διαστήματα, μοίρας ἔτι ἐκείθεν ἀποτέμνων καὶ τιθεὶς εἰς τὸ μεταξὺ τούτων, ὥστε ἐν ἐκάστῳ διαστήματι δύο εἶναι μεσότηας, τὴν μὲν ταυτῷ μέρει τῶν ἄκρων αὐτῶν ὑπερέχουσαν καὶ ὑπερεχομένην, τὴν δὲ ἴσῳ μὲν κατ' ἀριθμὸν ὑπερέχουσαν, ἴσῳ δὲ ὑπερεχομένην. ἡμιολίων δὲ διαστάσεων καὶ ἐπιτρίτων καὶ ἐπογδῶν γενομένων ἐκ τούτων τῶν δεσμῶν ἐν ταῖς πρόσθεν διαστάσεσιν, τῷ τοῦ ἐπογδῶν διαστήματι τὰ ἐπίτριτα πάντα συνεπληροῦτο, λείπων αὐτῶν

⁴⁹ “What the *Republic* lacks in this respect . . . is amply supplied by the *Timaeus*” (Barker 2007: 318); cf. *GMW*, vol. 2, pp. 57–58n9.

⁵⁰ “It should be noted that nothing is said, here or elsewhere in the *Timaeus*, of any music of the heavens that might be audible to human ears. Plato, no doubt, had in mind this old Pythagorean fancy; for it figures in the vision of Er in *Rep.* X. But in the *Tim.* the harmony resides in the structure of the soul; it is not connected with audible tones whose pitch had been imagined as depending on the relative speeds of the planetary motions” (Cornford 1937: 72).

⁵¹ On this famously taxing passage of the *Tim.*, see Heath (1913): 159–81, with the diagram on p. 160; Cornford (1937): 66–72; *GMW*, vol. 2, passage 2.3, with Barker's commentary; Barker (2007): 318–23; Zehl (2000): 20–21n25.

ἐκάστου μόριον, τῆς τοῦ μορίου ταύτης διαστάσεως λειφθείσης ἀριθμοῦ πρὸς ἀριθμὸν ἐχούσης τοὺς ὄρους ἕξ καὶ πενήτηκοντα καὶ διακοσίων πρὸς τρία καὶ τετταράκοντα καὶ διακόσια. καὶ δὴ καὶ τὸ μειχθέν, ἕξ οὐ ταῦτα κατέτεμενεν, οὕτως ἤδη πᾶν κατανηλώκει.

Now when he had mixed these two [the Same and Different] together with Being, and from the three he had made a single mixture, he redivided the whole mixture into as many parts as his task required, each part remaining a mixture of the Same, the Different and of Being. This is how he began the division: first he took one portion away from the whole, and then he took another, twice as large, followed by a third, one and a half times as large as the second and three times as large as the first. The fourth portion he took was twice as large as the second, the fifth three times as large as the third, the sixth eight times that of the first, and the seventh twenty-seven times that of the first. After this he went on to fill the double and triple intervals by cutting off still more portions from the mixture and placing these between them, in such a way that in each interval there were two middle terms, one exceeding the first extreme by the same fraction of the extremes by which it was exceeded by the second, and the other exceeding the first extreme by a number equal to that by which it was exceeded by the second. These connections produced intervals of $3/2$, $4/3$, and $9/8$ within the previous intervals. He then proceeded to fill all the $4/3$ intervals with the $9/8$ interval, leaving a small portion over every time. The terms of this interval of the portion left over made a numerical ratio of $356/243$. And so it was that the mixture, from which he had cut off these portions, was eventually completely used up.

The world soul is Plato's way of describing, in the *Timaeus*, the abstract framework of the structure of the universe, which was described allegorically in the *Republic*. The world soul provides the skeleton, as it were, on which the system of the heavenly bodies is pinned. It represents the blueprint for the paths of the planets.⁵² It does the same double duty as the Spindle: it is both astronomical and musical.⁵³

⁵² Thus Heath: "The dictum is generally taken to mean that the radii of the successive orbits, i.e. the distances between the successive planets and the earth, are in the ratio of the numbers 1, 2, 3, 4, 8, 9, 27" (Heath 1913: 164, with my emphasis). Cf. *GMW*, vol. 2, p. 19n19, "These two intersecting circles [of 36b–c] correspond respectively to that of the fixed stars and that on which the sun, moon, and planets have their special movements."

⁵³ "The relationship between astronomy and music is traced to its ultimate, immaterial, principle" (Burkert 1972: 355).

The world soul is first divided into seven notes, beginning with an octave and followed by a fifth, a fourth, a double octave, and a tone. Figure 9, reproducing a diagram in Cornford (1937): 69, shows this initial division:



Figure 9 Diagram reproduced from Cornford (1937): 69

You will note that the intervals shown here, as described in text, are the perfect consonances: the fifth, fourth, and octave, along with a tone (8:9), the latter being the difference between the fourth and the fifth (see p. 144 above).

The perfect consonances are then infilled with smaller and smaller intervals, “until we finally obtain a series representing musical notes at intervals of a tone or semitone.”⁵⁴ The first step in infilling is shown in Figure 10; the diagram is from Cornford (1937): 71:



Figure 10 Diagram reproduced from Cornford (1937): 71

The final step is to infill the intervals of a fourth that remain, with two whole tones plus a semitone. The end result is shown in Figure 11 (from Cornford 1937: 72) as an octave scale composed of two tetrachords or series of four notes. The diagram here is an incomplete representation; it shows only one octave of the four-octave compass of Plato’s world soul:



Figure 11 Diagram reproduced from Cornford (1937): 72

⁵⁴ Cornford (1937): 67; Zehl (2000): 20–21n25 gives a more detailed mathematical explanation of how the infilled notes, all approximations of the tone or semitone, are arrived at.

This final reckoning corresponds with Cornford's presupposition, at the beginning of his commentary on the passage, that "the strip [of the world soul] is marked off into divisions, corresponding to the intervals of a musical scale (*harmonia*)".⁵⁵ Cornford's account looks almost too neat, beginning with the assumption that what Plato is constructing is a scale and ending with an octave scale that corresponds comfortably to C major.

Cornford is canonical for later scholarship. Andrew Barker's account of the passage in *GMW*, though based on the same proposition, is perhaps more nuanced. His interpretation also creates a sequence of tetrachords that seem to be of similar pattern to what appears in the diagram on Cornford's p. 72 (our Figure 11).⁵⁶ He further attempts to fit such a sequence into the modal system, characterizing the resulting *harmonia* or mode as "Dorian."⁵⁷ But Barker is honest about the problems caused by his "assumption" (as he himself puts it): "We thus have three octaves, each divided into two fourths separated by a tone (one of the fourths in the third octave is divided); beyond them lies a further octave plus a sixth, differently and oddly divided."⁵⁸ He continues, "This poses no problems for the first two octaves. In the third octave a difficulty arises, since we already have a tone in first place. Beyond the third octave a variety of divisions are consistent with what Plato says; *none can be fitted to any scalar analysis we meet elsewhere*. Comparable problems will arise if we read the scale in the reverse direction. In any case, no Greek theorist seriously considers a musical scale extending beyond two octaves."⁵⁹

The system of a neat scale based on tetrachords is thrown by the final octave. Now it becomes apparent why the diagram on Cornford's p. 72 is incomplete, showing only one octave: it is not, in fact, the case that the tetrachords hold good for all the other octaves of the scale.

Barker's solution is not to rethink the scalar reading of the passage but rather to emphasize its "metaphysical" nature: "Plato's motives are mathematical and metaphysical: he would have found it no surprise and no objection that his construction is only partially realised in the structures of human musical practice."⁶⁰ His view echoes that of Cornford: "The upshot is that

⁵⁵ Cornford (1937): 66.

⁵⁶ *GMW*, vol. 2, p. 60n18.

⁵⁷ *GMW* loc. cit. in the previous n. On the modes, see p. 142 above, chapter 5.

⁵⁸ *GMW*, vol. 2, pp. 59–60n17.

⁵⁹ *GMW*, vol. 2, p. 60n18 (my emphasis).

⁶⁰ *GMW* loc. cit.

Plato has constructed a section of the diatonic scale, whose range is fixed by considerations *extraneous to music*" (my emphasis).⁶¹

In both cases, the disclaimer functions to discount the problems of the "scalar" theory. This is perhaps because of the long history and good credentials of that theory.⁶² It has been held by scholars from Pliny onward. Yet (as we saw in chapter 5) there is no evidence to suggest that Pliny was a musical expert and much to suggest that he did not understand the concepts. An ancient source does not have to be right, just because it is an ancient source.

The scale, it must be admitted, is not effective as a means of analysis of Plato's passage. We should consider the option that Plato is *not* primarily referring to a "scale," either an empirical or purely abstract one. On the analogy of the tuning of a lyre (see pp. 146–47), the world soul is tuned not step by step but by increasing harmonic subdivision. Cornford's diagrams themselves show this. These divisions begin with, and move progressively away from, the perfect consonances. The divisions are imagined vertically, a stacking up of intervals, rather than horizontally, step by step, as we would play a diatonic scale. What you end up with is a compass of four octaves and a major sixth. As Cornford points out, this is very odd if Plato's intention is to describe a scale: "No-one, setting out to construct a musical scale, would start by arranging the terms of two geometrical progressions in the series 1, 2, 3, 4, 8, 9, 27."⁶³ So let's say, for the sake of argument, that it's not a musical scale. What is it?

We remember that Macrobius inferred a universal principal of harmony from the heard consonances. Macrobius was an astute interpreter of Plato, and it is helpful to look at what he does with the world soul. At *Comm.* 2.2.1 Macrobius explains that the perfect consonances were the intervals interwoven in the world soul of the *Timaeus*:

⁶¹ Cornford (1937): 72.

⁶² Cornford was perhaps in turn influenced by Heath (1913): 159, "Plato explains how the Creator made the Soul by first combining in one mixture Same, Other and Essence, and then ordering the mixture according to the *intervals of a musical scale*, so that its harmony pervaded the whole substance." Under the influence of Cornford, it's become customary in scholarship to represent the system of ratios described at *Tim.* 35a–36d as a modern C-major scale, reproduced in James (1993): 46–53; Callatäy (1996): 5–6; Barker (2007): 319–24; Hagel (2009): 161.

⁶³ Cornford (1937): 68.

hinc Plato, postquam et Pythagoricae successionem doctrinae et ingenii proprii divina profunditate cognovit nullam esse posse sine his numeris iugabilem competentiam, in Timaeo suo mundi animam per istorum numerorum contextionem ineffabili providentia dei fabricatoris instituit.

Now when Plato, guided by Pythagoras' revelation and drawing upon the godlike power of his own extraordinary genius, had recognised that no union could be lasting except one based on those numbers, he constructed his world soul by interweaving them, imitating the ineffable wisdom of the divine creator.

Taking as his basic assumption the fact that the world soul represents the orbits of the heavenly bodies, at *Comm.* 2.3.14 Macrobius puts numbers on the distances between them, as follows (my interpretation of the numbers in terms of musical ratios in modern numeration is added):

1. The distance from the earth to the sun is twice as great as the distance from the earth to the moon (2:1, an octave).
2. The distance from the earth to Venus is three times the distance from the earth to the sun (2:3, a fifth),
3. The distance from the earth to Mercury is four times as great as the distance from earth to Venus (3:4, a fourth).
4. The distance from earth to Mars is nine times the distance from earth to Mercury (9:10, a "lesser tone" or a sharp semitone).
5. The distance from the earth to Jupiter is eight times as great as the distance from earth to Mars (9:8, a tone).
6. The distance from earth to Saturn is twenty-seven times as great as the distance from the earth to Jupiter (1:27, a major sixth four-and-a-bit octaves away from the fundamental).

You'll see that this follows Plato's number series in the construction of the world soul in the *Tim.*, translating its ratios into actual distances between things. Let's try drawing a diagram of this series (Figure 12):

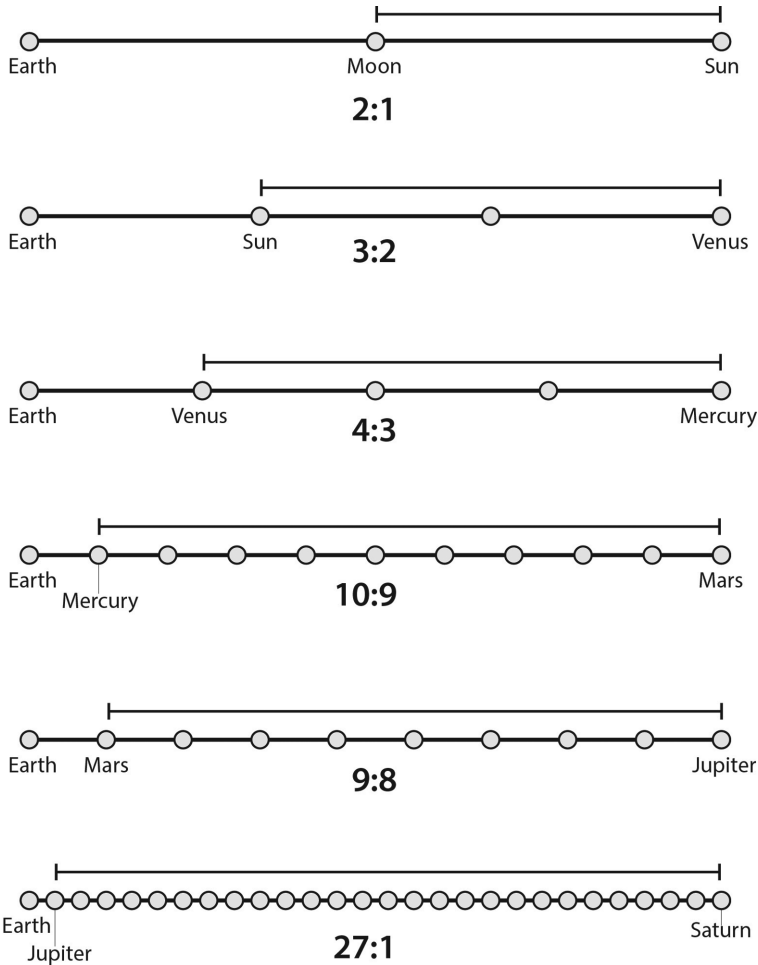


Figure 12 Diagram of the harmonic ratios, with thanks to Mary Woodcock Kroble, University of St. Andrews

The relationship between two different heavenly bodies is expressed as a ratio. These are “harmonic ratios.” We can understand how these work by returning to the idea of vibrating strings (p. 203). Imagine each line in Figure 12 as a string divided into segments. Envisage the string vibrating along its total length (e.g. from earth to sun, earth to Venus, etc., in Figure 12 and also in fractions. In Figure 12, the fractions are the segments between dots.

Macrobius' numbers at *Comm.* 2.3.14 relate with surprising accuracy to the modern interpretations of harmonic ratios. The following is a complete modern list of these, up to (for the sake of argument) 10:9.⁶⁴

- 2:1 octave
- 3:2 fifth
- 4:3 fourth
- 5:4 major third
- 6:5 minor third
- 7:6 septimal ("flat") minor third
- 8:7 septimal ("sharp") whole tone
- 9:8 whole tone
- 10:9 "sharp" semitone (in the *Timaeus* Plato uses the ratio 256:243, which is "nearly equivalent to our semitone"⁶⁵)

To bring this set of ratios to bear on our diagram derived from Macrobius: number 1 on p. 209 above gives us an octave; 2, a fifth; 3, a fourth; 4, an out-of-tune semitone (or "lesser tone" in the notated diagram on p. 198); 5, a tone. Number 6 is less readily identifiable: in practice the ratio of 1:27 gives a major sixth (which can also be interpreted as an inverted minor third). Macrobius' series of intervals in the world soul is thus octave-fifth-fourth-semitone-tone-major sixth. This is no scale, by any stretch of the imagination, although by infilling its larger intervals we may be able to contrive a scalar formation.

Nor is it a "harmony," however, in our sense of vertical harmony. While any two notes in the relationship of a perfect consonance are in themselves consonant, once you get a stack of such intervals, consonance decreases. This problem is addressed if we see this stack of intervals as part of the harmonic series: the fundamental tone is principally audible, with the overtones, not all of which are immediately audible, blending with it to give it

⁶⁴ See for instance Duffin (2007): 21. We now measure pitch in hertz (oscillations per second), an absolute measurement. I have retained the system of ratios here for historical consistency, and because they make it easier to understand what our ancient authors are trying to achieve in the passages studied.

⁶⁵ Cornford (1937): 71. Macrobius *Comm.* 2.1.22 also defines it as the ratio 256:243, the same one Plato uses to describe the semitone in his description of the world soul. This is the "Pythagorean diatonic semitone." A true semitone is nearer to 18:17, although there are many possibilities for how a semitone can be interpreted, which vary according to performance context. Many thanks to Jonathan Kemp of the St Andrews Music Centre for his help with this and other points relating to the physics of music.

color: one-from-many. This is a better model for celestial harmony than the simultaneous sounding of each of the notes of a scale, and it is the model that seems to emerge from Macrobius' interpretation of Plato's world soul.

I contend, in full awareness of the degree of speculation involved, that Plato's account of the world soul is a prefigurement of the harmonic series, a felicitous guess that arises from the need to postulate an absolute principle of harmony. The reason Plato *starts* with the octave, fifth, and fourth is because he begins by experimentally constructing a harmonic series—a *vertical* piling up of octave, fifth, fourth, tone. These are the audible harmonics from which a universal principle might inferred.

Beyond the audible harmonics, his series slides into speculation. The empirical knowledge available to Plato was such that only the first few harmonics could be identified; from there he extrapolated to produce harmonics that agreed with his preconceived number series. Although uncannily prophetic in its mathematical methodology, this sequence was not the Fourier series but one of Plato's own devising, based on squares and cubes. The beginning of his sequence is strongest; the intervals get smaller as they are piled higher, just as they do in our harmonic series. *Συνεπληροῦτο* (*suneplērouto*) at *Tim.* 36b1 can be interpreted as "filled up" vertically as well as horizontally. The vertical arrangement would imply a recognition that the intervals get smaller the further you go up the harmonic series. Compare the diagram of the construction of the world soul in Cornford (1937): 71 (Figure 10 at p. 207 above) with the notation of the harmonic series on p. 198 above. You will immediately be struck by the similarity. Plato's series of numbers gives us the first four overtones in the harmonic series, plus the difference between the fourth and fifth (a tone), the interval that in "our" harmonic series occurs between the seventh and eighth harmonic. Plato's 27:1 interval might seem to be an anomaly. It may or may not be relevant that the major sixth at four-and-a-bit octaves which this ratio produces is an inversion of the seventh harmonic, an out-of-tune minor third. Plato could not have known the precise intervallic value of the seventh harmonic: his ratio is an inspired stab in the dark, based only on the intimation that there must be more to the series of overtones than we can hear. What we have in the world soul is an ingenious blend of the empirical and suppositious.

Plato's series, then, is constructed on the basis of the perfect consonances, beginning with them and moving further afield, from the octave, fifth, and fourth to the tone and semitone (*leimma*) and then, more anomalously, to the major sixth. There *is* a kind of system behind the world soul, albeit one

that looks from the point of view of the modern understanding of the harmonic series to be scientifically defective in its outcome. But it isn't so important that Plato wasn't able to recognize the whole of the harmonic series; what is important is that he recognized that harmony is an underlying principle of the universe, which we can demonstrate up to the point of our human limitations, but which exceeds our pragmatic reach.

4. Back to the Spindle

In *Comm.* 2.1–3, Macrobius sheds light on the harmony of the spheres in Cicero's *Somnium*, not by using its immediate model, Plato's Spindle of Necessity, but with reference to the world soul of the *Timaeus*.⁶⁶ As part of this process, he expounds the musical system of the world soul, which, we've argued, is akin to the harmonic series. At *Comm.* 2.3 Macrobius finally loops back to Plato's *Republic* from his excursus into the *Timaeus*. He uses what he's said about the world soul to interpret the Spindle. Macrobius' reading of the world soul makes Plato's Spindle comprehensible in terms of number. Using the *Tim.* as a starting point, Macrobius puts *actual numbers* on the distances between the planets, as represented in the Spindle by the thicknesses of the rims of the whorls.⁶⁷ These distances, like the ratios of the world soul, are intended as harmonic ratios.

We remember that “from all eight of the [spindle-whorls] the sounds blended into a single harmony,” ἐκ πασῶν δὲ ὀκτῶ οὐσῶν μίαν ἁρμονίαν συμφωνεῖν, *Rep.* 617b6–7. *Harmonia*, cannot (*pace* Barker, p. 197 above) be an octave scale in a simple and direct sense. The sense of *symphōnein* is “to sound *together*.” In *Probl.* 11.6 (on which see pp. 200–01 above), the same term may suggest the blending of tones from more than one component. The planetary circles give out tones that are heard together, and that are not dissonant. That perfectly describes the harmonic series, in which the intervals are not all consonant (although the first few most certainly are), but which do not result in a dissonance, rather one unified sound.

⁶⁶ On this passage of Macrobius, see in particular Duhem (1913–59), vol. 1: 10.

⁶⁷ See *Comm.* 2.3.12.

Conclusion: The Lesson of Harmony

In this chapter we have looked at the first of three of Plato's afterlife myths treated in this book, namely the Spindle of Necessity from the *Republic*. The Spindle is a representation of the planetary orbits and the sound they are said to produce, which we know as the harmony of the spheres. I have argued against the traditional interpretation of this harmony as an octave scale, arguing instead for the Spindle as an anticipation of the harmonic series. In this I have called upon evidence for the ancient recognition of tones as composite and for the use of harmonics in ancient performance practice.

Like all theories about the harmony of the spheres, my interpretation must remain speculative, for the very reason that the planets do not *really* produce a sound composed of elements legible through mathematical/musical ratios. This is myth: it is wrongheaded to try to translate it according to strict criteria of reality. The beauty of eschatological myth is that it straddles the divide between "science" and symbol. "Scientific" information such as number conceals—one might say obfuscates—a different truth.⁶⁸

It is traditional to compare the Spindle with the account of the world soul in the *Timaeus*. Between them, these two accounts of the framework of the world give a comprehensive picture of the mathematics of the planetary circles and of music, as they are envisaged in the Platonic universe. Combining as they do astronomy and music, they together represent the role of sound and vision in shaping our understanding of the cosmos of which the soul is a part.

The idea in Plato's Spindle of *symphōnein*, "sounding together," is a particularly good way of expressing the connections between astronomy, music, and humanity. Geminus (p. 158 above) later uses the same term *symphōnein*

⁶⁸ Even the *Timaeus* does not, after all, provide us with the hard numbers we post-scientific revolution readers are inclined to look for. Its impressionistic nature is recognized by scholars from Heath to Hagel. "Whatever its exact meaning, it is obvious that we have here no serious estimate of the relative distances of the sun, moon and planets based on empirical data or observations; the statement is a piece of Plato's ideal a priori astronomy, in accordance with his statement in *Republic*, Book 7, that the true astronomer should 'dispense with the starry heavens'" (Heath 1913: 164). "Plato develops no ready system; he merely creates a sort of large and unprecedented harmonic framework by the first three numbers, their squares and cubes, and the arithmetic and harmonic means between them. This results in a numeric structure that describes an intervallic series of mainly fourths, with some tones, two fifths, and one (discordant) minor third intercalated. Expressed in the musical terminology that Plato avoids so carefully: diatonic tetrachords are created. Plato, however, wisely failed to mention the direction in which these tetrachords are to be taken, so that the final shape of the universal soul (and its relation to pitch structures) remained a mystery to be disputed by his followers" (Hagel 2010: 161).

to indicate the harmonization of “the phenomena,” i.e. (in this context) the lunisolar cycle of Kallippus, which was the best possible reconciliation of the incommensurate motions of the sun and moon: καὶ δοκεῖ μάλιστα πάντων αὕτη ἡ περίοδος τοῖς φαινομένοις συμφωνεῖν, “and [the Kallippic period] above all seemed *to agree* (*symphōnein*) with the phenomena”. *Symphōnein* describes not merely the harmonization of the motions of the sun and moon, but the agreement of a cycle devised by humanity with what we see in the universe: the fundamental “harmony” of mind and cosmos. This kind of *symphōnia* is the product of natural phenomena and human intelligence singing (as it were) from the same hymn sheet.

Symphōnia is often paired with *harmonia*, as it is in the description of the Spindle. At *Symposium* 187b4, for example (pp. 149–50 above), Eryximachus identifies *harmonia* and *symphōnia*, saying ἁρμονία συμφωνία ἐστίν, “harmony is *symphōnia*.” I suspect this pairing is most often seen in ethical contexts. Plato tells us, at *Rep.* 591d1–3, αἰεὶ τὴν ἐν τῷ σώματι ἁρμονίαν τῆς ἐν τῇ ψυχῇ ἕνεκα συμφωνίας ἀρμοττόμενος φανεῖται, “It will constantly be clear that [the wise man is] adjusting the balance (*harmonia*) in his body for the sake of the harmony (*symphōnia*) in his soul.”⁶⁹ Plato also uses forms of both *symphōnia* and *harmonia* at *Tim.* 47d2–7, part of the passage on psychic harmonization:⁷⁰

ἡ δὲ ἁρμονία, συγγενεῖς ἔχουσα φορὰς ταῖς ἐν ἡμῖν τῆς ψυχῆς περιόδοις, τῷ μετὰ νοῦ προσχρωμένῳ Μούσαις οὐκ ἐφ’ ἡδονὴν ἄλογον καθάπερ νῦν εἶναι δοκεῖ χρήσιμος, ἀλλ’ ἐπὶ τὴν γεγонуῖαν ἐν ἡμῖν ἀνάρμοστον ψυχῆς περίοδον εἰς κατακόσμησιν καὶ συμφωνίαν ἑαυτῇ σύμμαχος ὑπὸ Μουσῶν δέδοται.

And harmony (*harmonia*), whose movements are akin to the orbits within our souls, is a gift of the Muses, if our dealings with them are guided by understanding, not for irrational pleasure, for which people nowadays seem to make use of it, but to serve as an ally in the fight to bring order to any orbit in our souls that has become unharmonized (*an-harmoston*) and make it concordant (*symphōnian*) with itself.

⁶⁹ Cf. *Tim.* 43c7–d6 on the soul-intervals in the human soul.

⁷⁰ The first part of this progression is quoted at pp. 130–31 above.

The internal order of the soul is here connected, using musical terminology, to the universal principle of *harmonia* that also governs the orbits of the heavenly bodies.

So in Plato's Spindle planetary and musical concord acts as a blueprint for the souls' right ethical conduct during incarnation. In the Myth of Er, the human soul is privileged to a vision of concord, in order to understand what to strive for. Plato's vision of the harmony of the spheres in the world soul and the Spindle of Necessity represents a striving-toward, in which the technical data offered by astronomy and music is a starting point only.

A Sprinkling of Science

πάσαι ὅσαι μεγάλοι τῶν τεχνῶν προσδέονται ἀδολεσχίας καὶ
μετεωρολογίας φύσεως πέρι

All the greatest skills need a sprinkling of science.

—Plato, *Phaedrus* 269e4–270a1¹

Introduction

During this study of afterlife texts we’ve become interested in “anomalies,” different kinds of space within afterlife narratives. Most often, these narratives take the form of a linear journey, as along a road map; and that journey characteristically embeds a revelation in the form of a totalizing vision of the universe. This means there are two types of space—linear and synoptic—and two types of motion—straight line and contained (the circular motion of the universe)—in our afterlife texts. Such a juxtaposition of different kinds of space and motion may be considered anomalous in *individual* texts; but it is not anomalous when you look at *many* afterlife texts. In fact, it is an *essential* feature of such texts.

As a function of its hybrid approach to space, the afterlife offers an arena for the playful give and take between “science” and speculation about the soul’s journey in the afterlife. In chapter 6 we saw how the image of the universe, the Spindle of Necessity, hangs like a science-fiction moon over Er’s journey through the afterlife landscape. The Spindle is a representation of the world that straddles the boundary between allegory, on the one hand, and “scientific” information, in the form of the planetary system and musical

¹ This is my own paraphrase. Elsewhere the translation of Plato’s *Phaedrus* in the edition of Rowe (1986) is used throughout this chapter. On the tone of Socrates’ words see Yunis (2011) ad loc.; Rowe (1986) ad *Phdr.* 269e4–270a1; De Vries (1969); and Hackforth (1952) ad loc. Guthrie (1962–81), vol. 4: 432 sees in them “an interplay of the ironic and the serious.”

ratios, on the other. Here, it is the *limits* of “scientific” knowledge that give Plato room to speculate, to take as his point of departure what we do know, and to construct from there a composite landscape of metaphysical and ethical possibilities.

In this chapter we’ll see the pattern of two types of space in Plato’s *Phaedrus*. In this dialogue, the revelation is embedded in Socrates’ and Phaedrus’ performance of a linear journey of descent and reemergence from a landscape. This revelation is known as the central myth of the dialogue (*Phdr.* 243e8–257b6); it is also called Socrates’ “Palinode”—literally “way back”—because it is the second of two speeches, the first of which is characterized as a false start.

The *Phaedrus* is the Frankenstein of Platonic dialogues: its complex structure has been subject to studies that are framed in terms of “the problem of unity.”² Structural complexity is matched by thematic diversity: Werner (2012), for instance, offers no fewer than twenty-three themes treated in the dialogue, which include light and darkness, animals and monsters, liquids and water, memory and forgetfulness, initiation, mysteries, and sacred vision.³

While some have tried to unify the dialogue in terms of “myth” or “philosophy,”⁴ I’d like to offer a new interpretation of the unity of the dialogue based on a reading of it as a *mystic journey*, a journey that encapsulates a revelation. I’ll argue for the first time that Socrates’ and Phaedrus’ journey is a symbolic *katabasis*, that it plays with the genre of descent to the underworld. As we’ve seen, the genre has its origins in Homer *Od.* 11. There’s no doubt that Plato was familiar with its conventions. Werner points out that “Plato’s intimate familiarity with the catabatic genre is well attested in the eschatological myths of the *Phaedo*, *Gorgias* and *Republic*, all of which depict a descent of souls into the underworld.” Yet he doesn’t quite succeed in inserting the *Phaedrus* into this paradigm. He adds: “Although the palinode is not itself a catabatic myth in the strictest sense—as it deals with an ascent to heaven and not a descent to the underworld—it nonetheless appropriates many conventions of the genre.”⁵ This is close—but it misses the point. I would say that the dialogue as a whole appropriates katabatic conventions, among which, we *do* find a way of explaining the nature of the central myth. Even though it is

² Werner (2012): 236–39.

³ Werner (2012): 241–42.

⁴ See Werner (2012): 247.

⁵ Werner (2012): 111.

“anomalous” in respect of a purely underworld understanding of a *katabasis*, it *can* be fitted into a katabatic scheme.

Although a reading of the *Phaedrus* as a whole as a *katabasis*, supported by recent readings of the *Republic*, is both new and, to my mind, plausible, it is not the most striking thing in this chapter. Once we've established the underworld affiliations of the dialogic frame, it becomes apparent how the revelation of the central myth fits in.

1. The *Phaedrus* as *Katabasis*: The Landscape

There's precedent for an interpretation of the *Phdr.* as *katabasis* in the now-orthodox approach to Plato's *Republic* as a *katabasis*. It's widely argued that Socrates' journey in the *Republic* as a whole tropes an underworld descent, beginning with Socrates' “descent” to the Piraeus at the opening of the dialogue.⁶ So for instance Howland thinks that “*the conversation of the Republic takes place, metaphorically, in Hades.*”⁷ The opening word of the *Republic*, κατέβην (*katebēn*, *Rep.* 327a1), echoes Odysseus' retelling of his own *katabasis* at *Od.* 23.251–53:⁸

ὥς γάρ μοι ψυχὴ μαντεύσατο Τειρεσίαο
ἤματι τῷ, ὅτε δὴ κατέβην δόμον Ἄϊδος εἴσω,
νόστον ἑταίροισιν διζήμενος ἦδ' ἐμοὶ αὐτῷ.

“For so did the spirit of Teiresias foretell to me on the day when I went down (*katebēn*) into the house of Hades to enquire concerning the return of my comrades and myself.” (Murray rev. Dimock 1995)

Katabatic themes continue throughout the dialogue, culminating, of course, in the final Myth of Er.⁹

⁶ On the widespread view of the *Rep.* as a whole as a *katabasis* narrative, see Segal (1978); Burnyeat (1997); Howland (1993); Vegetti (1998–2007), vol. 1: 93–105; Reinhardt (2004): 34n18; De Luise (2007): 326–27; Capra (2010): 202. On the political-social aspects of Socrates' journey see especially Howland (1993); Vegetti (1998–2007), vol. 1: 93–105, “*Katabasis*”; and Ferrari (2003) *passim*.

⁷ Howland (1993): 44 (my emphasis).

⁸ Segal (1978): 321; Burnyeat (1997): 5; de Luise (2007): 326–27.

⁹ Initial intertextual reference to the *Od.* in the Myth of Er marks the myth out as a sequel to the *Odyssey* (614b2–3): ἀλλ' οὐ μέντοι σοι, ἦν δ' ἐγώ, Ἀλκίνοῦ γε ἀπόλογον ἐρῶ, “Mind you, I'm not going to give you an Alcinous' tale,” I said.” The reference is to Odysseus' account to Alcinous of his wanderings, in *Od.* 9–12; his *katabasis* in *Odyssey* 11 is part of this narrative; Socrates proposes to

So also at the end of the *Phaedrus*, we see Socrates and Phaedrus reemerge from the “underworld” landscape in which their own particular journey and revelation have taken place. At the close of the dialogue, Socrates reflects on the journey and its outcome (*Phdr.* 278b7–9):

οὐκοῦν ἤδη πεπαίσθω μετρίως ἡμῖν τὰ περὶ λόγων·καὶ σύ τε ἐλθὼν φράζε Λυσία ὅτι νῶ καταβάντε ἐς τὸ Νυμφῶν νᾶμά τε καὶ μουσεῖον ἠκούσαμεν λόγων.

So now we have had due amusement from the subject of speaking; and as for you, go and tell Lysias that we two came down (*katabante*) to the spring and the sacred place of the Nymphs and listened to speeches.

The moment of their reemergence is the counterpart of the gesture toward *katabasis* at the beginning of the *Republic*. Socrates and Phaedrus “have gone down” into the landscape: the verb is that with which Odysseus began the story of his *katabasis* in *Odyssey* 23 and with which Socrates’ katabatic journey in the *Republic* began. It is as though Socrates, at the end of the conversation of the *Phdr.*, finally comes clean about what sort of journey they have been on all along.

I will argue here that the notion of *katabasis* is *from the first* embedded in the landscape that is so prominent in the *Phaedrus*.¹⁰ References to the landscape come at important transitional points in the dialogue: the beginning and end; Socrates’ embarkation on his first speech; and at the midpoint of the dialogue, where it oils the point of friction between love and rhetoric. The landscape tends to appear as a way of making readers or listeners prick up their ears, before directing their attention to some important new stage in the proceedings. Here is its first occurrence (*Phdr.* 229a1–b2):

present a revision of it. On the reference to Alcinoos and its ramifications, see Halliwell (1988) on *Rep.* 614b2; Calabri (2007): 284; de Luise (2007): 318. Later in the myth, the spectacle of the souls choosing their lives (αἱ ψυχαὶ ἡροῦντο τοὺς βίους) at 620a1 “clearly recalls the parade of ghosts before Odysseus in *Odyssey* 11” (Halliwell 1988 ad *Rep.* 619e6). Odysseus himself draws the last lot, in a sequel to *Odyssey* 11 whereby the hero is recast in a cameo role (*Rep.* 620c3–d1). Apart from the Myth of Er, references to *Odyssey* 11 are found throughout the *Republic*. According to Howland (1993): 47, many of the metaphors used in the *Rep.* (such as sailing, 349d, and descent, 427c–d, 432c, 450e–51a) trope Odysseus’ journey. The Myth of the Cave in Book 7 references the *Odyssey*: at 516d4–7 Plato quotes *Od.* 11.489 (the speech of Achilles in the underworld).

¹⁰ The *Phaedrus* is the only Platonic dialogue in which setting is self-consciously foregrounded; it reappears thematically throughout. On the landscape, see especially Ferrari (1987): 2–7.

ΣΩ. Δεῦρ' ἐκτραπόμενοι κατὰ τὸν Ἴλισδὸν ἴωμεν, εἴτα ὅπου ἂν δόξη ἐν ἡσυχίᾳ καθιζήσόμεθα.

ΦΑΙ. Εἰς καιρόν, ὥς ἔοικεν, ἀνυπόδητος ὢν ἔτυχον· σὺ μὲν γὰρ δὴ αἰεὶ ῥᾶστον οὖν ἡμῖν κατὰ τὸ ὕδατιον βρέχουσι τοὺς πόδας ἰέναι, καὶ οὐκ ἀηδές, ἄλλως τε καὶ τήνδε τὴν ὥραν τοῦ ἔτους τε καὶ τῆς ἡμέρας.

ΣΩ. Πρόαγε δὴ, καὶ σκόπει ἅμα ὅπου καθιζήσόμεθα.

ΦΑΙ. Ὅρᾳς οὖν ἐκείνην τὴν ὑψηλοτάτην πλάτανον;

ΣΩ. Τί μήν;

ΦΑΙ. Ἐκεῖ σκιά τ' ἐστὶν καὶ πνεῦμα μέτριον, καὶ πόα καθίζεσθαι ἢ ἂν βουλώμεθα κατακλινῆναι.

SOCRATES: Let us turn aside here and go along the Ilissus; then we can sit down quietly wherever we please.

PHAEDRUS: I am fortunate, it seems, in being barefoot; you are so always. It is easiest then for us to go along the brook with our feet in the water, and it is not unpleasant, especially at this time of the year and the day.

SOCRATES: Lead on then, and look out for a good place where we may sit.

PHAEDRUS: Do you see that very tall plane tree?

SOCRATES: What of it?

PHAEDRUS: There is shade and a moderate breeze and grass to sit on, or, if we like, to lie down on.

A little later, following a discussion about the proper uses of mythography (229b4–230a7), Socrates indulges in a full-blown *ekphrasis* of the landscape in his best “dithyrambic” style (230b2–d2):¹¹

ΣΩ. Νῆ τὴν Ἥραν, καλὴ γε ἡ καταγωγή· ἢ τε γὰρ πλάτανος αὕτη μάλ' ἀμφιλαφὴς τε καὶ ὑψηλή, τοῦ τε ἄγνου τὸ ὕψος καὶ τὸ σύσκιον πάγκαλον, καὶ ὥς ἀκμὴν ἔχει τῆς ἀνθης, ὥς ἂν εὐωδέστατον παρέχοι τὸν τόπον· ἢ τε αὖ πηγὴ χαριεστάτη ὑπὸ τῆς πλατάνου ρεῖ μάλα ψυχροῦ ὕδατος, ὥστε γε τῷ ποδὶ τεκμήρασθαι. Νυμφῶν τέ τινων καὶ Ἀχελῷου ἱερὸν ἀπὸ τῶν

¹¹ Socrates says τὰ νῦν γὰρ οὐκέτι πόρρω διθυράμβων φθέγγομαι, “for I am already almost uttering dithyrambs” (*Phdr.* 238d2–3). Dithyramb was “in Plato’s day a byword for bombast” (Ferrari 1987: 110); cf. Zimmermann (1992): 10, 121. The rhetorical stylist Dionysius of Halicarnassus (first century BCE) equates dithyramb with stylistic bathos (*Demosthenes* 6.20–21); at *Letter to Gnaeus Pompeius* 2.13–14, Dionysius specifies that τὸν ὄγκον τῆς ποιητικῆς κατασκευῆς εἰς λόγους ἤγαγε φιλοσόφους ζηλώσας τοὺς περὶ Γοργίαν, ὥστε καὶ διθυράμβοις τινὰ ποιεῖν εἰκότα, “[Plato’s] fault is that he has introduced the apparatus of poetical artifice into philosophical discourses, and in doing so has vied with Gorgias and his followers, so that some of his prose is like dithyrambic poetry” (Usher 1984–5).

κορῶν τε καὶ ἀγαλμάτων ἔοικεν εἶναι. εἰ δ' αὖ βούλει, τὸ εὖπνουν τοῦ
τόπου ὡς ἀγαπητὸν καὶ σφόδρα ἡδύ· θερινόν τε καὶ λιγυρὸν ὑπηχεῖ τῷ
τῶν τεττίγων χορῷ. πάντων δὲ κομψότατον τὸ τῆς πόας, ὅτι ἐν ἡρέμα
προσάντει ἱκανὴ πέφυκε κατακλινέντι τὴν κεφαλὴν παγκάλως ἔχειν.
ὥστε ἄριστά σοι ἐξενάγηται, ὦ φίλε Φαῖδρε.

ΦΑΙ. Σὺ δέ γε, ὦ θαυμάσιε, ἀτοπώτατός τις φαίνει. ἀτεχνῶς γάρ, ὃ λέγεις,
ξεναγουμένῳ τινὶ καὶ οὐκ ἐπιχωρίῳ ἔοικας· οὕτως ἐκ τοῦ ἄστεος οὐτ' εἰς τὴν
ὑπερορίαν ἀποδημεῖς, οὐτ' ἔξω τείχους ἔμοιγε δοκεῖς τὸ παράπαν ἐξίνααι.

s.: By Hera, it is a charming resting place. For this plane tree is very spreading
and lofty, and the tall and shady willow is very beautiful, and it is in full
bloom, so as to make the place most fragrant; then, too, the spring is very
pretty as it flows under the plane tree, and its water is very cool, to judge
by my foot. And it seems to be a sacred place of some nymphs and of
Achelous, judging by the figurines and statues. Then again, if you please,
how lovely and perfectly charming the breeziness of the place is! and it
resounds with the shrill summer music of the chorus of cicadas. But the
most delightful thing of all is the grass, as it grows on the gentle slope,
thick enough to be just right when you lay your head on it. So you have
guided the stranger most excellently, dear Phaedrus.

p.: You are an amazing and most remarkable person. For you really do seem
exactly like a stranger who is being guided about, and not like a native.
You don't go away from the city out over the border, and it seems to me
you don't go outside the walls at all.

This is a liminal experience. Socrates is ἀτοπώτατός τις (*atopōtatos tis*, 230c6), “very strange,” lit. “very much out of place”—ostensibly because he is an urban creature in a rural landscape. He doesn't normally, as now, move ἐκ τοῦ ἄστεος (out of the city), ἔξω τείχους (outside the walls), εἰς τὴν ὑπερορίαν, “over the border.” There may be even more of a displacement here than meets the eye. The word that Phaedrus uses here for going outside the walls, ἀποδημεῖς (*apodēmeis*), is the same word that Socrates himself used in the *Apology* for the journey of *death*—ἀποδημῆσαι (*apodēmēsthai*).¹² The protagonists of the *Phdr.* are traversing a landscape in which they become removed from normal life—perhaps gravitating even toward a death-like experience.

¹² *Apol.* 40e4–5, εἰ δ' αὖ οἷον ἀποδημῆσαι ἐστὶν ὁ θάνατος ἐνθενδε εἰς ἄλλον τόπον . . . , “If death is just like *going away* from here to another place . . .” (my translation).

An underworld landscape is typically guarded by strange creatures. In particular, hybrids are a recognizable part of underworld furniture.¹³ In Socrates' and Phaedrus' *katabasis* we do not find actual monsters guarding the landscape. But we do find hybrids in the text. Following the initial description of landscape (229a1–b3), the place itself, specifically the breeze mentioned at 229b1, sparks in Socrates and Phaedrus the recollection of a myth, the abduction from that spot of the nymph Oreithyia by Boreas, the North Wind (229b7–c3). Phaedrus asks Socrates if he thinks the story is true (229c4–5); Socrates replies evasively that it might be possible to “rationalize” the myth, in the way of fashionable exegeses of myths such as those of hybrids, but that he himself is not particularly interested in that technique (229d2–e2):

ἐγὼ δέ, ὦ Φαῖδρε, ἄλλως μὲν τὰ τοιαῦτα χαρίεντα ἡγοῦμαι, λίαν δὲ δεινοῦ καὶ ἐπιπόνου καὶ οὐ πάνυ εὐτυχοῦς ἀνδρός, κατ’ ἄλλο μὲν οὐδέν, ὅτι δ’ αὐτῷ ἀνάγκη μετὰ τοῦτο τὸ τῶν Ἱπποκενταύρων εἶδος ἐπανορθοῦσθαι, καὶ αὐθις τὸ τῆς Χιμαίρας, καὶ ἐπιρρεῖ δὲ ὄχλος τοιούτων Γοργόνων καὶ ἄλλων ἀμηχάνων πλήθῃ τε καὶ ἀτοπία τερατολόγων τινῶν φύσεων.

But I, Phaedrus, think such explanations are very pretty in general, but are the inventions of a very clever and laborious and not altogether enviable man, for no other reason than because after this he must explain the forms of the Centaurs, and then that of the Chimaera, and there presses in upon him a whole crowd of such creatures, Gorgons and Pegasuses, and multitudes of strange, inconceivable, portentous natures.

The reference to hybrids seems gratuitous in the context; almost a non sequitur in relation to the myth of Boreas. But Socrates' vivid description of the hybrids renders them visibly present. The monsters have, as it were, soaked into the landscape and impregnated it: the spring (πηγή, *pēgē*, 230b6)

¹³ In Aristophanes' *Frogs*, Herakles warns the underworld traveler to expect a plethora of monsters: μετὰ ταῦτ' ὄψει καὶ θηρί' ὅψει μυρία / δεινότατα, “Afterwards, you'll see an infinity of serpents and beasts most frightful” (*Fr.* 143–44, trans. Henderson 2002). Reinhardt (2004): 33n16 remarks, “Any poet who has read Aristophanes' *Frogs* may be tempted to place some shadowy creatures at the entrance to the underworld.” In Hesiod, hybrids inhabit an underground world, ζαθέης ὑπὸ κεύθει γαίης, “under the hidden places of the holy earth” (*Theogony* 300), and τηλοῦ ἀπ' ἀθανάτων τε θεῶν θνητῶν τ' ἀνθρώπων, “far from the immortal gods and mortal human beings” (302). Ceto, the mother of monsters, gave birth “in a hollow cave,” σπήι ἐνι γλαφυρῷ (Hesiod, *Theogony* 297); Echidna, half-girl, half-snake, has “a cave, deep down under a hollow boulder,” ἐνθα δέ οἱ σπέος ἐστί κάτω κοιλῇ ὑπὸ πέτρῃ (301). Virgil's underworld landscape is prefaced by Chimeras, Cerberus, etc. (p. 43 above). Lucian later plays with the hybrid tradition in his *Dialogues of the Dead* (pp. 17–18 above). On hybrids in the underworld see further Gee (2016).

that flows (ῥεῖ, *rhei*, 230b6) under the plane tree reminds us uncannily of the crowd of Gorgons, Pegasuses (Πηγάσων, *Pēg-asōn*), and other implausible monsters that floats up—ἐπιρρεῖ (*epirrrei*)—like scum to the surface, at 229d7. The landscape into which Socrates and Phaedrus move is prefaced by monsters of a type you'd expect to find in the world below. Although the hybrids Socrates refers to are not real monsters, but presented as the food of overactive mythographical imaginations, when coupled with the landscape, they may remind us of what you would encounter in an underworld journey. These monsters are referred to at the point when Socrates and Phaedrus “cross the river;” i.e. when they remove themselves from the everyday normality of the city, when they, as it were, “cross the threshold.”

At 229d5–e2 Socrates described his mythical hybrids as ἀτοπίαι, beings that are “implausible,” “out of place” (*a-topiai*). We remember that Socrates shares their characteristic of displacement: he too is “out of place” (230c6). We might also think that Socrates is out of place in the sense that a hero on a *katabasis* is out of place. Perhaps it is to try to harmonize himself with his environment that Socrates tries on the persona of Typhon (*Phdr.* 230a1–7), the mythical lover of Hesiod's subterranean hybrid Echidna (*Theogony* 306–7), mother of other hybrids (*Th.* 308–19). Despite his contempt for the rationalizers, Socrates performs his own rationalization of myth, with an etymological play on Τῦφων (*Typhon*) and τῦφος (*typhos*), “smoke.”¹⁴ Typhon in Socrates' new interpretation becomes an allegory for a lack of self-knowledge—the smokescreen that stands before the self. To be *a-typhos*, clearly the better of Socrates' two options, is to be both “un-Typhonic” (i.e. not monstrous or unnatural) and “unobfuscated” (i.e. aware of one's own nature). Socrates' explanation of the soul in the central myth will confer such self-awareness. In it, Socrates will substitute for the mythographers' gallery of hybrids his own correction, the hybrid soul (246a6–7): εἰκέτω δὴ συμφύτῳ δυνάμει ὑποπτέρου ζεύγους τε καὶ ἡνιόχου, “Let it then resemble the combined power of a winged team of horses and their charioteer.” Socrates' play with mythography prepares us for what will come in the central myth: a different kind of hybrid.

Following Socrates' brief Typhonic flirtation, we are immediately drawn back into the landscape, when Phaedrus interjects, “But, my friend, to interrupt our conversation, wasn't this the tree you were taking us to?” (*Phdr.*

¹⁴ In Homer, *Iliad* 23.100, smoke represents the transience of the psyche, which vanishes to Achilles' touch “like smoke,” ἥῃτε καπνός (see p. 324 below).

230a6–7). The topographical elements of Socrates' landscape are, predominantly, trees and water. In general terms, these motifs may belong to the after-life tradition.¹⁵ Underworld water, specifically, is an important topographical marker: "The underworld water figured as a ritual limit between the worlds of life and death. Beyond the water, the purified souls could rest, free from the labours of incarnation . . . However they had to go through a ritual exercise in death to get there."¹⁶ We'll see that this may be exactly the direction in which Socrates' and Phaedrus' crossing of the river is tending.

The Gold Leaves

There is a tradition, almost unexplored in *Phaedrus* scholarship, which offers the progression from landscape to revelation: that of the so-called Orphic gold leaves. The gold leaves are intriguing texts written on stamp-sized pieces of gold foil.¹⁷ The first finds, from Thurii in southern Italy, were published by Comparetti in *Notizie degli scavi*, 1879–80.¹⁸ The first of the so-called B-type leaves (discussed later in this chapter), from Petelia, was published by Comparetti in *Journal of Hellenic Studies* 1882. The earliest in date (published later), from Hipponion in southern Italy, dates from the end of the fifth century (c. 400; i.e. roughly contemporary with Plato); the latest to the second or third century CE.¹⁹ They were found in graves widely scattered across the Greek and Roman world.²⁰

¹⁵ *GII*, p. 108, note that "many descriptions of the Underworld, in ancient Greece and elsewhere, include trees and groves." *GII*, p. 98, comment that bodies of water are "a very common motif in eschatological narratives and ritual systems all over the world"; Dousa (2011) discusses Egyptian provenance for the motif of trees and water in the afterlife tradition; cf. Zuntz (1971): 364.

¹⁶ Albinus (2000): 130; on water in the underworld see also pp. 128–29. Edmonds (2004): 22 states that "bodies of water frequently appear as barriers" in the eschatological tradition; see for instance Aristophanes, *Frogs* 137, ἐπὶ λίμνην μεγάλην ἵξεῖς, "you'll come to a great lake" (cf. Edmonds 2004: 125). For water as an obstacle in the underworld see *Il.* 23.72–73, where the spirits of the unburied can't cross the river into Hades.

¹⁷ See the photograph of Hipponion gold leaf, actual size, in Pugliese Carratelli and Foti (1974): 107. The general characteristics of the gold leaves are best summed up in Bernabé and Jiménez San Cristóbal (2008): 2–7.

¹⁸ Comparetti (1910): vii–viii gives a history of the scholarship from the first publication of the Thurii leaves up to the time of his edition. Dieterich (1893) was probably the first firmly to insert them into an "Orphic" tradition. None of the gold leaves characterize themselves as "Orphic": this is a modern designation (although it might be tempting to see ὀρφῆεντος, *orphēentos*, "dark," in line 9 of the Hipponion gold leaf as a sort of signature, in the form of a pun on Orpheus' name).

¹⁹ On dating see for instance *GII*, p. 69; Edmonds (2004): 25.

²⁰ On the find locations and their affinities with "Orphism" see Bernabé and Jiménez San Cristóbal (2011): 72–73. On the early discoveries and publication, see Zuntz (1971): 288–93; cf. Edmonds (2011a): 4–7.

These texts were perhaps intended to be carried into the afterlife by a dead person to act either as an aide-memoire or as a proxy to speak for the deceased. They are mainly in Homeric hexameters, with many formulae recurring across near-identical instances of the texts.²¹ The order of elements in the hexameter can be shuffled across different instances of the same text; some also contain near-hexameters and prose insertions.²² The hexameter texts might have been excerpts or adaptations of a longer poem or poems or redactions of a single archetype (we'll come back to this theory).²³ The nonmetrical lines of the texts may represent ritual affirmations.²⁴

There are now many editions and an immense mountain of scholarship on these tiny texts.²⁵ They have been classified and reclassified into groups, as each new discovery modifies or blurs the lines between existing categories. The original A–C categories, established by Zuntz, have now expanded across a range A–G (Tzifopoulos) or A–F (Edmonds).²⁶ Classification is based on the type of text represented.²⁷ Thus the A-type texts characteristically begin ἔρχομαι ἐκ καθαρῶν καθαρά (or ἐκ καθαρῶν καθαρὰ), “I come pure from the pure” and are seemingly about ritual purity, while the B-type gold leaves describe landscape elements of underworld topography. But it's thought that all texts are “a result of the same movement.”²⁸ With further discoveries, increasing connections can be seen between groups, leading scholars to posit a common context.²⁹

²¹ “Style and language are predominantly Homeric” (Zuntz 1971: 306; cf. p. 363). The exception is the Hipponion gold leaf which is in hexameters but whose dialect is Doric (see Janko 2016: 105–6). On Homer and the gold leaves in general, see Herrero de Jáuregui (2011); Martin (2007). On the Homeric dialect of the “B-type” leaves (typology defined at p. 229 below) see Janko (1984): 98; cf. Tzifopoulos (2010): 133.

²² Some of the gold leaf texts are entirely hexametric: see for example Hipponion (*GII*, no. 1) and Petelia (*GII*, no. 2). The shuffling of elements in the hexameter is evident in these two texts: line 12 of the Petelia gold leaf transposes Hipponion line 1 to the end, garbling or extending it across two lines.

²³ On the archetype theory see Janko (1984) and (2016); and see below, p. 229 and pp. 241–42.

²⁴ Riedweg (2011): 230.

²⁵ Janko (2016): 101–2 lists the plethora of editions and gives a partial concordance. For a short history of scholarship on the leaves see Edmonds (2011a): 3–14. Recent editions include *GII* (with English translation); Zuntz (1971): 277–393 (lacking subsequent discoveries); Pugliese Caratelli (2001); Bernabé (2005), vol. 2, fasc. 2: 7–79, frs. 474–97; Tortorelli Ghidini (2006) (on the Olbia bone tablets, the Derveni papyrus, and the Gurób papyrus, all of which, along with the leaves, she takes as part of a kind of Orphic *corpus*); Edmonds (2011a): 15–50. For interpretation see among others Guthrie (1952): 171–87; Bernabé and Jiménez San Cristóbal (2008); Mirto (2012): 39–53; Edmonds (2011a); Tzifopoulos (2010); Edmonds (2004): 29–110.

²⁶ Zuntz (1971): 275–393; Tzifopoulos (2010): 255–80; Edmonds (2011a): 41–48. For a concordance see Bernabé and Jiménez San Cristóbal (2008): 242–44.

²⁷ On the classification criteria see Edmonds (2011a): 10–11.

²⁸ Bernabé and Jiménez San Cristóbal (2011): 70.

²⁹ Riedweg (2011): 221–22.

No one has essayed a thoroughgoing interpretation of the *Phdr.* in the light of the gold leaves, as I am about to do. In general terms, it is extremely plausible that Plato had a thorough knowledge of Orphic literature: Orphic themes and concepts are everywhere in Plato. Bernabé (1998) demonstrates Plato's wide-reaching use and reworking of Orphic language, poems, and themes across the dialogues. Orphic books must have been available already by the fifth century BCE, as is evidenced by the Derveni papyrus, a commentary of c. 350 BCE on an earlier Orphic cosmogony of c. 500 BCE, perhaps originating from the circle of Anaxagoras.³⁰ Plato apparently knew of two types of Orphic books: (1) cosmogonies and (2) books comprising magic formulae or acts of initiation.³¹ Together these books seem to have enabled Plato to utilize Orphic ideas as part of a philosophical system that combined (1) the origins of the universe and (2) man's place in it. To my mind, this combination of factors is exactly where the journey-revelation paradigm in Plato's dialogues is tending.

There are very few references in the scholarship to a connection between the gold leaves and the *Phaedrus*. Where parallels between the gold leaves and Plato have been noted, these pertain chiefly to the *Republic*.³² Thus for instance Edmonds observes, in connection with the Myth of Er, "Plato is here clearly playing with the same elements from the mythic tradition that are found in the long B tablets—magic water, memory and life, a choice dependent on previous experiences."³³ Bernabé and Jiménez San Cristóbal also discern B-type gold leaf topography in Plato, yet without citing the *Phdr.*;³⁴

³⁰ On the dating of the Derveni papyrus and of the text on which it comments, see West (1983): 18; Janko (2002): 1. According to West (1983): 18, "There is reason to suspect that it was on the one hand Dionysiac-Bacchic in orientation, and on the other hand incorporated a doctrine of metempsychosis." On the content and significance of the Derveni papyrus see among others Kouremenos, Parássoglou, and Tsantsanoglou (2006): 20–28; Tortorelli Ghidini (2006): 163–254; Betegh (2004): 130–31; Janko (2002); Laks and Most (1997); West (1983): 68–115. Merkelbach (1967) and Burkert (1968) established the connection with Anaxagoras. Anaxagoras' book apparently had wide cachet in Athens during Plato's time; see *Apol.* 26d. Socrates comments on his own reading of Anaxagoras at *Phaedo* 97b8–99d2, pp. 254–55 below.

³¹ The first attestation of the term Ὀρφικά is Herodotus 2.81. On the Orphic books in general see Graf (2011): 53. On "Orphic" literature see further Adorno (1975): 16–17.

³² Frutiger (1976): 253–54 enumerates some parallels between the (then known) gold leaves and Plato's afterlife myths. Guthrie (1952): 176 claims that the description of the underworld in the gold leaves corresponds with those of Plato, particularly in the *Rep.* (but cf. Bernabé and Jiménez San Cristóbal 2008: 54); the water of forgetfulness in Plato's Myth of Er may gesture toward to gold leaf tradition (see Halliwell 1988 on *Rep.* 621a2; Calabi (2007): 282, 291–94).

³³ Edmonds (2004): 51. Cf. Albinus (2000): 144, who refers to the Myth of Er as "undoubtedly [an instance] of Orphic discourse."

³⁴ Bernabé and Jiménez San Cristóbal (2008): 24 cite *Phd.* 108a, *Gorg.* 524a, *Rep.* 614e, and *Aen.* 6.540. On the Myth of Er they comment that Plato "in many details seems to have taken Orphic sources as his models." See further *Ibid.* pp. 29–35.

in the extensive list of Platonic passages in the Appendix to Bernabé (1998), only three are from the *Phaedrus*, and all of those are from the central myth. This also holds good for other parallels between the *Phaedrus* and the gold leaves.³⁵

What I want to do here is to experiment with the gold leaves as a way of integrating the *journey* and the myth of the *Phaedrus*. Recognition of the coherence of its mystic journey and revelation means, not least, that the suturing between the different limbs of the dialogue looks a lot tighter.

We can start by considering the elements in Socrates' landscape in the light of the gold leaves. Here it is the B-type leaves that interest us the most. All of the B-type leaves deal with underworld topography, variously expanding and contracting the same or similar features.³⁶ It's been suggested that the B texts go back to a single archetype, maybe an *ἱερός λόγος* (*hieros logos*, a sacred narrative, what I'd call a "liturgy"), perhaps progressively abbreviated over the course of time.³⁷ The gold leaf from Hipponion in southern Italy is the fullest instance of the B-type text. It gives detailed instructions for navigating the underworld:³⁸

Μναμοσύνας τόδε ἔργον. ἐπεὶ ἂν μέλλεισι θανεῖσθαι
εἰς Ἀΐδαο δόμος εὐέρεας, ἔστ' ἐπὶ δεξιὰ κρίνας,
παρ' δ' αὐτὰν ἑστακῦα λευκὰ κυπάρισος·
ἔνθα κατερχόμεναι ψυκαὶ νεκὺον ψύχονται.
ταύτας τὰς κρίνας μεδὲ σχεδὸν ἐγγύθεν ἔλθεις.
πρόσθεν δὲ ἡευρέσεις τὰς Μναμοσύνας ἀπὸ λῖμνας

³⁵ Riedweg (1987): 53 cites *Phdr.* 250c4–5 in comparison to the A-type gold leaves (Zuntz 1971 A1–3 = *GII* nos. 5, 6, and 7; cf. Bernabé 2005 fr. 488–91); *GII*, p. 206n44, cite *Phdr.* 246a; Zuntz (1971): 306n7 cites *Phdr.* 246a ff., 249e, and 274a. None of these cross-references are from the landscape section of the dialogue.

³⁶ On the topography of the underworld in the B-type leaves see Bernabé and Jiménez San Cristóbal (2008): 22–23. For the original B-type classification, see Zuntz (1971): 355–93. The B-type category has been expanded by more recent discoveries such as the Hipponion gold leaf. On group B and its expansion see Edmonds (2004): 35 and n.18; Janko (1984): 89; Tzifopoulos (2010): 93, 95–100. Tzifopoulos (2010): 260–66 presents a complete edition of the B texts, including that of Hipponion.

³⁷ Lloyd-Jones (1975): 225: "Obviously there was an original poem"; cf. Pugliese Carratelli (1975): 227: "Ora è evidente che testi esistenti derivano, con maggiori o minori alterazioni, da un *ἱερός λόγος*." ("Therefore it's obvious that the extant texts derive, with greater or lesser changes, from an *hieros logos*"). Cf. Janko (1984) and (2016).

³⁸ The version of the text and translation given here is *GII* no.1. This is fr. 474F in Bernabé (2005); B10 in Edmonds (2011a): 43, Tzifopoulos (2010): 263, and Riedweg (2011); no. 1 in Tortorelli Ghidini (2006); I A 1 in Pugliese Carratelli (2001) and (2003). The first edition was Pugliese Carratelli and Foti (1974); see also Pugliese Carratelli (1975); Gigante (1975); Lloyd-Jones (1975); Merkelbach (1975); Janko (1984), with the additional bibliography cited in his n.1; Marcovich (1990): 73; Russo (1996). Riedweg (2011): 243 gives text and commentary, as do Bernabé and Jiménez San Cristóbal (2008): 9–57; see Edmonds (2011a): 8 for further comments.

ψυχρὸν ὕδωρ προρέον· φύλακες δὲ ἐπύπερθεν ἔασι.
 τοὶ δὲ σε εἰρέσσονται ἐν<ι> φρασὶ πευκαλίμαισι
 ὃ τι δὲ ἐξερέεις Ἄιδος σκότος ὀρφέεντος.
 εἶπον· ὕδς Ἰᾶς ἐμὶ καὶ Ὅρανο ἀστερόεντος·
 δίψαι δ' ἐμ' αὖτος καὶ ἀπόλλυμαι· ἀλὰ δότ' ὅ[κα
 ψυχρὸν ὕδωρ πέναι τες Μνεμοσύνες ἀπὸ λίμν[α]ς.”
 καὶ δὴ τοὶ ἐρέουσιν ἠυποχθονίοι βασιλεῖ·
 καὶ δέ τοι δόσοσι πιεν τᾶς Μναμοσύνας ἀπὸ λίμνα[ς]
 καὶ δὲ καὶ σὺ πὶὸν ὁδὸν ἔρχεα<ι>, ἥν τε καὶ ἄλλοι
 μύσται καὶ βᾶχχοι ἠιεράν στείχοσι κλεινοί.

- 1 This is the work of Memory, when you are about to die
- 2 down to the well-built house of Hades. There is a spring at the right side,
- 3 and standing by it a white cypress.
- 4 Descending to it, the souls of the dead refresh themselves.
- 5 Do not even go near this spring!
- 6 Ahead you will find from the Lake of Memory,
- 7 cold water pouring forth; there are guards before it.
- 8 They will ask you, with astute wisdom,
- 9 what you are seeking in the darkness of murky Hades.
- 10 Say, “I am a son of earth and starry sky,”³⁹
- 11 I am parched with thirst and am dying; but quickly grant me
- 12 cold water from the Lake of Memory to drink.”
- 13 And they will announce you to the Chthonian King,⁴⁰
- 14 And they will grant you to drink from the Lake of Memory.
- 15 And you too, having drunk, will go along the sacred road on which other
- 16 glorious initiates and *bacchoi* travel. (*GII* 2007)

This is a detailed underworld itinerary or road map. The instructions come in the form of topographical features and groups of figures. The voice of the

³⁹ Published readings of this line vary: contrast the text of Bernabé (2005) fr. 474F. Pugliese Carratelli and Foti (1974): 111 originally had ὕδς βαρέας καὶ οὐρανοῦ ἀστερόεντος (“I am the son of Heaviness and Heaven”); cf. Pugliese Carratelli and Foti (1974): 121 for the explanation (earth is heavy!). Marcovich (1990): 76 retained this reading, but Pugliese Carratelli (2001) and (2003) accepts Γῆς παῖς εἰμι, after Sacco (2001); see Bernabé and Jiménez San Cristóbal (2008): 39n133.

⁴⁰ On the different reading in Bernabé’s edition of the Greek text, which differs from *GII*, see Bernabé and Jiménez San Cristóbal (2008): 49.

anonymous guide instructs the dead person to look for a spring and tree on the right, with a group of souls drinking from it. However tempting this might look, the soul should not be distracted into taking a right turn at this point, but follow the road straight on to the Lake of Memory. It will encounter a group of characters (guards) to whom it should repeat a prearranged formula, “I am a son of earth and starry sky.” If it passes this test it will be introduced to the gods of the underworld and allowed to continue along the Road of the Enlightened. The journey narrative of the leaf is cast as a *dialogue*; one that is “woven into the context of a story which follows from the initiate’s expectation of a walk through the netherworld.”⁴¹

It would obviously be foolish to try to establish a list of exact parallels between the Hipponion leaf and the landscape of the *Phdr.* Nor would that be consonant with how Plato uses the Orphic tradition, modifying it and playing on its raw materials.⁴² That said, the Hipponion leaf does seem to offer a striking parallel with the *Phaedrus* landscape. In the leaf, there’s what looks like an etymological play in line 4 between ψυχαί and ψύχονται: the unknowing “souls” (*psychai*) succumb to the urge to “cool off” (*psychontai*).⁴³ Later, in line 7, the enlightened soul will encounter the *proper* source of coolness, “cold flowing water,” ψυχρὸν (*psychron*) ὕδωρ πορεύον. *Phdr.* 230b6 contains all three elements of this collocation: ῥεῖ μάλα ψυχροῦ ὕδατος, “the spring is very pretty as it *flows* under the plane tree, and its *water* is very *cool*, to judge by my foot.” It is as though Socrates and Phaedrus have arrived at the right body of water, signaled by the echo of the collocation from the gold leaf.

Perhaps this collocation would not be so striking—after all, cold and flowing are attributes of water—without the full context: that of reincarnation or metempsychosis. Bernabé and Jiménez San Cristóbal see a reference to reincarnation in the problem of the first fountain. They perceive a play on the meanings of *psychontai* as both “cool down” and “receive life.”⁴⁴ The souls that “refresh themselves” at the first fountain “receive life”—false or mortal life.⁴⁵ Thus, drinking from the first spring—which some scholars assimilate to the River Ameles, the River of Forgetfulness in the Myth of Er (*Rep.* 621a5,

⁴¹ Betz (2011): 103.

⁴² Bernabé and Jiménez San Cristóbal (2008): 54: “It is clear . . . that Plato freely elaborated on Orphic motifs in the service of his own philosophical and literary interests.”

⁴³ On the etymological play, see Tortorelli Ghidini (1992); cf. Bernabé and Jiménez San Cristóbal (2008): 31–32.

⁴⁴ See *LSJ*, ψύχω.

⁴⁵ Bernabé and Jiménez San Cristóbal (2008): 32–33. Cf. Russo (1996): 44–45; Tortorelli Ghidini (2006): 42–44, 119–21; Merkelbach (1999): 9. The idea seems to originate with Propp (1972).

τὸν Ἀμέλητα ποταμόν)—excludes these unwary souls from the destiny of the blessed.⁴⁶

On the other hand, by drinking the “cold” water of the Lake of Memory the soul is liberated from the cycle of reincarnation: as Pugliese Carratelli put it, “Nei testi orfici delle lamine . . . l’acqua non a tutti accessibile di Mnemosyne appare un elemento indispensabile nel processo di purificazione e liberazione da ogni forma di vita terrena . . . alla definitiva interruzione del doloroso ciclo delle trasmigrazioni dell’anima da un corpo all’altro” (“In the Orphic texts of the leaves the water of Mnemosyne, not accessible to everyone, appears to be a vital element in the process of purification and liberation from all forms of earthly life . . . toward the final interruption of the circle of grief that is the cycle of transmigration of the soul from one body to another”).⁴⁷

By virtue of the memory of their mystic experiences the *mystai* can remove themselves from the circle of reincarnation for good. They have to remember what they’ve *seen*.⁴⁸ The water of Mnemosyne is the passport to life outside incarnation: it provides a new eschatology for the initiate.⁴⁹ “In its mnemonic faculty, the intellect recognises its ability to overcome what is limited, sensible and mortal, in such a way that the soul becomes aware of its identity by means of memory, that is, by means of its own experience, its responsibility for its actions, and their consequences after death.”⁵⁰

To return to Plato: the principal theme of the *Phdr.* is memory, in the form of *anamnesis*, recollection of prebirth memories (*Phdr.* 249b6–c4):⁵¹

δεῖ γὰρ ἄνθρωπον συνιέναι κατ’ εἶδος λεγόμενον, ἐκ πολλῶν ἰὸν αἰσθήσεων εἰς ἓν λογισμῷ συναιρούμενον· τοῦτο δ’ ἐστὶν ἀνάμνησις ἐκείνων ἃ ποτ’ εἶδεν ἡμῶν ἡ ψυχὴ συμπορευθεῖσα θεῶν καὶ ὑπεριδοῦσα ἃ νῦν εἶναι φαμεν, καὶ ἀνακύψασα εἰς τὸ ὄν ὄντως.

⁴⁶ Tortorelli Ghidini (2006): 118. Some scholars, including Tortorelli Ghidini, cite Pausanias 9.39.8, on the oracle of Trophonius at Lebadeia, with its two springs, that of Mnemosyne and that of Lethe (cf. Albinus 2000: 144).

⁴⁷ Pugliese Carratelli (1975): 230, my translation.

⁴⁸ Marcovich (1990): 77: “It is common knowledge that the assistance of Memory is necessary for the initiates in mysteries enabling them to *remember* the mystic secrets and instructions.” On the lake of Mnemosyne, see further Tortorelli Ghidini (2011).

⁴⁹ On these points in relation to the Hipponion leaf, see Pugliese Carratelli and Foti (1974): 117–19; Marcovich (1990): 77. Marcovich sees the gold leaf itself as a gift from Mnemosyne to the initiate, “a golden passport to paradise.” Further on the role and significance of Mnemosyne see Bernabé and Jiménez San Cristóbal (2008): 15–19.

⁵⁰ Bernabé and Jiménez San Cristóbal (2008): 17. On revelation as a means of self-determination for the soul, see pp. 156–58 above.

⁵¹ On *anamnesis* see Sedley (2006), and further p. 248 below.

For a human being must understand a general conception formed by collecting into a unity by means of reason the many perceptions of the senses; and this is a recollection (*anamnesis*) of those things which our soul once beheld, when it journeyed with [the god] and, lifting its vision above the things which we now say exist, rose up into real being.

Memory here gives access to the true nature of the universe, through *anamnesis*. A reader alive to the parallels, and versed in the Orphic literature of revelation, would discern that Socrates and Phaedrus are metaphorically undergoing not just a *katabasis* but a *mystic katabasis*, as they move away from the city. What they arrive at in the central myth is the philosophical equivalent of the Lake of Memory: Socrates' account of *anamnesis*.

2. The Vision

In the *Phaedrus*, Socrates and Phaedrus perform a linear journey of descent and reemergence: a quasi-*katabasis*. Paradoxically, their discussion from this vantage point leads to the surface of the *universe*, in the central myth. This central myth marries mystic vision with the idea of the spherical universe. In it, the souls of the gods, envisaged in the form of composite beings made up of charioteers with teams of two compliant horses (247b2), are carried around by the *periphora* (rotational motion) of the universe, so that they see the forms of true things outside it (247b7–c2):

ἔξω πορευθεῖσαι ἔστησαν ἐπὶ τῷ τοῦ οὐρανοῦ νώτῳ, στάσας δὲ αὐτὰς περιάγει ἢ περιφορὰ, αἱ δὲ θεωροῦσι τὰ ἔξω τοῦ οὐρανοῦ.

They travel outside and take their stand upon the outer part of the heavens, and positioned like this they are carried round by its revolution and gaze on the things outside the heavens.

The souls of the gods see the region above the heavens for one complete circuit (*periodos*, 247d3–7):

ἰδοῦσα διὰ χρόνου τὸ ὄν ἀγαπᾷ τε καὶ θεωροῦσα τάληθῃ τρέφεται καὶ εὐπαθεῖ, ἕως ἂν κύκλῳ ἢ περιφορὰ εἰς ταὐτὸν περιενέγκῃ. ἐν δὲ τῇ περιόδῳ καθορᾷ μὲν αὐτὴν δικαιοσύνην, καθορᾷ δὲ σωφροσύνην, καθορᾷ δὲ ἐπιστήμην . . .

[The soul] is glad at last to see what is and is nourished and made happy by gazing on what is true, until the revolution (*periphora*) brings it around in a circle to the same point. In its circuit (*periodos*) it catches sight of justice itself, of self-control, of knowledge . . .

Not only those of the gods but *all* souls participate in the cycles of the universe to some degree (248a1–8):

αἱ δὲ ἄλλαι ψυχαί, ἡ μὲν ἄριστα θεῶ ἐπομένη καὶ εἰκασμένη ὑπερῆρεν εἰς τὸν ἔξω τόπον τὴν τοῦ ἡνιόχου κεφαλὴν, καὶ συμπεριηγέχθη τὴν περιφοράν, θορυβουμένη ὑπὸ τῶν ἵππων καὶ μόγισ καθορώσα τὰ ὄντα· ἡ δὲ τοτὲ μὲν ἦρεν, τοτὲ δ' ἔδυ, βιαζομένων δὲ τῶν ἵππων τὰ μὲν εἶδεν, τὰ δ' οὐ. αἱ δὲ δὴ ἄλλαι γλιχόμεναι μὲν ἅπασαι τοῦ ἄνω ἔπονται, ἀδυνατοῦσαι δέ, ὑποβρύχαι συμπεριφέρονται . . .

Of the other souls, the one which follows a god best and has come to resemble him most raises the head of its charioteer into the region outside, and is carried round with the revolution (*periphora*), disturbed by its horses and scarcely catching sight of the things that are; while another now rises, now sinks, and because of the force exerted by its horses sees some things but not others. The remaining souls follow after them, all of them eager to rise up, but unable to do so, and are carried round together under the surface . . .

Plato's universe contains beneath its unruffled surface a subaqueous chariot race. This chariot race happens within the bubble whose skin is the periphery of the universe. The universe, with its circular motion, is really a giant convection system, a whirlpool inside a bubble. The bubble is permeable: its surface tension can be broken. The space below, or inside, the skin of the bubble is like the sea below its surface. The souls are rolled about in "the depths" (ὑποβρύχαι, *hypobrychiai*, from βρύξ, *bryx*, "depth"), like swimmers in the surf struggling (γλιχόμεναι, *glichomenai*, *Phdr.* 248a6) against its power.⁵² For the souls inside the bubble, they must break thorough the

⁵² Plutarch imitates this passage at *De facie in orbe lunae Fac.* 943C8–D3. In Plutarch, souls are first released from the body on earth; they head for the moon. But when they reach the moon, the struggle isn't over: they have to get a foothold and cling on, despite the moon's efforts to shake them off (*Fac.* 943C8–D3). At 943D1 Plutarch borrows Plato's participle γλιχομένης (*glichomenas*) from *Phaedrus* 248a6 to describe the souls struggling against the surge. On the *De facie* see further discussion in chapter 9.

surface, just as a swimmer, who has been hurled to the bottom by a wave, has to struggle to get to the top again.

The notion of the spherical universe is not just a backdrop, but an essential component of Plato's eschatology. The "sprinkling of science" with which Socrates seasons his myth of the soul in the *Phaedrus* is the notion of the spherical universe that will be fully worked out, in the abstract, in the *Timaeus*. The souls in the *Phaedrus* are implicated in the cycles—*periphora* and *periodoi*—of the universe: terms we've examined earlier in the context of the *Timaeus*.⁵³ These are both spatial—in the sense of the "revolutions" that the souls physically follow—and temporal—in the sense of "periods." The latter sense is also the measure of reincarnation.

The "period" of reincarnation for some souls is different, according to how much they "see" (248e5–249b1):

εἰς μὲν γὰρ τὸ αὐτὸ ὅθεν ἤκει ἡ ψυχὴ ἐκάστη οὐκ ἀφικνεῖται ἐτῶν μυρίων—
οὐ γὰρ πτεροῦται πρὸ τοσούτου χρόνου—πλὴν ἡ τοῦ φιλοσοφῆσαντος
ἀδόλως ἢ παιδευαστήσαντος μετὰ φιλοσοφίας, αὗται δὲ τρίτῃ περιόδῳ
τῇ χιλιετεί, ἐὰν ἔλωνται τρίς ἐφεξῆς τὸν βίον τοῦτον, οὕτω πτερωθεῖσαι
τρισχιλιοστῷ ἔτει ἀπέρχονται. αἱ δὲ ἄλλαι, ὅταν τὸν πρῶτον βίον
τελευτήσωσιν, κρίσεως ἔτυχον, κριθεῖσαι δὲ αἱ μὲν εἰς τὰ ὑπὸ γῆς δικαιοτῆρια
ἐλθοῦσαι δίκην ἐκτίνουσιν, αἱ δ' εἰς τοῦρανοῦ τινα τόπον ὑπὸ τῆς Δίκης
κουφισθεῖσαι διάγουσιν ἀξίως οὐ ἐν ἀνθρώπου εἶδει ἐβίωσαν βίου.

For each soul only returns to the place from which it has come after ten thousand years; for it does not become winged before then, except for that of the man who has lived the philosophical life without guile or who has united his love for his boy with philosophy; and these souls, with the third [period, *περίοδος*] of a thousand years, if they choose this life three times in succession, on that condition become winged and depart, in the three-thousandth year. But the rest, when they finish their first life, undergo judgement, and after judgement some of them go to the places of correction under the earth and pay full penalty, while others are lifted up by Justice

⁵³ This is the same terminology of rotation and periodicity we've seen in the *Timaeus* (discussed in the Intermezzo, pp. 161–66). At *Tim.* 47b6–8 (pp. 128–29) contemplation of the celestial circles is what brings the soul into line with the universe; at *Phdr.* 248a4 the souls strive to "see" the true things above the surface of the universe. The verb of contemplation (*καθοράω*) is the same in each case. In *Phdr.* 248a1 we see the soul following (*ἐπομένῃ*, *hepomenē*) its designated god; at *Tim.* 90c7–d1 (p. 162) the notion of following the god is abstracted to the notion of following (*συνεπόμενον*, *sun-hepomenon*) the revolutions (*periphorai*) of the universe.

into some region of the heavens and live a life of a kind merited by their life in human form.

The place to which the souls return, whence they came, is the region above the heavens, where true incorporeal things exist. The length of time for which the soul must be incarnated, therefore exiled from this true region, varies: philosophers need only three periods—*periodoi*—of one thousand years before they escape the cycle;⁵⁴ other souls are judged and sent through a kind of passport control to a place that is down or up according to their actions in life.

The differential between souls here is not unconnected to the difference between souls in the Hipponion gold leaf, where initiated souls, remembering their instruction, must discern the difference between the cold water from the first fountain (interpreted, above, as that of “false life” or reincarnation) and that from the lake of Mnemosyne, which gives release from the cycle.

Indeed, the climax of the *Phaedrus* sets out a vision constructed on the model of initiation into the mysteries, albeit the mysteries of the *universe* (250b5-c5):

κάλλος δὲ τότ' ἦν ἰδεῖν λαμπρόν, ὅτε σὺν εὐδαίμονι χορῷ μακαρίαν ὄψιν τε καὶ θέαν, ἐπόμενοι μετὰ μὲν Διὸς ἡμεῖς, ἄλλοι δὲ μετ' ἄλλου θεῶν, εἰδόν τε καὶ ἐτελοῦντο τῶν τελετῶν ἦν θέμις λέγειν μακαριωτάτην, ἦν ὠργιάζομεν ὁλόκληροι μὲν αὐτοὶ ὄντες καὶ ἀπαθεῖς κακῶν ὅσα ἡμᾶς ἐν ὑστέρω χρόνῳ ὑπέμενεν, ὁλόκληρα δὲ καὶ ἀπλᾶ καὶ ἀτρεμῇ καὶ εὐδαίμονα φάσματα μυούμενοι τε καὶ ἐποπτεύοντες ἐν αὐγῇ καθαρᾷ, καθαροὶ ὄντες . . .

But before it was possible to see beauty blazing out, when with a happy company they saw a blessed sight before them—ourselves following with Zeus, others with different gods—and were initiated into what it is right to call most blessed of mysteries, which we celebrated, whole in ourselves, and untouched by the evils which awaited us in later time, with our gaze turned in our final initiation towards whole, simple, unchanging and blissful revelations, in a pure light, pure ourselves . . .

This passage drips with mystery terminology. ὠργιάζομεν (*ōrgiazomen*) for instance is from ὀργιάζω (*orgiazō*, “to celebrate ὄργια, *orgia*, sacred

⁵⁴ The symbolism of the number three may be Orphic, in the context: see Albinus (2000): 127.

rites”); μινούμενοι (*mioumenoi*) is from μινέω (*mineō*, “to be initiated into the mysteries,” whence also μύστης, “initiate” and μυστήρια “mysteries”); ἐποπτεύοντες (*epopteuontes*) is related to ἐποπτεία (*epopteia*), the highest grade of the Eleusinian mysteries. The fact that this last term is identified as Eleusinian does not detract from my argument: the narrative of the *Phaedrus* writ large is an *eclectically* “mystic” progression from journey to vision, with particular leanings (I will argue) to the kind of progression we also find in the Orphic gold leaves.⁵⁵

We see in the passage just quoted the climax, also, of the theme of purification in the *Phaedrus*. The souls’ original vision was received ἐν αὐγῇ καθαρᾷ (*en augēi katharai*, “in a pure light”); during it, the souls themselves were pure (καθαροί, *katharoi*). Purification is a dominant theme of the *Phdr.* The landscape at 229b7–8 offers a kind of virginal purity—its water is καθαρὰ καὶ διαφανή. It becomes the setting for Socrates’ self-purification (243a2–5):

ἐμοὶ μὲν οὖν, ὦ φίλε, καθήρασθαι ἀνάγκη: ἔστιν δὲ τοῖς ἀμαρτάνουσι περὶ
μυθολογίαν καθαρμὸς ἀρχαῖος, ὃν Ὀμηρος μὲν οὐκ ᾔσθετο, Στησίχορος δέ.

Now I, my friend, must purify myself (*kathērasthai*); and for those who have sinned in relation to mythology there is an old purification, which Homer didn’t understand, but Stesichorus did.

Socrates has previously delivered a speech about love (*Phdr.* 237b2–238c4) that he now thinks is ἀσεβῆ, “impious” (242d6), because it reduced Love (the god Eros) to a human level, whereas he is really a god. Socrates must therefore atone for his guilt, like Stesichorus, by composing a Palinode (which becomes, in the *Phdr.*, the central myth).⁵⁶ Socrates’ progression from blindness to sight involves a rewriting of eschatology in the central myth, which lifts eschatology out of its underworld setting and repositions it with reference to the philosophical universe. This is the “purification.”

⁵⁵ Yunis (2011) ad loc. believes Plato drew on the *Eleusinian* mysteries for his terminology. Ἐποπτεία (“vision”; cf. Plato’s ἐποπτεύοντες) for instance came at the climax of the rites. Likewise Werner (2012): 20–23 identifies aspects of the mysteries in the opening scene of the dialogue: he sees a connection between the crossing of the River Ilissus and the Eleusinian mysteries, which traditionally went “out of town” (cf. p. 223 above).

⁵⁶ The archaic lyric poet Stesichorus, like Homer, claimed that Helen eloped to Troy with Paris; his hubris against Helen was offensive to the gods; and so he was punished with blindness, after which he recanted, claiming that it was only Helen’s *eidolon* (cf. *Rep.* 586c4–6) that went to Troy, not Helen herself, upon which, Stesichorus’ sight was restored.

But Moira overcame me and the other immortal gods and the
 star-flinger with lightning.
 I have flown out of the heavy, difficult circle,
 I have approached the longed-for crown with swift feet,
 I have sunk beneath the breast of the Lady, the Chthonian Queen,
 I have approached the longed-for crown with swift feet.
 “Happy and blessed, you will be a god instead of a mortal.”
 A kid I fell into milk.

What are the points of contact between the *Phdr.* and the A-type gold leaves? First, there is a narrative of displacement in each. Calame characterizes the A-types leaves as “reproduc[ing] a narrative journey of initiation”⁶⁰ in which the deceased “goes through a phase of rupture from the old order marked by death, then through an interval that ensures the transferal into the underworld, in order to finally reach the moment of integration into the world of the blessed.”⁶¹ You could see this kind of progression behind Socrates’ and Phaedrus’ journey in the *Phdr.* First they are removed from normal life, passing outside the walls and crossing the river; Socrates is momentarily naturalized in the underworld landscape in the form of his Typhonic persona, and his inspired second speech represents the moment of revelation or “integration [as a philosopher] into the world of the blessed.”

We’ve already discussed how the period of reincarnation differs in the *Phdr.* according to how much the souls have seen; and we’ve posited that this may be parallel, in some sense, to the ability of souls to differentiate between the two types of water in the B leaves. A similar distinction emerges in the A-type leaves too. Zuntz in particular saw a distinction between those who, following the standard afterlife route, have to make amends for injustice, and hope to join the blessed on that basis, and those who, like the soul in the *Thurii* leaf, have no amends to pay and have escaped the “wheel” (of reincarnation), presumably because of their privileged status as initiates.⁶² This kind of soul can say (*GII* no.5, line 5), “I have flown out of the heavy, difficult circle.” Bernabé and Jiménez San Cristóbal too interpret κύκλος as the cycle

⁶⁰ Calame (2011): 210.

⁶¹ Calame (2011): 211–12.

⁶² Zuntz (1971): 336; a doctrine “drawn upon by Plato,” as Zuntz comments in passing (p. 337). Cf. Albinus (2000): 141–43. Albinus here connects the κύκλος of the A texts with the topography of the B texts: the souls must avoid the water of forgetfulness (as he interprets the first fountain of the B texts) to escape the “wheel of generation” (p. 143).

of reincarnation.⁶³ They assimilate the cycle of reincarnation to the cycles of the universe: "A cyclical model of events had been developed since ancient times in Greece, based naturally on the succession of the seasons . . . In the light of this principle, it can be supposed that the believer considers that his individual destiny is not clearly distinguished from the cosmic 'circle'."⁶⁴ We've seen how the souls in the *Phaedrus* are implicated in the cycles—*periphora* and *periodoi*—of the universe.

On the analogy of the Thuri leaf, the souls of the philosophers will more quickly gain a status tantamount to the soul of the initiate, who has "flown out of the heavy, difficult circle." The metaphor of "becoming winged" (*Phdr.* 248e5–249b1; see p. 235 above) is the counterpart of the A leaf's ἐξέπταν, "I flew forth." We find in the leaf the metaphor of flying out of the circle of reincarnation; Plato embroiders it, so that the notion of the wing becomes the key idea of the central myth of the *Phdr.* Given that the imagery corresponds in other ways, I think it's plausible that the metaphor of the wing could have been suggested to Plato by the gold leaf-type text. Socrates begins, "The nature of a wing is to carry what is heavy upwards, lifting it aloft to the regions where the race of the gods resides," πέφυκεν ἡ πτεροῦ δύναμις τὸ ἐμβριθεῖς ἄγειν ἄνω μετεωρίζουσα ἢ τὸ τῶν θεῶν γένος οἰκεῖ, (246d6–7). We've seen how the souls of philosophers "become winged," i.e. "fly out of the difficult circle" more quickly. And the theme of the wing is reprised in verse at the culmination of the central myth, when Socrates climactically breaks into Homeric hexameters (252b8–9):

τὸν δ' ἦτοι θνητοὶ μὲν Ἐρωτα καλοῦσι ποτηνόν,
ἀθάνατοι δὲ Πτέρωτα, διὰ πτεροφύτορ' ἀνάγκην.

Mortals call him winged Love, but the immortals call him The Winged One, because he must needs grow wings.

Rowe (1986) wryly comments ad 252b6, "The incompetence of the second line—if we are expected to know that it is invented for the occasion—once again separates Socrates from real poets and their business." My view is different: Socrates is not above speaking in the broken hexameters of the leaves, at the climactic point of his revelation. In fact, you could argue, it is only by

⁶³ Bernabé and Jiménez San Cristóbal (2008): 117.

⁶⁴ Bernabé and Jiménez San Cristóbal (2008): 118.

lapsing into hexameters that Socrates can bring to the theme of revelation in the *Phdr.* the full weight of its mystic history.

Conclusion

Let's return, in conclusion, to the idea of an *hieros logos*, a complete "master text" that lies behind the Orphic gold leaves. Janko (see above, p. 229) proposed an archetype behind the B-type leaves. Riedweg (2011) extended that idea to the whole corpus of leaves, placing the A- and B-type gold leaf texts together in an assemblage that almost amounts to a "stations of the cross" (my phrase), i.e. a complete ritual narrative or "liturgy."⁶⁵ He reconstructs the whole archetype, starting with B texts, putting the A texts end to end with them to form a continuous sequence. He believes this sequence represents "a hexametric poem which constitutes the unifying bond of all the leaves."⁶⁶

Without adhering too closely to the detail of Riedweg's reconstruction, the idea that the leaves may be excerpts from a continuous narrative is a suggestive one. Could it be that the "sacred narrative" of the leaves can help to shed light on the entire progression of Plato's dialogue? I would see such a narrative as implied by the *Phaedrus*. We've seen that there's a journey-to-revelation progression in the *Phaedrus* and that the journey or frame bears affinities to the underworld topography of the gold leaves. Read this way, we can see Socrates' journey, parallel to the B-type leaves, as preparation for the revelation delivered in the central myth, which intersects with the themes of the A-type leaves. If we take the Orphic *hieros logos* progression from journey to revelation—a progression that has left its traces in the gold leaf texts—as model for the *Phdr.*, this is one way of explaining the two types of space there: the tradition of the mysteries we call Orphic unites journey and vision, frame and revelation.

⁶⁵ This theory finds both supporters and opponents in the scholarship: cf. Tzifopoulos 2010: 5 and 108, for example; Bernabé and Jiménez San Cristóbal (2011): 85–86; Edmonds (2011b): 258–59; Obbink (2011). Riedweg (2011): 222–23 discusses the question of an archetype, before presenting his own. See now Janko (2016): 104, 126–27. Janko startlingly conjectures Pythagoras as its putative author.

⁶⁶ Riedweg (2011): 252–53. Cf. p. 245: "Given the various links between the leaves (links that have become stronger and stronger due to new discoveries over the last few years), it seems to me generally much more economical to start from the hypothesis of a single hexametric poem." On this theory the *hieros logos* would belong to a ritual of initiation in which the poem was probably made known to the initiate by the Orphic priest (*orpheotelestes*).

So, to conclude: in this chapter we've seen how the journey-revelation paradigm of afterlife texts manifests itself in the *Phaedrus*. Socrates and Phaedrus enter a landscape the salient features of which are liminality and displacement, and which is figured by hybrids and by particular elements of topography. We've noted an intersection between the *Phaedrus* and the B-type gold leaves particularly through the motif of water. This water is significant, for it brings with it a wider context of reincarnation. In the gold leaves, the first fountain is to be avoided, because it leads back to the circle of incarnation. The Fountain of Mnemosyne is to be sought, as release from it; in the *Phaedrus* this motif is transfigured through philosophical knowledge. In this case, philosophers who have conscious knowledge (*anamnesis*) of the preincarnation vision escape the wheel more quickly.

The culmination of the central myth in the *Phaedrus* is, as we've seen, couched in terms of a mystic revelation. Prominent among these terms is that of purity—καθαρός (*katharos*). By remembering the vision in the pure, prebirth state, you can be released from the circle of reincarnation. Here again are points of contact with the gold leaves, in this case, the A-type texts: not only purity, but also the idea of the grievous circle, of wings, of hexameter verse. Together, the B- and A-type leaves form a sort of *roman-à-clef* for understanding the progression of the *Phaedrus*, from journey to vision.

Yet there's a difference too. Plato substitutes for the Orphic mysteries the mysteries of the universe, his "sprinkling of science": knowledge of the universe is essential, here as in the *Republic*, for the soul's self-knowledge and ultimately for its fate in the afterlife.

8

The Lyre and the Cloak

The Cosmology of Soul in Plato's *Phaedo*

What counts here—first and last—is not so-called knowledge of so-called facts, but vision—seeing.

—Josef Albers, *Interaction of Color*

Introduction

In the *Phaedo*, journey and vision are one. We are all, all the time, on an underworld journey, since we live in the “creases” of the earth, not on its surface.¹ At the same time, the True Earth of the *Phaedo* mirrors in its shape the spherical universe of the vision, as we’ve seen it in the Spindle of Necessity in the *Republic* and in the flight of souls in the *Phaedrus*.² The fate of the soul is integrated with the shape and motive forces of the earth. This is a true geography of soul.

To pick up the threads, for a moment, of Proserpina’s tapestry, discussed in chapter 3, we saw there “two geographies.” As defined by Ptolemy (*Geog.* 1.1), γεωγραφία (*geōgraphia*) is distinct from χωρογραφία (*chōrographia*). The quality of the former is to show the known earth as something single and continuous (μίαν τε καὶ συνεχῆ). *Chōrographia*, on the other hand, is about human habitation amid the individual landforms on the surface of the earth. We saw in chapter 3 that Proserpina’s tapestry “map” is not a logical

¹ Nightingale (2002) 234: in the *Phaedo*, Socrates locates his “known world” beneath the surface of the earth, “thus making it part of an elaborate underworld system.”

² I am in no doubt as to the sphericity of Plato’s earth in the *Phaedo*, not least because it is a vision parallel to the representation of the spherical universe in the *Republic* and *Phaedrus*. Any debate about the shape of the earth in the *Phaedo* is unnecessary: “Il est simplement manifeste que Socrate conçoit la terre, mais aussi le monde dans son ensemble (le ciel), *comme une sphère*,” “It’s simply obvious that Socrates conceives of the earth, but also of the world in its totality, *as a sphere*” (Pradeau 1996: 81, with my translation and emphasis); cf. Pradeau (1996): 81n2; Roller (2010): 5; Furley (1989): 24; contra Calder (1958); Morrison (1959); Lloyd (1968); Gallop (1982); Sedley (1989–90).

unfolding of space but a bold simultaneous projection of both types of geography, in the form of globe and *oikoumene*: a hybrid of two representations of space, a holographic flickering from one image to another. Within that paradoxical projection of space, there's an additional tension between spherical and stratified conceptions of the world. We saw that Proserpina adds the *manes*, the dead, to the zonal model of the earth (*DRP* 1.266–8). Although the addition of the *manes* seems to follow seamlessly from the description of the zones, in fact the world of the dead doesn't "really" belong anywhere in the spherical universe: it is a layer of the *stratified* universe as represented in the cosmologies of Homer and Hesiod. In Claudian, it sits at the bottom of the spherical earth.

Claudian, far from being a lone, late, confused voice, is the culmination of a tradition of such simultaneous representations of different kinds of space. We see the idea of the underworld-antipodes in earlier texts that include the pseudo-Platonic *Axiochus*, and Virgil, *Georgics* 1.233–44. Visually Figure 5 (p. 91), the generic map that accompanies manuscripts of Ptolemy's Handy Tables, shows a startling combination of the zone map with the underworld, seen particularly in the juxtaposition in the south frigid zone of ἀχερυσία λίμνη, "the marsh of Acheron," and νότιος πόλος, "the South Pole." Acheron belongs to Homeric mythology;³ the South Pole to the geometric zone-model of the spherical earth. Two worlds collide. This map simultaneously visualized elements of myth and geography in the same way our texts do.

In all of these instances, the presence of the underworld alongside the spherical universe is a clumsy juxtaposition, as opposed to a complete assimilation. What we have in the *Phaedo*, however, is a complete synthesis of the underworld with the "geographic" earth. Tartarus (*Phaedo* 111e7–112e3) is the lowest point of the world, but it is also the center of the *sphere*—not the antipodes, as in the instances already mentioned.⁴ There is no uneasy tension between spherical and stratified models in the *Phaedo*: this is a full *integration* of underworld with spherical earth.

The result of Plato's assimilation of the underworld, the landscape of the soul, with the "scientific" earth, is that *earth and soul become analogous*. They can be studied in the same way. How this is so will become clear in the rest of this chapter.

At *Phaedo* 61d10–e3 Socrates announces his topic—the afterlife:

³ See e.g. *Od.* 10.513.

⁴ On the center of the sphere as its lowest point, see Pradeau (1996): 90; and below, p. 286.

καὶ γὰρ ἴσως καὶ μάλιστα πρέπει μέλλοντα ἐκεῖσε ἀποδημεῖν διασκοπεῖν τε καὶ μυθολογεῖν περὶ τῆς ἀποδημίας τῆς ἐκεῖ, ποῖαν τινὰ αὐτὴν οἰόμεθα εἶναι . . .

And it's perhaps especially fitting for one who is about to take his leave to examine the life beyond and tell stories about it: what kind of experience we think it is . . . (Emlyn-Jones and Preddy 2017)⁵

Note Socrates' term of inquiry here—ποῖαν τινά, *poian tina*, “what sort of thing.” At *Phaedo* 108c2–7 Socrates vaults from eschatology to cosmography in a sprightly intuitive leap:

ἡ δὲ καθαρῶς τε καὶ μετρίως τὸν βίον διεξεληθοῦσα, καὶ συνεμπόρων καὶ ἡγεμόνων θεῶν τυχοῦσα, ᾤκησεν τὸν αὐτῇ ἐκάστη τόπον προσήκοντα. εἰσὶν δὲ πολλοὶ καὶ θαυμαστοὶ τῆς γῆς τόποι, καὶ αὐτὴ οὔτε οἷα οὔτε ὅση δοξάζεται ὑπὸ τῶν περὶ γῆς εἰωθότων λέγειν.

On the other hand the soul that has passed its life in a pure (καθαρῶς, *katharōs*⁶) and disciplined way and actually has gods as its fellow travelers and leaders, lives in the place that is appointed for each one. There are many wonderful places on the earth and it is itself neither of the kind nor size imagined by those who are accustomed to talk about the earth.

The hinge between the topics of soul and earth could not be more casual: a simple connective δέ. The seamless transition is appropriate, because the shape of the cosmos is a function of the fate of souls, and vice versa. Again, note Socrates' terms of inquiry—οἷα (*hoia*) and ὅση (*hosē*): what it is like and how big it is. The terms of inquiry recall the terms used of the afterlife at 61d10–e3. Like the soul, the earth will be subject to forensic study. Socrates' proposed forensic examination of the afterlife is akin to the qualitative and quantitative examination of the earth that follows. The two entities—soul and earth—can be examined in the same terms because, in the *Phaedo*, the soul is “harmonized” with the nature of the world.

⁵ Greek text and translations of Plato's *Phaedo* in this chapter from Emlyn-Jones and Preddy (2017).

⁶ On the theme of purity in the *Phaedrus*, see pp. 238–42 above. Compare also the notion of “following the gods” (*Phdr.* 248a1–8), p. 234 above.

Before passing to this double examination, however, we should (as Socrates will do) redefine the terms of the inquiry. It is often said that “those who habitually discourse about the earth” (*Phd.* 108c7) refers to geographers; the *Phaedo* is customarily compared with ancient geographic literature.⁷ But a rereading of Socrates’ agenda shows that this is precisely not what he’s doing: he will show that the earth is *not* how these people see it.

The physical “geography” of the *Phaedo* is no more (or less) “real” than the Spindle of Necessity in the *Republic* or the description of the “regions above the heaven” in the *Phaedrus*. As with the harmony of the spheres (chapter 6) we should not fall into the trap of trying to interpret it literally. Socrates’ playful gestures toward geography only serve, in the final analysis, to accentuate the *difference* between his account and “geography.” In the *Phaedo*, the “scientific” model of the spherical earth becomes the symbolic vehicle for what’s more real—the account of the nature of souls.

1. Socrates’ Redefinition of Harmony

The priority of the argument in the *Phaedo* is not, in my view, “geography” but rather a redefinition of *harmony*. An account of Socrates’ argument in the *Phaedo*, up to his description of the True Earth, will be useful. But I do not intend to evaluate Socrates’ argument in the idiom of philosophical scholarship: to say what Socrates really meant, or what he should have said; I wish merely to try to clarify its progression and intent.

Socrates’ redefinition of harmony proceeds in several stages. The first part of his project (from *Phd.* 64c) is to show that death is the separation of soul and body. You can only obtain knowledge of reality by removing yourself, as far as possible, from the senses of sight and hearing (ἀπαλλαγείς ὅτι μάλιστα

⁷ Thus Nightingale (2002): 231, on *Phd.* 108c: “Here Plato deliberately locates the narrative in the context of a *specific genre, that of geography*” (my emphasis). Cf. Ibid. p. 234, “I believe that the Greek geographic writings offer a *more direct model* for most of the elements in Socrates’ tale” (my emphasis). Burnet (1911) on *Phd.* 113a7 commented on the similarity of the *Phaedo* with the *Periplus* of the Carthaginian Hanno (c. 500 BCE; see Dueck 2012: 10). The common element of such writings, which are to be found in *Geographi Graeci Minores* (Müller 1855–61), is the blow-by-blow description of places and peoples. However, the more you look at these writers, the more obvious it is that there is no real common ground between the *Phaedo* and the early geographical writings: their kind of ethnography is foreign to the mythical description of the earth in the *Phaedo*. The reading of the *Phd.* as a “geography” has authority, however: it goes back to Aristotle. In *Meteor.* 2.355b33–356a33 Aristotle treats Socrates’ account of the workings of the earth in the *Phaedo* as a “failed geography lesson” (Annas 1982: 120). Aristotle’s is a banal hyperrationalist reading: he interprets Plato’s account purely in the light of physical evidence, what we know about the behavior of bodies of water. In this, he falls into the very trap Socrates is at pains to avoid in the *Phaedo*.

ὀφθαλμῶν τε καὶ ὠτῶν, “dispensing as far as possible with the eyes and the ears,” 66a4–5). The philosopher practices death daily, by separating soul from body. Everyone else faces death as the only alternative to greater evil: paradoxically, they exercise self-restraint (*sōphrosyne*, 68e4–5) through lack of self-control (τινὰ δι’ ἀκολασίαν αὐτοὺς σεσωφρονίσθαι, “they’ve been made temperate through some kind of self-indulgence,” 69a1–4). In other words, *sōphrosynē* in the face of death can be a kind of self-advertisement (or self-deception). But true qualities such as *sōphrosynē* are a “purification” akin to the mysteries (69c1–d4):⁸

τὸ δ’ ἀληθὲς τῷ ὄντι ἢ καθαρσίς τις τῶν τοιούτων πάντων καὶ ἡ σωφροσύνη καὶ ἡ δικαιοσύνη καὶ ἀνδρεία, καὶ αὐτὴ ἡ φρόνησις μὴ καθαρμός τις ἦ.

But the truth in reality, temperance (*sōphrosynē*) and justice and courage, may be a kind of cleansing of all these qualities, and wisdom itself may be some kind of purification.

Next (from *Phd.* 70b) is the proof of the existence of the soul after death. Do souls go to Hades? (70c4–6):

σκεψώμεθα δὲ αὐτὸ τῇδε πη, εἴτ’ ἄρα ἐν Ἅιδου εἰσὶν αἱ ψυχαὶ τελευτησάντων τῶν ἀνθρώπων εἴτε καὶ οὔ.

Let’s look at it in the following way: whether the souls of the dead are in fact in Hades or they aren’t.

Are they reincarnated? Because if so, these things would be sufficient proof that they continue to exist. Socrates’ project is to explore these ideas.

There follows the first proof of the immortality of the soul, what commentators refer to as “the cyclical argument”⁹ (72a13–b6):

εἰ γὰρ μὴ αἰὲν ἀνταποδοιδίη τὰ ἕτερα τοῖς ἑτέροις γιγνόμενα, ὥσπερ εἰ κύκλῳ περιμόντα, ἀλλ’ εὐθεῖά τις εἴη ἡ γένεσις ἐκ τοῦ ἑτέρου μόνον εἰς τὸ καταντικρὺ καὶ μὴ ἀνακάμπτοι πάλιν ἐπὶ τὸ ἕτερον μηδὲ καμπὴν ποιοῖτο,

⁸ On the terminology of the mysteries and the “Orphic” quotation in this passage of the *Phaedo*, see Burnet (1911) and Rowe (1993) ad loc. On parallel use of the terminology and themes of the mysteries and of Orphism in the *Phaedrus*, see pp. 236–37 above.

⁹ Rowe (1993) ad loc.; cf. Burnet (1911) ad loc.

οἷσθ' ὅτι πάντα τελευτῶντα τὸ αὐτὸ σχῆμα ἂν σχοίη καὶ τὸ αὐτὸ πάθος ἂν πάθοι καὶ παύσαιτο γιγνόμενα.

For if things did not always balance out with their opposites when they come into being, going round in a circle as it were, but if coming into being were only in a straight line from the opposite to the opposite and did not bend back to the other side and make the turn, do you realise that all dying things would have the same pattern and would undergo the same process and coming into being would cease?

Two ideas are combined here: a pendulum swing and a circle. The pendulum is the swing from generation to diminution and back again, i.e. life span; the circle is the ongoing continuity of cyclical units (pendulum swings) one after the other. This is what I've called the "tropic model" of generation.¹⁰ It functions by analogy with the two different kinds of motion found in the cycles of the natural world (the sun, the planets). The soul is immortal because it is part of this ongoing double cycle.

The second proof of its immortality is the theory of *anamnesis*, what is usually called by philosophers the "argument from recollection" (*Phaedo* 72e5).¹¹ *Anamnesis* or recollection is the theory that you remember knowledge you had before embodiment, even if you are not aware of it. The ability to recollect is a key argument for the soul's existence outside the body.¹² All learning is the recovery of the soul's prior knowledge, lost at each birth (75e). What we saw before birth, i.e. in a disembodied, pure-soul state, was the Forms (the absolute concepts of things). Sensory objects are imperfect "reminders" of the Forms.¹³ Knowledge of the thing recollected can be different from the thing itself, just as we can remember a lover from seeing an item that pertained to him, such as a lyre or cloak (73d5–10); or it can be similar, as when we see a picture of someone and remember them in the flesh (73e9–10). Sensible things are deficient in respect of the Forms in similar degree as an object or portrait is deficient in respect of the person it represents.

¹⁰ See p. 170 above.

¹¹ On this argument see in particular Sedley (2006); Franklin (2005); Kelsey (2000); Ackrill (1973). On *anamnesis* in the *Phaedrus*, see pp. 232–33 above.

¹² See Sedley (2006): 316–17.

¹³ Franklin (2005): 307: "we recollect when we come to have a Form in mind in response to a sensory experience" (cf. p. 310).

We all recollect, most of us instinctively comparing sensory objects to our unconscious knowledge of the Forms; in the case of philosophers, this knowledge is brought into consciousness.¹⁴ Only the philosopher has the capacity consciously to recognize the deficiency of the senses, because only a philosopher consciously remembers the Forms.¹⁵

Socrates' interlocutor Cebes is convinced by this argument that the soul exists before birth, but how about after death (77c)? This opens another phase of Socrates' argument, which now becomes about seen and unseen, the so-called argument from affinity: that the soul is invisible and therefore more similar to the invisible, i.e. the Forms, than to the visible world. The soul can, however, become infected, as it were, by the impressions it receives from the body (i.e. the senses) and therefore become more akin to the visible world.¹⁶ Apolloni for instance distinguishes between those souls that separate themselves from worldly attachments and its "material part" by practicing philosophy—and therefore at death go to dwell with the invisible—and those that, still unpurified, hang around on earth (81cd).¹⁷

Souls attached to the visible world behave in planetary fashion: they "wander about" (81d8–e2).¹⁸

αἱ περὶ τὰ τοιαῦτα ἀναγκάζονται πλανᾶσθαι δίκην τίνουσαι τῆς προτέρας τροφῆς κακῆς οὖσης. καὶ μέχρι γε τούτου πλανῶνται, ἕως ἂν τῇ τοῦ συνεπακολουθοῦντος, τοῦ σωματοειδοῦς, ἐπιθυμία πάλιν ἐνδεθῶσιν εἰς σῶμα.

[The souls of the bad] are forced to roam about (*planasthai*) in such places, paying the price for their former way of life which was evil. Moreover they roam about to the point when through their desire for their close companion, the corporeal, they are bound again to the body.

¹⁴ The argument of Franklin (2005): 290–91. Cf. p. 298: "Most people have no idea that the items of the sensible world are images of Forms. This is an awareness granted only by philosophical reflection. Nevertheless what all people can do is classify sensible particulars by reference, in most cases unknowing reference, to the Forms."

¹⁵ See Franklin (2005): 304–09, "The Deficiency of Sensibles."

¹⁶ Apolloni (1996) breaks down the idea of a strict body-soul dualism. In his view, which differs from some earlier commentators, the soul does have some capacity to feel, in proportion to its connection to the body and therefore the senses (p. 15); cf. p. 19, "The soul can derive some knowledge from sense-perception." Therefore "to the degree the soul believes the inconsistent messages the senses give it, the soul will still bear a resemblance to physical bodies." (p. 24).

¹⁷ Apolloni (1996): 30–32.

¹⁸ See also *Phd.* 108b11, where the soul "wanders" πλανᾶται. On our "planetary" souls, see p. 157.

These souls are reincarnated because of their immoderate attachment to the body, whereas a true philosopher's soul is not afraid of separation from the body (84b).

Simmias and Cebes are unsatisfied by Socrates' arguments that the soul is invisible and incorporeal. Simmias' objection at 85b10–86d4 takes the form of an *analogy from harmony*. This is where Socrates begins to redefine harmony, a project that will extend across the dialogue. For Simmias (as a Pythagorean¹⁹) the soul is a harmony in the sense of “mixture” (i.e. of the elements). Simmias equates “mixture” and “harmony”: for him, the mixture in the soul *is* its “harmony” (86b8–c3):²⁰

... τοιοῦτόν τι μάλιστα ὑπολαμβάνομεν τὴν ψυχὴν εἶναι, ὥσπερ ἐντεταμένου τοῦ σώματος ἡμῶν καὶ συνεχομένου ὑπὸ θερμοῦ καὶ ψυχροῦ καὶ ξηροῦ καὶ ὕγρου καὶ τοιούτων τινῶν, κρᾶσιν εἶναι καὶ ἁρμονίαν αὐτῶν τούτων τὴν ψυχὴν ἡμῶν, ἐπειδὰν ταῦτα καλῶς καὶ μετρίως κραθῇ πρὸς ἄλληλα.

... some such thing as this is what we assume the soul to be: just as our bodies are in tension and held together by hot and cold and dry and wet and such other things, our soul is also a mixture and a tuning (κρᾶσιν . . . καὶ ἁρμονίαν, *krasin . . . kai harmonian*) of these same things when these are combined with each other in a good and balanced way.

Simmias maintains (85e) that you might use the same argument about harmony (*harmonia*), on the one hand, and a lyre and its strings, on the other, as Socrates does about the soul and the body. On this analogy, “harmony” is a metaphor for soul, unseen and disembodied (85e5); the lyre and its strings are “material and corporeal objects, composite as well as earthly and related to what is mortal” (86a2–3). Later, Socrates will have to return to the first principles of cosmology to show Simmias the difference between “sound” and true harmony.

If the soul is a harmony, in Simmias' sense, then it must die *before* the body. This is particularly noticeable in cases where the body is out of tune (86c3–d1):

¹⁹ On Simmias' Pythagoreanism see Burnet (1911) on *Phd.* 86b6; Barnes (1982): 489: “The obvious inference is that the harmony theory was Pythagorean, and specifically, a doctrine belonging to Philolaus” (cf. p. 490). On the traditional view of Philolaus as the originator of the idea of the soul-as-harmony see Rohde (1925): 377 and 400n52.

²⁰ “What Simmias seems to mean here is that “having a soul” . . . is merely another way of describing the state of the bodily constituents when mixed and “in tension” (Rowe 1993 on *Phd.* 86b7).

εἰ οὖν τυγχάνει ἡ ψυχὴ οὕσα ἀρμονία τις, δῆλον ὅτι, ὅταν χαλασθῇ τὸ σῶμα ἡμῶν ἀμέτρως ἢ ἐπιταθῇ ὑπὸ νόσων καὶ ἄλλων κακῶν, τὴν μὲν ψυχὴν ἀνάγκη εὐθὺς ὑπάρχει ἀπολωλέναι, καίπερ οὕσαν θειοτάτην, ὥσπερ καὶ αἱ ἄλλαι ἀρμονίαι αἵ τ' ἐν τοῖς φθόγγοις καὶ ἐν τοῖς τῶν δημιουργῶν ἔργοις παῖσι, τὰ δὲ λείψανα τοῦ σώματος ἐκάστου πολὺν χρόνον παραμένειν, ἕως ἄν ἡ κατακαυθῇ ἢ κατασαπῇ.

If therefore the soul really is some kind of tuning (*harmonia*), it's clear that when our body is loosened or stretched out of proportion through diseases and other mishaps, necessity immediately begins to destroy the soul, no matter how divine it is, just as the other attunements in our musical sounds and all the works of our craftsmen, but the remnants of each body stay around for a long time until they are burned up or rot away.

Socrates' conclusion at 94d will be that the soul *can't* be a harmony, at least in the sense of a mixture of the elements of which it is composed, because it *governs* those elements.²¹ They are just its material cause. But Socrates is *not* saying that the soul is not a harmony, period. If Socrates were saying this, it would seem to us to be a very odd conclusion if we consider harmony as a sort of mixture. In the *Republic*, the character of the soul is inseparable from the mixtures in its chosen life, and this means that great care needs to be taken in choosing the life (618c8–d5):

... εἰδέναι τί κάλλος πενία ἢ πλούτῳ κραθὲν καὶ μετὰ ποίας τινὸς ψυχῆς ἕξεως κακὸν ἢ ἀγαθὸν ἐργάζεται, καὶ τί εὐγένειαι καὶ δυσγένειαι καὶ ιδιωτεῖαι καὶ ἀρχαὶ καὶ ἰσχύες καὶ ἀσθένειαι καὶ εὐμαθίαι καὶ δυσμαθίαι καὶ πάντα τὰ τοιαῦτα τῶν φύσει περὶ ψυχὴν ὄντων καὶ τῶν ἐπικτήτων τί συγκεραννύμενα.

... to know how beauty *combined* (*krathen*) with poverty or wealth and the possession of what kind of state of what kind of soul achieves good or evil; and what can be achieved by high or low birth, one's personal life, political offices, and physical strengths and weaknesses, and a readiness or reluctance to learn, and all such things which belong to the soul naturally or are acquired, when blended together. (Emlyn-Jones and Preddy 2013, my emphasis)

²¹ See Apolloni (1996): 20.

In the *Timaeus* both the world soul and human souls are *mixtures*: the world soul at *Tim.* 35b1 is μιγνύς (“mixed”), as is the human soul at 41d4–7:

ταῦτ' εἶπε, καὶ πάλιν ἐπὶ τὸν πρότερον κρατῆρα, ἐν ᾧ τὴν τοῦ παντὸς ψυχὴν κεραννὺς ἔμισγεν, τὰ τῶν πρόσθεν ὑπόλοιπα κατεχεῖτο μίσιγων τρόπον μὲν τινα τὸν αὐτόν, ἀκήρατα δὲ οὐκέτι κατὰ ταῦτα ὡσαύτως . . .

When he had finished this speech he turned again to the mixing bowl he had used before, the one in which he had blended and mixed the soul of the universe. He began to pour into it what remained of the previous ingredients and to mix them in somewhat the same way, though these were no longer [in their original unmixed condition] . . . (Zeyl 2000, modified)²²

In fact, none of this contradicts what Socrates says in the *Phaedo*. In the argument that follows, Simmias' idea of the soul-as-harmony is not discarded but transcended: it provides a starting point for what is in effect a redefinition of harmony.

Socrates will have to restart the investigation of the nature of harmony. You have to see the big picture to understand whether or not the soul is a harmony. The point of recommencement is *natural science*, περὶ ψύσεως ἱστορίαν, *Phd.* 96a7. Socrates will reject natural science as we understand it, and reinvent his explanation away from the evidence of the senses (*Phd.* 99d–e).

In the meantime, though, Socrates must deal with Cebes' objection. Cebes apparently believes the soul to be long-lived, but not immortal.²³ Cebes' analogy for the soul is a *visual* one, to complement Simmias' auditory one: the soul-as-weaver, body-as-cloak (87d). Souls might use up many bodies, just as a weaver might wear out many cloaks, each time weaving a replacement; but in the end the final cloak (i.e. the body) will outlast its maker by a certain amount of time. On this analogy, Cebes feels that we are not yet justified in believing that the soul outlasts the body permanently (87e).

This analogy seems subsidiary to the analogy with harmony. But in fact, in what follows (91c) Socrates will answer both objections in such a way that we

²² All translations of Plato's *Timaeus* in this chapter are from Zeyl (2000), with any modifications noted by square brackets.

²³ On Cebes' "Empedoclean" view of the soul see Trépanier (2017): 137n15, with bibliography there cited. On the image of the body as the soul's cloak, see Empedocles fr. 113/126 Inwood, σαρκῶν ἀλλογνῶτι περιστελλουσα χιτῶνι, "[she] dressed [him/it] with an alien robe of flesh" (assuming "it" does in fact refer to the soul, as Trépanier 2017: 141 believes).

end up with a different view of *harmony*. His redefinition applies to both the auditory and visual aspects of the argument, because “harmony,” in the sense of color, is just as much a part of visual art as it is of music.

How does his redefinition go? Socrates asserts, “This attunement of yours isn’t the sort of thing to which you’re likening it,” οὐ γὰρ δὴ ἁρμονία γέ σοι τοιοῦτόν ἐστιν ᾧ ἀπεικάζεις (92b8–9). The basis of the definition must change. First, his riposte to Simmias’ argument contains two stipulations: (1) Simmias must stop thinking that harmony is a “composite” entity—τὸ ἁρμονίαν μὲν εἶναι σύνθετον πρᾶγμα, “that an attunement (*harmonia*) is a composite thing” (92a7–b1)²⁴—and (2) he must drop the idea that the soul is a harmony of the *elements* strung together like lyre strings—ψυχὴν δὲ ἁρμονίαν τινὰ ἐκ τῶν κατὰ τὸ σῶμα ἐντεταμένων συγκεῖσθαι, “that the soul is an attunement made up of tensions across the body” (92a8–9). Harmony in the sense that Simmias defined it (i.e. sound) can only come into being after the existence of “the things from which it was put together”—in the case of musical harmony, it arises from a particular “resonator” (92e4–93a1). On this argument the soul would only come into existence after the body: the antithesis of the Platonic point of view as established in the “argument from recollection.” Second, if every soul contained a mixture of qualities, this would mean discordant elements were possible in at least some souls, in which case the soul cannot by definition be a harmony (94a2–4):

κακίας οὐδεμία ψυχὴ μεθέξει, εἴπερ ἁρμονία ἐστίν· ἁρμονία γὰρ δήπου παντελῶς αὐτὸ τοῦτο οὔσα, ἁρμονία, ἀναρμοστίας οὐποτ’ ἂν μετὰσχοι.

No soul will have anything bad in it if it is an attunement, for attunement is surely altogether just that: attunement, and will never participate in lack of attunement.

Socrates’ is an austere definition of harmony: not, for him, a balance of opposites, but a wholly unified entity without any elements of dissonance whatsoever, a perfectly clean harmonic series. This is an abstract harmony, the principle of consonance, not its sonic manifestation.²⁵

Finally, the soul can oppose the instincts of the body; but if it were a harmony in the sense Simmias defines it, it could only be led by its “resonator,”

²⁴ On the concepts of composite and incomposite, see Apolloni (1996): 10.

²⁵ On Plato’s abstract system of harmony in the *Republic* see chapter 6.

i.e. the compound of elements that compose it (94c). The soul cannot therefore be a harmony “led by conditions of the body” (94e2–3).

So far so good, but we have not seen the last of harmony in the *Phd.* Meanwhile, at 95a7, Socrates passes to Cebes’ argument. This starts from ground zero. He must answer Cebes’ argument (and, we’ll see, reconstruct harmony along his own lines) in the light of *all* natural philosophy, since what Cebes is really asking for is the cause of generation and decay, γενέσεως καὶ φθορᾶς τὴν αἰτίαν (95e8). Socrates begins with the story of his own encounter with natural science (96a8), since natural science is the science of “cause” (96a9).

Socrates’ definition of that “science” is of his own historical moment: the kinds of questions he lists are the kinds of questions asked by the Presocratics.²⁶ But in the end Socrates’ foray into the “phenomena of heaven and earth,” τὰ περὶ τὸν οὐρανὸν τε καὶ τὴν γῆν πάθη (96c1–2), is counterproductive, serving only to make him doubt things that seemed obvious before.

The Presocratic philosopher Anaxagoras at first seemed to promise the answers to Socrates’ natural-philosophical wish list at 97d9–98a7:

... καὶ μοι φράσειν πρῶτον μὲν πότερον ἢ γῆ πλατεῖα ἐστὶν ἢ στρογγύλη, ἐπειδὴ δὲ φράσειεν, ἐπεκδιηγῆσεσθαι τὴν αἰτίαν καὶ τὴν ἀνάγκην, λέγοντα τὸ ἄμεινον καὶ ὅτι αὐτὴν ἄμεινον ἦν τοιαύτην εἶναι· καὶ εἰ ἐν μέσῳ φαίη εἶναι αὐτὴν, ἐπεκδιηγῆσεσθαι ὡς ἄμεινον ἦν αὐτὴν ἐν μέσῳ εἶναι· καὶ εἴ μοι ταῦτα ἀποφαίνοι, παρεσκευάσμην ὡς οὐκέτι ποθεσόμενος αἰτίας ἄλλο εἶδος. καὶ δὴ καὶ περὶ ἡλίου οὕτω παρεσκευάσμην ὡσαύτως πευσόμενος, καὶ σελήνης καὶ τῶν ἄλλων ἄστρον, τάχους τε πέρι πρὸς ἄλληλα καὶ τροπῶν καὶ τῶν ἄλλων παθημάτων, πῇ ποτε ταῦτ’ ἄμεινόν ἐστιν ἕκαστον καὶ ποιεῖν καὶ πάσχειν ἅ πάσχει.

... and that he’d first explain whether the earth is flat or spherical. And when he’d done that, he’d explain besides the cause and why it must be so, saying what is better and that it was better for it to be as it is. And if he were to say that it’s in the centre and if he were to prove this, I was prepared not to hanker after any other kind of cause ever again. And furthermore I was prepared to pursue my inquiries about the sun in the same way, and about the moon and the rest of the stars, both regarding their speed relative to each

²⁶ On the list of natural-philosophical questions at 97d–98a see Rowe (1993) ad loc. As Burnet (1911) on 99b6 puts it, “Once again we have the scientific problems of the middle of the fifth century.”

other, their [phases] (τροπῶν, *tropōn*²⁷) and the rest of their characteristics, in whatever way it's better for each one to act and be acted upon by these motions that they undergo.

Socrates was looking for a “teleological” reading, that Mind arranges things as it is “better” for them to be (97c8).²⁸ Socrates’ disappointment came, however, from the discovery that Anaxagoras did not offer the teleological causes of these phenomena, only the *material* (elemental) causes (98b8–c2):

ὁρῶ ἄνδρα τῷ μὲν νῷ οὐδὲν χρώμενον οὐδὲ τινος αἰτίας ἐπαιτιώμενον εἰς
τὸ διακοσμεῖν τὰ πράγματα, ἀέρας δὲ καὶ αἰθέρας καὶ ὕδατα αἰτιώμενον καὶ
ἄλλα πολλὰ καὶ ἄτοπα.

I see a man not using his mind at all, nor assigning any causes to the arrangement of things, but assigning air and ether and waters and a lot of other strange things.

Material causes represent how contemporary “scientists” look at the world; it is for these kinds of cosmologies that Socrates will substitute his own in what follows.

At 99d Socrates discards natural science in this sense. He launches a new inquiry, one *without* reliance on the senses, which concludes at 106e9–107a1. The proposition, that “the soul is immortal and imperishable, and our souls will exist somewhere in Hades,” resets the argument for the rest of the dialogue. At 100b4–9 Socrates specifies both the method and purpose of his new inquiry. Socrates’ method will be to explore “absolute” qualities such as beauty and goodness: by doing this, he will show that the soul is immortal. The rest of his argument up to 107c builds on the “argument from affinity” by interweaving these two things—abstraction and immortality—and thus arriving at a definition of the latter. Having established that, at 107c a new part begins: the *consequences* of the soul’s immortality. This part ends at 115a8 and includes Socrates’ “geographical” myth.

This part begins with a condition (107c2): if the soul is immortal, then we must take care of it at all times. To illustrate this we are given a “myth

²⁷ I have amended Emlyn-Jones and Preddy’s Loeb translation to reflect the Greek *tropos* (see pp. 167–68 above for definition of that term).

²⁸ See Sedley (1989–90).

of judgment" (107d–108c).²⁹ Cosmography follows the myth of judgment. As we saw earlier (p. 245), the transition between the myth of judgment and the earth is very abrupt, indicating the close connection between soul and earth. Socrates' project in his rewriting of cosmography is twofold: to expound (1) the overall shape (ιδέα, *idean*) of the earth (108d9) and (2) its τόπους (*topous*, 108e1). This is the same division we are later to find in geographical writings, between *geōgraphia* and *chōrographia* (pp. 83–86). But although the exposé in 109a–d follows the order of ancient geographical idiom—a global description of earth, followed by a description of the *oikoumene* with its chorography³⁰—we'll see that this is not Socrates' ultimate concern.

The earth as Socrates describes it is held in the middle of the universe by its own equipoise (109a). This answers one of the "Presocratic" questions he asked earlier, at 99b5–8, how the earth stays in place. In Socrates' new exposition, there is no need either of a vortex theory, or of an air cushion, to explain the earth's position and stability.³¹ It is like it is purely because of the ineluctable force of geometry.³² It stays where it is because of its "uniform shape" (ὁμοιότης, 109a2): it is *self*-supporting.³³

This is to fulfill the first part of Socrates' brief (the *form* of the earth). The earth writ large is "pure" (109b8–c3):

αὐτὴν δὲ τὴν γῆν καθαρὰν ἐν καθαρῷ κεῖσθαι τῷ οὐρανῷ ἐν ᾧ πέρ ἐστι
τὰ ἄστρα, ὃν δὴ αἰθέρα ὀνομάζειν τοὺς πολλοὺς τῶν περὶ τὰ τοιαῦτα
εἰωθότων λέγειν.

The earth itself is pure and lies in the pure heaven in which there are the stars. Indeed, the majority of those who are accustomed to talk about these things call it the ether.³⁴

Not so its *topoi*. The earth has a scattering of human habitations on its surface. Socrates describes these as being in hollows of varying morphology,

²⁹ On the "Myth of Judgement" in the *Phd.*, see Annas (1982).

³⁰ Pradeau (1996): 82.

³¹ The vortex theory at 99b6 probably belongs to Empedocles; the "trough theory" to Anaximenes, Anaxagoras, and/or Democritus (Sedley 1989: 363).

³² Sedley (1989): 367 comments on the "replacement of material by mathematical analysis."

³³ On the earth's equipoise see Furley (1989): 16–25.

³⁴ Perhaps compare Empedocles and/or Anaxagoras, the former of whom "gave the name αἰθήρ to atmospheric air . . . while the latter used it of fire" (Burnet 1911 ad loc.).

which pock the earth's surface. We live in a sort of sedimentary layer that collects in the hollows (109c2–3). But we are under the illusion that we live on the surface of the earth. Our view of the world above is distorted, as if we were seeing it bent through the refractive index of water (109c4–d5):

ἡμᾶς οὖν οἰκοῦντας ἐν τοῖς κοίλοις αὐτῆς λεληθέναι καὶ οἶεσθαι ἄνω ἐπὶ τῆς γῆς οἰκεῖν, ὥσπερ ἂν εἴ τις ἐν μέσῳ τῷ πυθμένι τοῦ πελάγους οἰκῶν οἴοιτό τε ἐπὶ τῆς θαλάττης οἰκεῖν καὶ διὰ τοῦ ὕδατος ὁρῶν τὸν ἥλιον καὶ τὰ ἄλλα ἄστρα τὴν θάλατταν ἡγοῖτο οὐρανὸν εἶναι, διὰ δὲ βραδυτῆτά τε καὶ ἀσθένειαν μηδεπώποτε ἐπὶ τὰ ἄκρα τῆς θαλάττης ἀφίγμενος μηδὲ ἑωρακώς εἶη, ἐκδύς καὶ ἀνακύψας ἐκ τῆς θαλάττης εἰς τὸν ἐνθάδε τόπον, ὅσῳ καθαρώτερος καὶ καλλίων τυγχάνει ὢν τοῦ παρὰ σφίσι, μηδὲ ἄλλου ἀκηκοώς εἶη τοῦ ἑωρακότος.

Now we who live in the hollows have failed to observe this and think we live above on the earth, as if someone living in the middle of the depths of the ocean were to think he was dwelling on the surface of the sea and, seeing the sun and the rest of the stars through the water, he were to think that the sea was the heaven; but, on account of his slowness and weakness, he had never yet got to the surface of the sea, or had even seen, on emerging and lifting his head out of the sea and looking up at our world here, how much purer and more beautiful it actually is than his own environment, nor had heard from anyone else who had seen it.

Not only that, but our perception of the layers of the world is all wrong. We are one level below where we thought we were. Our “sky” is the surface of the sedimentary layer (the smoked-glass surface through which we peer); the real sky is a whole other layer above that again. Socrates’ repositioning of the argument involves the conceptual reorganization of space.³⁵ We must think ourselves out of the notion that we live on the earth’s surface. Inherent in this is an ethical reorganization of our notion of our position in a hierarchy involving high and low. What we think of as our sky is only the surface of the pool of scum we live in, like the surface of a polluted sea. Only when we have understood that we have misinterpreted the nature of our earth and our place on it, and that our old notion is a fraud, can we begin to harmonize the

³⁵ “What is needed [in Socrates’ account] is a radically different perspective, as symbolized by the vantage-point of the ether dwellers” (Sedley 1989–90: 375).

soul with the “true earth.” Parallel to the reorientation of the earth is a reorientation of soul.

The true view is obtained by obtruding your head like a flying fish above the surface (109e3–110a1):³⁶

ἐπεὶ, εἴ τις αὐτοῦ ἐπ’ ἄκρα ἔλθοι ἢ πτηνὸς γενόμενος ἀνάπτοιο, κατιδεῖν
<ἀν> ἀνακύψαντα, ὥσπερ ἐνθάδε οἱ ἐκ τῆς θαλάττης ἰχθύες ἀνακύπτοντες
ὁρῶσι τὰ ἐνθάδε, οὕτως ἂν τινα καὶ τὰ ἐκεῖ κατιδεῖν, καὶ εἰ ἡ φύσις ἱκανὴ εἴη
ἀνασχέσθαι θεωροῦσα, γινῶναι ἂν ὅτι ἐκεῖνός ἐστιν ὁ ἀληθῶς οὐρανὸς καὶ
τὸ ἀληθινὸν φῶς καὶ ἡ ὥς ἀληθῶς γῆ.

... since if someone were to get to the surface, or grew wings and flew up, he’d lift up his head and see, just as fish here look up out of the sea and see what’s here, so someone would see what’s up there, and if he were naturally capable of holding out and viewing the sight, he’d realise that is truly heaven and the true light and the real earth.

The notion of a “better earth,” literally a utopia, leads us from cosmography into myth (μῦθος, 110b1).³⁷ In the myth, Socrates proceeds to take again the two elements of his exploration—cosmography and “geography”—which he has previously explored in a perceptual light, and reenvision them inside the conceptual frame of a myth, as though placing a colored filter over the lens of natural science.

2. The True Earth

You can recognize the same pattern here, of imperfect exposition followed by recantation, as we saw in the *Phaedrus* (p. 219 and p. 237 above). So far all arguments have been unsatisfactory. At 110b5 Socrates begins again, with πρῶτον, the same formula he had used in his first, imperfect, exposition of the form of the earth at 108e4 (*Phd.* 110b6–111a2):

³⁶ Compare *Phaedrus* 248a1–c5, where the souls are carried around just under the “surface” (ὑποβρύχια, *Phdr.* 248a7); see p. 231 above. Compare also the motif of the wing in the *Phaedrus* (p. 234 above).

³⁷ Socrates’ “myth” is the immediate predecessor of Plutarch’s “myth” in the *De facie in orbe lunae* 934F; see p. 280 below.

λέγεται τοίνυν, ἔφη, ὦ ἑταῖρε, πρῶτον μὲν εἶναι τοιαύτη ἡ γῆ αὐτὴ ἰδεῖν, εἴ τις ἄνωθεν θεῶτο, ὥσπερ αἱ δωδεκάσκυτοι σφαῖραι, ποικίλη, χρώμασιν διειλημμένη, ὣν καὶ τὰ ἐνθάδε εἶναι χρώματα ὥσπερ δείγματα, οἷς δὴ οἱ γραφῆς καταχρῶνται. ἐκεῖ δὲ πᾶσαν τὴν γῆν ἐκ τοιούτων εἶναι, καὶ πολὺ ἔτι ἐκ λαμπροτέρων καὶ καθαρωτέρων ἢ τούτων· τὴν μὲν γὰρ ἀλουργὴ εἶναι [καὶ] θαυμαστὴν τὸ κάλλος, τὴν δὲ χρυσοειδῆ, τὴν δὲ ὄση λευκὴ γύψου ἢ χιόνος λευκοτέραν, καὶ ἐκ τῶν ἄλλων χρωμάτων συγκειμένην ὡσαύτως, καὶ ἔτι πλειόνων καὶ καλλιόνων ἢ ὅσα ἡμεῖς ἐωράκαμεν. καὶ γὰρ αὐτὰ ταῦτα τὰ κοῖλα αὐτῆς, ὕδατός τε καὶ ἀέρος ἑκπλεα ὄντα, χρώματός τι εἶδος παρέχεσθαι στίλβοντα ἐν τῇ τῶν ἄλλων χρωμάτων ποικιλίᾳ, ὥστε ἐν τῇ αὐτῆς εἶδος συνεχὲς ποικίλον φαντάζεσθαι. ἐν δὲ ταύτῃ οὕσῃ τοιαύτῃ ἀνὰ λόγον τὰ φυόμενα φύεσθαι, δένδρα τε καὶ ἄνθη καὶ τοὺς καρπούς· καὶ αὖ τὰ ὄρη ὡσαύτως καὶ τοὺς λίθους ἔχειν ἀνὰ τὸν αὐτὸν λόγον τὴν τε λειότητα καὶ τὴν διαφάνειαν καὶ τὰ χρώματα καλλίω· ὣν καὶ τὰ ἐνθάδε λιθίδια εἶναι ταῦτα τὰ ἀγαπώμενα μόρια, σάρδιά τε καὶ ἰάσπιδας καὶ σμαράγδους καὶ πάντα τὰ τοιαῦτα· ἐκεῖ δὲ οὐδὲν ὅτι οὐ τοιοῦτον εἶναι καὶ ἔτι τούτων καλλίω. τὸ δ' αἴτιον τούτου εἶναι ὅτι ἐκεῖνοι οἱ λίθοι εἰσὶ καθαροὶ καὶ οὐ κατεδηδεσμένοι οὐδὲ διεφθαρμένοι ὥσπερ οἱ ἐνθάδε ὑπὸ σηπεδόνος καὶ ἄλμης ὑπὸ τῶν δεῦρο συνερρυηκότων, ἃ καὶ λίθοις καὶ γῇ καὶ τοῖς ἄλλοις ζώοις τε καὶ φυτοῖς αἴσχη τε καὶ νόσους παρέχει. τὴν δὲ γῆν αὐτὴν κεκοσμηθῆναι τούτοις τε ἅπασιν καὶ ἔτι χρυσῷ τε καὶ ἀργύρῳ καὶ τοῖς ἄλλοις αὖ τοῖς τοιοῦτοις.

“Well then, my friend,” [said Socrates] “first of all it’s said that, if one were to observe it from above, the appearance of the earth itself is very similar to spheres made up from twelve leather patches, elaborately patterned, divided into colours, like those colours here that our artists use as samples. But over there, the whole earth is made up of such colours, but far brighter and purer than these. One part is of sea-purple of marvelous beauty, another is like gold, and all that is white is whiter than chalk or snow, and the earth consists of other colours like this, even more numerous and more beautiful than the sort we have seen here. For even the very hollows in it, being filled with both water and air, offer an appearance of colour as they gleam in the variety of other colours so as to give the appearance of a single continuous decorated surface. On this, being of such a nature, things that grow do so in proportion: trees, flowers, and fruits. And again in the same way the mountains and the rocks by the same proportions have a smoothness and transparency and finer colours. We even have prized fragments of

these gemstones down here: carnelians, jaspers, emeralds, and everything of this kind; but up there there's nothing that's not of this kind and they're even more beautiful than those here. The reason for this is that those stones are pure and not eaten away or damaged, like the ones here, by corrosion and brine from sediment that has collected together, that causes deformity and disease to stones and earth and also to animals and plants. But the earth itself is adorned by all of these and furthermore by gold and silver, and again the other things of this sort."

Here again, as in his previous exposition, Socrates moves inward from the overall shape of the earth to the detail, in line with geographic technique. This is the mythologized version of the image of the spherical earth in the middle of the heaven at 108e–109a. The difference is in the degree and kind of detail: although it is now an idealized, "fictional" picture, it is also a more luxuriant one. This vision is the equivalent of the Spindle of Necessity in the *Republic* and the flight around the universe in the central myth of the *Phaedrus*. Like those visions, it is didactic, designed to teach his interlocutors about the "real" earth, as a prerequisite to understanding their own souls.

Despite its ostensible familiarity as a globe image,³⁸ there is a disorientating unrealism about Plato's earth. At *Phaedo* 110b7–9, the earth is ὥσπερ αἱ δωδεκάσκυτοι σφαῖραι, ποικίλη, χρώμασιν διειλημμένη, "like spheres made up from twelve leather patches, elaborately patterned, divided into colours." In Plato's description the spherical earth is reverse engineered into a dodecahedron composed of twelve interlocking pentagonal parts: the closest you can get to a sphere by constructing one geometrically. Plato's description of the earth in the *Phaedo* is not of the shape of a sphere, but an account of how you would arrive at that shape were you to build one *ab initio*.³⁹ The Demiurge in the *Timaeus* chose the same shape, a dodecahedron, for his artistic creation (the universe) at *Tim.* 55c.⁴⁰ Geometrical *process* is written into the description. From the beginning, this earth is meant to look stylized: a work of art, a fabrication, stripped back like a geodesic dome to reveal the principles of construction that lie behind it.

³⁸ Such a view is familiar to us; but we should remember it was not possible in reality until the famous "blue marble" image, NASA photograph AS17-22727, taken by Apollo 17 in 1972. On the Apollo images see Cosgrove (2001): 257–62.

³⁹ See Rowe (1993) ad loc.

⁴⁰ See Cornford (1937) ad loc., making the connection with *Phd.* 110b.

The dominant impression is that of color: pure colors unlike the “samples” we see from the surface of the earth. The hollows full of water and air present an appearance of color (χρώματος τι εἶδος, 110d1). They shine ἐν τῇ τῶν ἄλλων χρωμάτων ποικιλίᾳ, “in the variety (*poikiliai*) of other colours” (110d1–2), so the whole thing presents a polychrome (*poikilon*) appearance (110d2–3).

Ποικίλλω (*poikillō*), ποικίλματα (*poikilmata*), and so on are terms particularly associated with synoptic or “holistic” views of the world. The original meaning of the verb *poikillō* is “to work in various colours, work in embroidery, embroider garments”; metaphorically, it means “to diversify, vary.”⁴¹ Its cognate noun ποίκιλμα (*poikilma*, pl. *poikilmata*), “embroidered stuff, embroidery,” is often used in descriptions of works of art in Homer: at *Iliad* 6.294 we have [πέπλος] κάλλιστος ἦν ποικίλμασιν, “the [cloak that] was the most beautiful in its embroidery (*poikilmasin*).” This cloak is one of a number of πέπλοι παμποίκιλα ἔργα γυναικῶν / Σιδονίων, “cloaks that were the works, embroidered all over (*pam-poikila*), of the Sidonian women,” at lines 289–90.⁴² The adjective ποικίλος (*poikilos*; Latin *pictus*) means “many-colored” in Homer.

Poikillō and its cognates seem to have attracted cosmological significance almost from the beginning. The verb is already used in Homer of the making of the Shield of Achilles, a schematic representation of the earth: ἐν δὲ χορὸν ποίκιλλε, “on it [Hephaistos] wrought (*poikille*) a dance” (*Iliad* 18.590). Plato uses the same terminology to represent the work of the world artisan in the *Timaeus*. The god in Plato’s *Timaeus* created the universe as an objet *d’art* (*Timaeus* 40a2–7), a *pepoikilmenon* (“painted,” “embroidered,” *variegated*) entity. Likewise, the outermost whorl of the Spindle in the *Republic*, which represents the sphere of fixed stars, the skin of what becomes Plato’s decorative universe in the *Timaeus*, was also ποικίλον (*poikilon*, *Rep.* 616e9; see p. 193 above). In the *Rep.*, the Spindle is made up of multiple colors, “closely resembling the rainbow, but brighter and purer” (μάλιστα τῇ ἱριδι προσφερές, λαμπρότερον δὲ καὶ καθαρώτερον, *Rep.* 616b7–8). This image is the analog of the colors of the True Earth in the *Phaedo*: χρωμάτων . . . πλειόνων καὶ καλλίωνων ἢ ὅσα ἡμεῖς ἐωράκαμεν, “colours . . . more in number and more beautiful than those we see here” (110c6–8).

⁴¹ LSJ ποικίλλω.

⁴² ποικίλος is also the epithet of πέπλος, *peplos*, “cloak”, at *Il.* 5.735.

Plato's terminology gestures toward an ideal. *Poikilmata* are the starting point for the extrasensory journey, "examples" (*paradeigmata*) that should be treated as *instances* of what is true. We've seen that the earth in the *Phaedo* is *poikilē* (110b7). But the colors on our earth (ἐνθάδε, "the ones *here*," 110a2) are, in respect of the colors of the true earth, like painters' "samples" (δείγματα, *deigmata*, 110b8). The implication is of trial color-mixing. The purpose of color samples is to get the right tonal mixture; the mixture in these samples is provisional only: by definition, "samples" are not right. There's something provisional about the earth we see, like a color chart or a work under construction.

The *poikilia* (variegation) of color on our earth stands in opposition to the colors of the True Earth, which are brighter and purer (λαμπρότερων καὶ καθαρωτέρων ἢ τούτων, 110c1–2).⁴³ We can only see colors in our world as mixed, as the Aristotelian *On Colours* later points out (793b14–17):

τῶν δὲ χρωμάτων οὐδὲν ὁρῶμεν εἰλικρινὲς οἷόν ἐστιν, ἀλλὰ πάντα κεκραμένα ἐν ἑτέροις· καὶ γὰρ ἂν μηδενὶ τῶν ἄλλων, ταῖς γε τοῦ φωτὸς αὐγαῖς καὶ ταῖς σκιαῖς κεραννύμενα ἄλλοῖα, καὶ οὐχ οἷά ἐστι, φαίνεται.

We do not see any of the colours pure as they really are, but all are mixed with others; or if not mixed with any other colour they are mixed with rays of light and with shadows, and so they appear different and not as they are. (Hett 1936b)

This is true: in modern color theory, color is the ultimate relativity.⁴⁴ This is why all colors we see on earth must be samples (*deigmata*), trial mixtures. We work back from them to the pure pigments of which they are the imperfect representations. Pure colors can only be expressed in myth. This is how we should approach the visible world: as a trial, imperfect, like the earth we live on in the *Phaedo*.⁴⁵

⁴³ Cf. Diotima's similar description of the initiate's ascent to absolute beauty at *Symp.* 211d5–e1, where the final vision of beauty is εἰλικρινές, καθαρὸν, ἄμεικτον: "clear, pure, unmixed." Compare *Phdr.* 250b5–c5 (p. 236 above).

⁴⁴ Albers (2013): 1: "In visual perception a color is almost never seen as it really is—as it physically is"; p. 5: "We are able to hear a single tone. But we almost never (that is, without special devices) see a single color unconnected and unrelated to other colors. Colors present themselves in continuous flux, constantly related to changing neighbors and changing conditions."

⁴⁵ On the inadequacy of sense perception, and its uses, see Sedley (2006): 315, 322; Franklin (2005): 304–9; Apolloni (1996): 19.

The idea of “examples” (*paradeigmata*) is yoked with the theme of *poikilia* throughout Plato’s dialogues. Variegation—*poikilia*—is a defining characteristic of things that pertain to the *sensible* world. So in *Republic* 529c7–d5 (quoted on p. 114 above), the *observanda* of optical astronomy are “decorations” (*poikilmata*) “painted” (*pepoikiltai*) on the heaven. As sensible objects, we remember, they fall short of Truth. Imperfect as they are, however, *poikilmata* provide a way into the world of true abstraction. In this sense they are *paradeigmata*, “examples” (*Rep.* 529d8–e1):

οὐκοῦν, εἶπον, τῇ περὶ τὸν οὐρανὸν ποικιλίᾳ παραδείγμασι χρηστέον τῆς πρὸς ἐκεῖνα μαθήσεως ἕνεκα, ὁμοίως ὥσπερ ἂν εἴ τις ἐντύχοι ὑπὸ Δαιδάλου ἢ τινος ἄλλου δημιουργοῦ ἢ γραφέως διαφερόντως γεγραμμένοις καὶ ἐκπεπονημένοις διαγράμμασιν.

“It therefore follows,” I said, “that we must use the splendour (*poikilia*) of the heavens as models (*paradeigmata*) for the purposes of our study regarding those other things, just as if one might resort to figures elaborately drawn in various ways by Daedalus, or some other craftsman or artist.

Poikilmata have their uses. In the *Rep.*, “astronomy becomes par excellence the discipline that can bridge the gulf between sensible and intelligible worlds.”⁴⁶ Its goal is to “make the natural thinking faculty of the soul useful instead of useless,” μεταλαμβάνοντες χρήσιμον τὸ φύσει φρόνιμον ἐν τῇ ψυχῇ ἐξ ἀχρήστου ποιήσιν (*Rep.* 530c2–3). It’s in this way that *poikilmata* are also *paradeigmata*: “examples” toward the end of useful study.

The *deigmata* (“color samples”) of our imperfect earth in the *Phd.* bear the same relation to the colors of the true earth as do embodied lives to souls in the *Republic*. In the Myth of Er, the souls take from the lap of Lachesis βίων παραδείγματα, *biōn paradeigmata*, “samples of lives” (*Rep.* 617d1–5). Here the examples are also “samples,” like the color samples of the *Phaedo*; the lives to be chosen by the still-disembodied souls are described as though they are the fabric swatches Lachesis is working with in her spinning. The Prophet lays out the swatches like a fabric seller for the souls to choose embodied, sensory, lives from, to live out in the sensory world.

Both colors and lives represent imperfect or provisional states, ultimately to be transcended; in the *Phaedo*, by knowledge of the true earth, in the *Rep.*

⁴⁶ Sedley (1989): 377.

by an understanding of the place of the soul in the universe, as represented by the Spindle. The fact that colors (in the *Phaedo*) and lives (in the *Rep.*) can be talked about in the same terms speaks to the close connection, in Plato's world, between the universe and the soul.

Further, in the myth of the *Phaedo*, Plato is also working also with textual "samples," the imperfect ideas which he will rework. Plato's image of the polychrome universe is not new: it is borrowed from one of the Presocratics. In fact, the image in the *Phaedo* is pointed: it serves to highlight the *difference* between Socrates' approach to the "variegated" world, as an exemplary way into the abstract world, and the materialist approach of the Presocratics. Thus we find the theme of *poikilia* in connection with the universe before Plato, in Empedocles fr. 27/23.1–8 Inwood.⁴⁷

ὥς δ' ὅποταν γραφέες ἀναθήματα ποικίλλωσιν,
 ἀνέρες ἀμφὶ τέχνης ὑπὸ μήτιος εὖ δεδαῶτε·
 οἳ τ' ἐπεὶ οὖν μάρψωσι πολύχροα φάρμακα χερσίν,
 ἀρμονίῃ μίξαντε τὰ μὲν πλέω, ἄλλα δ' ἐλάσσω,
 ἐκ τῶν εἶδεα πᾶσιν ἀλίγκια πορσύνουσι,
 δένδρεά τε κτίζοντε καὶ ἀνέρας ἢ δὲ γυναῖκας,
 θήρας τ' οἰωνούς τε καὶ ὕδατοθρέμμονας ἰχθῦς,
 καὶ τε θεοὺς δολιχαίωνας τιμῇσι φερίστους·
 οὕτω μὴ σ' ἀπάτη φρένα καινύτω ἄλλοθεν εἶναι
 θνητῶν, ὅσσα γε δῆλα γεγάσιν ἀάσπετα, πηγὴν,
 ἀλλὰ τορῶς ταῦτ' ἴσθι, θεοῦ πάρα μῦθον ἀκούσας.

As when painters adorn (*poikillōsin*) votive offerings,
 men well-learned in their craft because of cunning,
 and so when they take in their hands many-coloured pigments,
 mixing them in harmony, some more, others less,
 from them they prepare forms resembling all things,
 making trees and men and women
 and beasts and birds and water-nourished fish
 and long-lived gods, first in their prerogatives.
 In this way let not deception overcome your thought-organ

⁴⁷ This passage of Empedocles is not, to the best of my knowledge, recalled by modern scholars in relation to the *Phaedo*.

[by convincing you] that the source of mortal things, as many as
 have become
 obvious—countless—is anything else,
 but know these things clearly, having heard the story (*mython*) from a
 god. (Inwood 2001)⁴⁸

Empedocles represents the world as constructed from his four elements: earth, air, fire, and water. Each of these elements is, as it were, a “pigment” that the painters “mix in harmony” (*harmoniēi meixante*⁴⁹), i.e. in due proportion, with the other elements. With these harmonious combinations, artists are able to represent all forms. This is an analogy for how nature produces everything from the four elements.

Socrates plays subtle games with his Presocratic model in a way that is extremely revealing, in the light of his own assessment of his difference from the “natural scientists,” of whom Empedocles is one. Socrates takes Empedocles’ image and reworks it for his own purposes. In Empedocles the purpose of the simile is to illustrate the *fabric* of the world: how the whole multitude of things in the world can be made by admixture of only four elements (= “pigments”).⁵⁰ In other words, Empedocles uses the “pigments” analogy to illustrate the *material* causes of all the things we see in the world. In this, he is doing exactly what Socrates accuses the unsatisfactory scientists of doing at *Phd.* 98b8–c2 (discussed at pp. 254–55 above).

Socrates retools Empedocles’ image as an analogy for the world-*as-a-whole*. In his earth there is no straightforward analogy between pigments and elements. Neither Socrates’ world nor his soul are “harmonies” in the sense that Empedocles means it in the “painters” fragment. Instead, the colors in the *Phaedo* only give us a hint toward the abstract world of absolute color,

⁴⁸ All text and translations of Empedocles in this chapter from Inwood (2001).

⁴⁹ Compare “mixture and harmony,” *krasin... kai harmonian*, *Phd.* 86b6–c2 (p. 250 above), there in Simmias’ argument. On Empedocles’ idea of mixture as a possible influence on Simmias’ argument, see Barnes (1982): 488–89. On Empedocles’ idea of the soul as mixture see Trépanier (2017): 144. Empedocles is recorded as saying *μῖγμα ἐξ αἰθερώδους καὶ ἀερώδους οὐσίας*, “[The soul] is a mixture (*migma*) of a certain *aither*-like and air-like nature” (trans. Trépanier 2017: 144). Trépanier (2017): 144 accepts the fifth-century theologian and doxographer Theodoret’s attribution of this axiom to Empedocles, although it was rejected by Diels in his compiling of the fragments of the Presocratics. For Plutarch’s response to the idea, see chapter 9, pp. 295–96 below.

⁵⁰ “To support the idea that the immense variety of the world is adequately explained by the theory of mixture of so small a number of elements, [Empedocles] introduces in Homeric style an analogy with the painter’s creation of an imaginary world from pigments few in number but many-colored in their potentialities” (*KRS* ad loc.). On the technicalities of Empedocles’ simile, see Wright (1981): 38–39. For a brief interpretation, see Inwood (2001): 186–87. On the gods and the soul in Empedocles as material, and made up of elemental mixtures, see Trépanier (2017): 137–38; 143–47.

shape, pattern. Empedocles' colors point toward construction: Socrates' to its underlying principles. Empedocles means "harmony" in the sense of "mixture" (note his collocation *harmoniēi meixante*); Socrates will redefine "harmony" in the sense of "unity." In Empedocles' simile, and in Simmias' argument, the *poikilmata* are all there is. In Socrates' argument they are only a starting point.

3. The World-System

At *Phd.* 111c4–5, Socrates concludes his reenvisaging of the whole earth: καὶ ὅλην μὲν δὴ τὴν γῆν οὕτω πεφυκέναι καὶ τὰ περὶ τὴν γῆν, "Indeed, the whole of the earth is like this, as are the earth's surroundings." He now proceeds to brush in the detail of the "hollows" (κοῖλα) he first mentioned in 109b5 (picked up by τὰ ἔγκοιλα, 111c5). We discover that they are interconnected, in fact form a system: what we might call the "mixing-bowl" system, since water flows from one into another "as into mixing bowls" (111d5).

In the myth, it becomes apparent that the earth takes on the role of the "body"; the earth-system described by Socrates is actually a receptacle for souls, whose fate becomes intimately bound up with it.⁵¹ Κοῖλα (*koila*) and its cognates designate body cavities in the *Timaeus*: at *Tim.* 73a3, 78c6, and 85e10, for instance, the word κοιλία designates the abdominal cavity.

The whole earth-system combines anatomical imagery with the Homeric language of the underworld. Socrates calls the largest of the hollows by the Homeric name "Tartarus" (111e7–112a5):

ἐν τι τῶν χασμάτων τῆς γῆς ἄλλως τε μέγιστον τυγχάνει ὃν καὶ διαμπερὲς
τετρημένον δι' ὅλης τῆς γῆς, τοῦτο ὅπερ Ὅμηρος εἶπε, λέγων αὐτό
τῆλε μάλ', ἧχι βάθιστον ὑπὸ χθονός ἐστι βέρεθρον [*Iliad* 8.14]
ὃ καὶ ἄλλοθι καὶ ἐκεῖνος καὶ ἄλλοι πολλοὶ τῶν ποιητῶν Τάρταρον
κεκλήκασιν.

One of the chasms of the earth happens to be especially huge and is pierced right through the whole earth. It's what Homer is talking about when he

⁵¹ "Κοῖλος appartient aussi au vocabulaire anatomique, et désigne alors les cavités du corps" (*Koilos* pertains also to anatomical language, and also designates the cavities of the body"), Pradeau (1996): 83.

says, “Far away where there is the deepest pit under the earth” [*Il.* 8.14] which both he and many other poets elsewhere call Tartarus.

Socrates quotes Homer, *Iliad* 8.14, from the “cosmology” of *Iliad* 8 (p. 35 above). But this is to lead us up the garden path. Socrates’ world is utterly different from Homer’s stratified one, in which Tartarus is the bottom-most of a series of layers. Plato’s Tartarus is part of a spherical earth-system, which has no bottom layer but in which things tend to the center. This is not simply a juxtaposition of the stratified and spherical concepts of the universe, as we’ve seen it in chapter 3; Tartarus is completely assimilated to the spherical model.

Socrates reinterprets the underworld, i.e. “Tartarus,” as a subterranean river-system *inside* his spherical earth. It represents the confluence of the four Homeric rivers, Oceanus (*Phd.* 112e7), Acheron (112e8), Pyriphlegethon (113b5), and Styx (113c1). These rivers are rationalized to represent the mixing of the elements within the earth-body.⁵² He explains the earth-system using the analogy of respiration (112b7–c4):⁵³

καὶ ὥσπερ τῶν ἀναπνεόντων αἰεὶ ἐκπνεῖ τε καὶ ἀναπνεῖ ῥέον τὸ πνεῦμα, οὕτω καὶ ἐκεῖ συναιωρούμενον τῷ ὑγρῷ τὸ πνεῦμα δεινούς τινας ἀνέμους καὶ ἀμηχάνους παρέχεται καὶ εἰσιὸν καὶ ἐξιόν. ὅταν τε οὖν ὑποχωρήσῃ τὸ ὕδωρ εἰς τὸν τόπον τὸν δὴ κάτω καλούμενον, τοῖς κατ’ ἐκείνα τὰ ρεύματα διὰ τῆς γῆς εἰσρεῖ τε καὶ πληροῖ αὐτὰ ὥσπερ οἱ ἐπαντλοῦντες.

And just as the breath of creatures who breathe exhales and inhales in a constant stream, so too over there the breath oscillates with the water and causes enormous terrifying winds as it goes in and comes out. So whenever the water retreats to the so-called nether region, it flows into the places along those streams there through the earth and fills them, like men irrigating.

The earth is engineered on a combined hydraulic and pneumatic system. Water is used, apparently, to create enough stored energy for motion to result, by, as it were, squeezing the air into a smaller space so that it becomes

⁵² Pradeau (1996): 83, 92.

⁵³ Pradeau (1996): 91: “Avec le Tartare s’achève ensuite la représentation de la terre comme un corps, quand Socrate le compare à la respiration” (“With Tartarus the representation of the earth as a body is then achieved, when Socrates compares it to respiration”).

pressurized. In this, Plato is thinking of another passage of Empedocles (fr. 106/100 Inwood):⁵⁴

ὥδε δ' ἀναπνεῖ πάντα καὶ ἐκπνεῖ· πᾶσι λίφαιμοι
σαρκῶν σύριγγες πύματον κατὰ σῶμα τέτανται,
καὶ σφιν ἐπὶ στομίους πυκιναῖς τέτρηνται ἄλοξιν
ῥινῶν ἔσχατα τέρθρα διαμπερές, ὥστε φόνον μὲν
κεύθειν, αἰθέρι δ' εὐπορίην διόδοισι τετμήσθαι.
ἔνθεν ἔπειθ' ὅποταν μὲν ἀπαίξῃ τέρεν αἷμα,
αἰθήρ παφλάζων καταΐσσεται οἷδατι μάργω,
εὔτε δ' ἀναθρόσκη πάλιν ἐκπνέει, ὥσπερ ὅταν παῖς
κλεψύδρῃ παίζουσα διειπετέος χαλκοῖο·
εὔτε μὲν αὐλοῦ πορθμὸν ἐπ' εὐειδεῖ χειρὶ θείσα
εἰς ὕδατος βάπτῃσι τέρεν δέμας ἀργυφέοιο,
οὐδεὶς ἄγγοσδ' ὄμβρος ἐσέρχεται, ἀλλὰ μιν εἵργει
ἄερος ὄγκος ἔσωθε πεσῶν ἐπὶ τρήματα πυκνά,
εἰσόκ' ἀποστεγάσῃ πυκινὸν ῥόον· αὐτὰρ ἔπειτα
πνεύματος ἐλλείποντος ἐσέρχεται αἷσιμον ὕδωρ.
ὥς δ' αὐτως ὅθ' ὕδωρ μὲν ἔχῃ κατὰ βένθεα χαλκοῦ
πορθμοῦ χωσθέντος βροτέῳ χροὶ ἡδὲ πόροιο,
αἰθήρ δ' ἐκτὸς, ἔσω λελημένος, ὄμβρον ἐρύκει
ἀμφὶ πύλας ἡθμοῖο δυσηχέος, ἄκρα κρατύνων,
εἰσόκε χειρὶ μεθῇ· τότε δ' αὖ πάλιν, ἔμπαλιν ἢ πρὶν,
πνεύματος ἐμπίπτοντος ὑπεκθέει αἷσιμον ὕδωρ.
ὥς δ' αὐτως τέρεν αἷμα κλαδασσόμενον διὰ γυίων
ὀππότε μὲν παλίνροσον ἀπαίξειε μυχόνδε,
αἰθέρος εὐθύς ῥεῦμα κατέρχεται οἷδατι θῦον,
εὔτε δ' ἀναθρόσκη, πάλιν ἐκπνέει ἴσον ὀπίσω.

⁵⁴ For a brief account of this simile, see Wright (1981): 244–48. Plato's imitation of it is underplayed in scholarship. Burnet (1911) on *Phd.* 111e4 mentions the connection in general terms: "The whole description [of the 'oscillation'] shows that a sort of pulsation, like the systole and diastole of the heart, is intended. The theory is, in fact, an instance of the analogy between the microcosm and the macrocosm . . . and depends especially on the Empedoclean view of the close connection between respiration and the circulation of the blood." Plato also imitated Empedocles' simile at *Timaeus* 78b–c, similarly to illustrate the "circular thrust" involved in respiration. In the *Tim.* Plato substituted the more obscure simile of the "fisherman's weel," or wicker fish trap, for Empedocles' simile of the clepsydra. On the *Timaeus* simile, see Cornford (1937): 306–19. Cornford refers to Empedocles fr. 106/100 as Plato's starting point.

And all [animals] inhale and exhale thus: all have channels
 empty of blood in the flesh, deep inside the body,
 and at their mouths the extreme surface of nostrils is pierced right
 through
 with close-packed furrows, so that
 they cover over the blood but a clear passage is cut in channels for aither.
 Next, when the smooth blood rushes back from there,
 seething air rushes down in a raging billow;
 and when it [blood] leaps up, it exhales again –
 as when a little girl plays with a klepsydra of gleaming bronze:
 when she puts her fair hand over the passage of the pipe
 and dips it into the smooth frame of shining water,
 no water enters the vessel, but it is checked by
 the bulk of air from within, which falls against the close-packed holes,
 until she uncovers the dense flow. But then,
 when the breeze leaves it, the water enters in turn.
 In the same way when she holds water in the depth of the bronze,
 plugging the passage and pore with her mortal hand,
 and aither is outside longing to enter, she checks the water
 around the gates of the harsh-sounding strainer by controlling the
 extremities,
 until she releases her hand; then again, conversely to before,
 when the breeze enters it water in turn runs out.
 In the same way, when smooth blood surging through the limbs
 rushes back into the interior [of the body],
 straightway a stream of air comes down/back, seething in a billow,
 but when [blood] leaps up, it exhales an equal amount in return.

Although in the *Phd.* he is describing a subterranean *river*-system, Plato is forced to introduce the idea of wind, or “breath” (πνεῦμα), into his account of *waters* at 112b7, to accommodate reference to Empedocles’ simile, which describes *respiration*.⁵⁵ *Pneuma* is juxtaposed with water (ῥῆδωρ or ὑγρῶ) in both texts: in Empedocles at lines 15 and 21 and in Plato at 112b7–8 (τῷ ὑγρῶ τὸ πνεῦμα). The two texts use the same word for “exhale”: ἐκπνέει at Empedocles fr. 106/100 line 8, and ἐκπνεῖ at *Phd.* 112b6. Πρεῦμα (“flow”) at

⁵⁵ Burnet (1911) ad 112b4: “The πνεῦμα is mentioned because the whole theory is derived from that of respiration.”

Empedocles fr. 106/100 line 24 is matched by ρεύματα at *Phd.* 112b1 and c3. Most conclusive of all, Empedocles' collocation τέτρηνται / . . . διαμπερές (fr.106/100 lines 3–4) is echoed with only slight *variatio* at *Phd.* 111e7, διαμπερές τετρημένον.⁵⁶ Just as in Empedocles the nostrils of the breathing organism are “pierced right through,” so in Plato, the earth is “pierced right through” by the chasm of Tartarus. The earth is (as it were) the nose, and Tartarus the “lungs” and “heart,” of Plato's chthonic respiratory system.

In the *Intermezzo* we saw the account of respiration at *Tim.* 81a2–b2 (pp. 166–67 above). There, respiration shared in the ongoing cyclical motion of the universe: ὁ δὲ τρόπος τῆς πληρώσεως ἀποχωρήσεώς τε γίγνεται καθάπερ ἐν τῷ παντὶ παντὸς ἢ φορὰ γέγονεν, “Now [the process of replenishment and the depletion follows] the manner of the movement of anything within the universe at large.”⁵⁷ In the *Timaeus* the motion of the universe is the analogy for respiration. In the *Phd.*, it is respiration that is the analogy for the motion of the world-system. The terms of the analogy are interchangeable by virtue of the close connection between world and human organism.

In the *Phaedo*, it is the earth itself that differentiates the fate of souls: some descend into Tartarus, never to reemerge (113e6); others circulate by way of the convection system;⁵⁸ and yet others emerge out into the “pure dwelling” (καθάρων οἰκησιν, 114c1) that is ἐπὶ γῆς—on the surface of the earth—the real surface. Philosophers can go even higher, but at that point, Socrates leaves his descriptive powers behind (114c).

The subterranean river-system and the second group, in particular, of souls in the *Phaedo* share the two kinds of motion of the universe, circular and linear.⁵⁹ So for instance the water of Styx is seen as both “descending under the ground,” δὺς κατὰ τῆς γῆς, 113c3 (rectilinear motion) and “winding

⁵⁶ Neither Rowe (1993) nor Burnet (1911) mention the correspondence with Empedocles; it is not in Frutiger's list of Empedoclean parallels (1976): 254–60. Cf. *Timaeus* 91a6, where the gods “bored a hole” (συνέτρησαν, *sunetrēsān*—the same verb Empedocles uses in fr.100/106 and Plato uses in the *Phaedo*) in the spine for the egress of semen.

⁵⁷ On terminology in this passage shared with the description of the earth's convection system in the *Phd.*, see Pradeau (1996): 88.

⁵⁸ This image might be thought to play with the Empedoclean notion of the cosmic circulation of the *daimon* at fr. 11/115 Inwood. On this idea see Trépanier (2017): 172, who does not, however, make an explicit link with the *Phaedo*.

⁵⁹ Pradeau (1996): 94: “La terre du *Phédon* est animée de deux types de mouvements, que l'on retrouve tels quels dans le *Phèdre* et la *République*: un mouvement circulaire (les fleuves y souscrivent pour une part) et un mouvement linéaire de bas en haut provoqué par le Tartare,” “The earth of the *Phaedo* is animated by two types of movements, such as one also finds in the *Phaedrus* and the *Republic*: a circular movement (the rivers on the one hand describe [this motion]), and a linear movement from low to high provoked by Tartarus”. Cf. Pradeau op. cit. p. 99.

around” περιελιττόμενος, 113c4 (circular motion). So also some souls are caught up in the earth’s convection currents at 114a. The *Phaedo* thinks of eschatological process in terms of *actual* motion, shared with the earth-system. The geography of the *Phd.* is thus a metaphor for the state of the soul: it is a “psychocentric” earth.⁶⁰

It is not a static thing, but growing and changing. The earth is an image of the soul in its various stages of development. A parallel between the river-system of the *Phaedo* and the later picture of soul harmonization in the *Timaeus* reveals the purpose behind the description of the earth in the *Phd.*

In the *Timaeus*, the unharmonized soul is described in terms reminiscent of the river-system of the *Phd.* At *Tim.* 43a5–7 (see chapter 4, pp. 164–65) the orbits (*periodous*) of the soul, “bound within a mighty river, neither mastered that river nor were mastered by it, but tossed it violently and were violently tossed by it,” αἱ δ’ εἰς ποταμὸν ἐνδεθεῖσαι πολλὴν οὐτ’ ἐκράτουν οὐτ’ ἐκρατοῦντο, βίᾳ δὲ ἐφέροντο καὶ ἔφερον, *Tim.* 43a6–7. In *Tim.* 43c8–d2, sensations are its motive force (κίνησιν):

μετὰ τοῦ ῥέοντος ἐνδελεχῶς ὀχετοῦ κινεῖσθαι καὶ σφοδρῶς σείουσιν τὰς τῆς ψυχῆς περιόδους.

They co-operated with the continually flowing channel to stir and violently shake the orbits of the soul.

They combine with a “flowing channel” (ῥέοντος . . . ὀχετοῦ) to disrupt the soul’s orbits (περίόδους). The word for “channel” is a metaphor from irrigation, the same word Plato uses to describe the courses of the underground rivers at *Phd.* 112c6. The souls in the *Phd.* are tossed chaotically about like whitewater rafts on the underworld rivers until they achieve purification; in the *Tim.* the developing soul is similarly tossed about on a torrent of emotions, until its orbits come into line with the harmony of the universe. The cosmology of soul, in the *Phaedo*, similarly, is a hierarchy that ranges from chaos to order: the souls that are permanently tossed about in Tartarus, the souls that suffer the vicissitudes of the motion of the convection system, and the souls that rise above it.

⁶⁰ For the term, see Sedley (1989): 273–74.

4. Soul Harmony

So finally, what is real soul harmony? My answer, in terms of the *Phaedo*, is that it is *sōphrosynē*, “self-regulation.”

Simmias’ picture of the soul (p. 250 above) was that it is a κρᾶσιν . . . καὶ ἁρμονίαν, “a mixture and a harmony.” Implied in Simmias’ definition of the soul, as it is represented by Socrates, is that it is a mixture of various things (elements) of which, should they be separated out, the components might retain their original character. This is very different from the conclusion we must reach about Socrates’ vision of the soul, whose salient characteristic might be defined as “oneness.”

At the end of the *Phaedo*, the ideal is that the soul should take on the characteristics of the *true* earth. We remember τὴν δὲ γῆν αὐτὴν κεκοσμηθῆναι τούτοις τε ἅπασιν καὶ ἔτι χρυσῷ τε καὶ ἀργύρῳ καὶ τοῖς ἄλλοις αὖ τοῖς τοιούτοις, “The earth itself is adorned (*kekosmēsthai*) by all of these and furthermore by gold and silver, and again the other things of this sort” (110e8–111a2). Now the soul must be similarly adorned (*kosmēsas*), with its innate good qualities, parallel to the earth’s jewels (114e6–115a2):

... κοσμήσας τὴν ψυχὴν οὐκ ἄλλοτρίῳ ἀλλὰ τῷ αὐτῆς κόσμῳ, σωφροσύνην τε καὶ δικαιοσύνην καὶ ἀνδρείαν καὶ ἐλευθερίαν καὶ ἀληθείαν . . .

[When a man] has regulated (*kosmēsas*) his soul to no alien adornment (*kosmōi*), but to its own: with temperance (*sōphrosunēi*), justice, courage, freedom and truth . . .

The true earth unites the *poikilia* of its imperfect hollows into one single polychrome but nonetheless uniform thing, ἓν τι αὐτῆς εἶδος συνεχὲς ποικίλον (*Phd.* 110c6–7). The characteristic of the better earth is to unite many into one. The soul too exemplifies the aspiration of one-from-many. We can infer from other passages of Plato’s eschatologies that this is the case. At *Rep.* 588c7 Plato speaks of the dangers of multiplicity in the soul, which can be imagined in the shape θηρίου ποικίλου καὶ πολυκεφάλου, “of a complex (*poikilou*) many-headed animal.”⁶¹ Whether the soul is represented in hybrid form like

⁶¹ For the negative connotation of *poikilia* here, cf. *Rep.* 557c5; states are deceptively attractive when they are ποικίλος (*poikilos*) like an embroidered cloak, ἱμάτιον ποικίλον πᾶσιν ἄνθεσι πεποικιλμένον, “a garment of many colors (*poikilon*), embroidered (*pepoikilmenon*) with all kinds of hues” (my trans.)

this, or in musical form, on the analogy of a lyre, the parts must be reconciled, as at *Rep.* 443e1–2:

πάντα ταῦτα συνδήσαντα καὶ παντάπασιν ἓνα γεγόμενον ἐκ πολλῶν,
σώφρονα καὶ ἡρμωσμένον.

He binds all these together and from many elements becomes in every respect a unity, temperate and harmonious (*sōphrona kai hermosmenon*)..

It is unity, ἓνα . . . ἐκ πολλῶν, “one from many,” that is real soul harmony, rather than *poikilia*. The soul is described in this passage (*Rep.* 443d3–e2) as a musical instrument. Plato likens the three parts of soul to the three fixed notes used in the tuning of lyre, the *hypate*, *mese*, and *nete* (or *neate*).⁶² The result of the tuning process is *harmonia*. Only when a harmonious tuning (i.e. *sōphrosynē*) has been attained can one begin practice (of life, as of music!).

Sōphrosynē, which is usually translated “self-restraint” but which we could translate here as “self-regulation” or “self-alignment,” is the “tuning” of the soul into a *harmonia*. It is what draws the whole thing together. Plato is explicit about the equation between *sōphrosune* and *harmonia* at *Rep.* 431e9: ὡς ἀρμονία τινὶ ἢ σωφροσύνη ὁμοίωται, “temperance is like some kind of a fitting together (*harmonia*).” This is because it extends “across the whole scale” (*Rep.* 432a3–4):

ἀλλὰ δι’ ὅλης ἀτεχνῶς τέταται διὰ πασῶν παρεχόμενη συνάδοντας τοὺς τε
ἀσθενεστάτους ταῦτὸν καὶ τοὺς ἰσχυροτάτους καὶ τοὺς μέσους.

[*Sōphrosune*] is distributed literally across the whole population and makes the weakest and the strongest and those in between sing together in unison.

Because of *sōphrosune*, strong and weak can “sing together” to produce a *symphōnia* akin to the song of the Sirens in the cosmos in Plato’s Spindle of Necessity (p. 197 above).

⁶² On lyre tuning, see chapter 5, pp. 146–47.

Sōphrosune—like *harmonia* as we saw it in the discussion of Plato's *Republic* in chapter 6—is not a mixture but a synthesis: not a combination of things but one single entity in itself, the unification of diverse elements into something that is truly one. It is the soul equivalent of Plato's harmony of the spheres at *Rep.* 617b6–7, φωνὴν μίαν ἰεῖσαν, ἓνα τόνον· ἐκ πασῶν δὲ ὀκτὼ οὐσῶν μίαν ἁρμονίαν συμφωνεῖν, “uttering one sound, one note, and from all eight there was the concord of a single harmony.” What *symphonia* is to music, *sōphrosune* is to soul.

Conclusion

“This geographic eschatology . . . explores and negotiates the boundaries of the human.” Thus Nightingale, of the *Phaedo*.⁶³ The boundaries or limits—*eschata*—of the human are the true subject of the dialogue. The *Phaedo* is only superficially a geography: it takes the idioms of the genre and uses them as a point of departure for the study of the *soul*. It might more properly be called a “psychography.”

In this sense it is not a geography at all but a cosmology, a study of the world-system writ large, more akin to the broad-brush speculations of the Presocratic philosophers than to what we have of early Greek geographical literature: “C'est pourquoi finalement le terme de géographie est impropre—que la terre du *Phédon* est une compression, un modèle plus simple (ou plus grossier) de ce que sera la représentation ultérieure de l'univers” (“That is why in the final analysis the term geography is inappropriate—[the fact] that the earth is a compression, a more simple (or more broad-brush) model of what will be the ultimate representation of the universe.”⁶⁴ In this sense a more appropriate comparison would be the cosmographical speculations of the Presocratic philosophers.

Socrates in the *Phaedo* constructs a geographical *myth*—*mythos* (*Phd.* 110b1)—which is not the same as mapping the world. The purpose of the work's “geography” is to show that the earth is μίαν τε καὶ συνεχῆ, “one and continuous” (to borrow Ptolemy's phrasing from *Geog.* 1.1, pp. 83–84 above). So too the soul. The outcome of Socrates' redefinition of harmony is that we see the soul as a harmony, but *not* in the sense of “mixture” as in Simmias'

⁶³ Nightingale (2002): 232.

⁶⁴ Pradeau (1996): 94; cf. p. 104.

argument, which takes its premise from the Presocratic idea of elemental mixture. Plato plays with this latter idea by allusion to Empedocles, but transcends it. *Oneness* is the primary characteristic of the harmonic soul as it emerges from Socrates' redefinition: this is a characteristic shared between the ideal earth and the harmonized soul. The soul, like the earth, is one and self-supporting (or self-regulating, the sense of *sōphrosunē*). In the *Phaedo*, the spherical earth-model is not just a vehicle for afterlife speculation; it is the afterlife itself. The *Phaedo* offers us a complete harmonization of eschatology and "science."

General Conclusion to Plato's Soulscapes

We saw at the beginning of chapter 6 that the *Republic*, *Phaedrus*, and *Phaedo* are usually grouped, along with the *Gorgias*, as "Plato's eschatological dialogues." In the final analysis, however, they are not strictly speaking "eschatological" in the afterlife sense pure and simple. All of the dialogues we've examined here are about being *alive*, being human. Each of the dialogues we've seen here uses, in its own idiosyncratic way, the motif of eschatology to describe the nature of the soul in the here and now.

In my study of each of the three dialogues treated here, I have pursued one prevailing idea: in the case of the *Republic*, that of harmony; in the *Phaedrus*, that of a mystic progress against the backdrop of the spherical universe; and in the *Phaedo*, the "cosmography of soul," i.e. the soul-earth nexus. There are of course also common elements across all of these dialogues: the immortality of the soul; metempsychosis; mystic ideas and terminology; and, above all, the double manifestation of space in the form of journey and vision.

The visions of all three dialogues are equivalent: in each case, the vision is the teacher of the soul. In the *Republic*, the image of the Spindle of Necessity looms over the journey of Er through the strange realm of the afterlife; in the *Phaedrus*, the central myth contains its vision of the spherical universe, the culminating point of Socrates' and Phaedrus' journey; in the *Phaedo*, journey and vision are concertinaed: the spherical earth itself becomes the locus for our afterlife journey, our souls tossed on the waves of its convection system.

The interplay of two kinds of space we find in the journey-vision paradigm allows, as we've seen, for eschatology as an arena in which to explore the connection of soul and universe. This connection is most often troped by the use

of scientific information in the afterlife vision. But for Plato, "science" is only the jumping-off point. It is the limits of scientific information that enable him to shade into speculation, when "science" becomes metaphysics.⁶⁵

Afterlife myths may draw on scientific information, but their use of that information does not, in the end, aim to be *real* (albeit it may—perhaps must—be plausible). Afterlife myths are a way of speculating about the connections between soul and universe. They often exceed the reach of the technical information available to them, and contemporary conceptual language may not be far enough developed for full expression of what the writer is trying to say.⁶⁶ Eschatologies use limited empirical knowledge to project tremulous imaginative superstructures, which can nonetheless turn out to be more substantial than they look. So Plato's myths outgrow their seedbed of available fact: this does not mean they are empirically implausible or that they are devoid of other kinds of truth.

The purpose of each of Plato's eschatological visions is to push through the doors of perception into the realm of abstraction. The better able we are to understand that the senses lead nowhere as an end in themselves, but that as a way of understanding the nature of the universe they are a starting point on the eschatological journey toward the Forms, the better our chances in the afterlife will be.

Ultimately, our eschatological aim is what I call "psychic harmonization": that is, in its ideal state, the idea that the soul will be at one with the universe, sharing its pure circular motion. This is the rationale for all the visions in our texts: to give the soul a preincarnation taste of what it's aiming for in the afterlife. A soul that remembers well will go to a high point in the universe, riding it so that the soul motions are indistinguishable from the motions of the universe itself. This is complete psychic harmonization. In the ideal world, the universe itself is our "eschatology."

⁶⁵ Tuan (1977): 86, "Mythical space is a fuzzy area of defective knowledge surrounding the empirically known; it frames pragmatic space."

⁶⁶ As with Plato's falling short of the harmonic series in the *Republic*. We'll come across this phenomenon again in Dante's striving after rhythmic alignment in *Paradiso* XXVIII (pp. 305–07 below).

PART 4
TO THE SKY

The Dark Side of the Moon

Obtained after “unification,” “cosmicization” continues the same process—that of recasting man in new, gigantic dimensions, of guaranteeing him macranthropic experiences.

—Mircea Eliade, *Yoga: Immortality and Freedom*

Introduction

In Plutarch’s second-century CE Platonic dialogue *De facie in orbe lunae* (*On the Face in the Moon’s Disc*), the speaker, Sulla, puts us squarely in the territory of the Elysium of *Odyssey* 4 (p. 22 above). Sulla speaks first of the goddess Demeter “sharing” her daughter Persephone (Kore—the Maiden) with the god of the underworld, each for six months; he rapidly follows this with quotation of Homer’s Elysium (*De fac.* 942E4–F10):

τὸ δὲ νῦν μὲν ἐν οὐρανῷ καὶ φωτὶ νῦν δ’ ἐν σκότῳ καὶ νυκτὶ γενέσθαι
περὶ τὴν Κόρην ψεῦδος μὲν οὐκ ἔστιν, τοῦ δὲ χρόνου τῷ ἀριθμῷ πλάνην
παρέσχηκεν. οὐ γὰρ ἕξ μῆνας ἀλλὰ παρ’ ἕξ μῆνας ὀρῶμεν αὐτὴν ὑπὸ τῆς
γῆς ὥσπερ ὑπὸ τῆς μητρὸς τῇ σκιᾷ λαμβανομένην ὀλιγάκις δὲ τοῦτο διὰ
πέντε μηνῶν πάσχουσιν, ἐπεὶ τὸν γ’ Ἄϊδην ἀπολιπεῖν ἀδύνατόν ἐστιν
αὐτὴν τοῦ Ἄϊδου πέρας οὐσαν· ὥσπερ καὶ Ὅμηρος ἐπικρυψάμενος οὐ
φαύλως τοῦτ’ εἶπεν

ἀλλ’ εἰς Ἥλύσιον πεδῖον καὶ πείρατα γαίης·
ὅπου γὰρ ἡ σκιὰ τῆς γῆς ἐπινεμομένη παύεται, τοῦτο τέρμα τῆς γῆς
ἔθετο καὶ πέρας. εἰς δὲ τοῦτο φαῦλος μὲν οὐδεὶς οὐδ’ ἀκάθαρτος ἄνεισιν,
οἱ δὲ χρηστοὶ μετὰ τὴν τελευτὴν κοιμισθέντες αὐτόθι ῥᾶστον μὲν οὕτως
βίον . . .

The statement concerning Kore that now she is in the light of heaven and now in darkness and night is not false but has given rise to error in the

computation of time, for not throughout six months but every six months we see her being wrapped in shadow by the earth as it were by her mother, and infrequently we see this happen to her at intervals of five months, for she cannot abandon Hades since she is the boundary of Hades, as Homer too has rather well put it in veiled terms:

“to the Elysian plain and the *bounds of the earth*” [*Od.* 4.563].

Where the range of earth’s shadow ends [on the *moon*], this he set as the term and boundary of the earth. To this point no one who is evil or unclean, but the good are conveyed thither after death and there continue to lead a life most easy to be sure. (Cherniss and Hembold 1957)¹

But Homeric quotation is used to lull us into a false sense of familiarity, drawing us into Plutarch’s ruse all unawares: this Elysium is *not* the one we know from Homer. Sulla makes it look as though Homer says that the *moon* is the “boundary of Hades”—when in fact the moon is not in Homer’s text at all, and Elysium is the “boundary of *earth*.”² Disingenuously, sneakily, Sulla lifts the Homeric Elysium from “the ends of the earth” up a level. The resulting sense of vertigo sets the scene for the rest of Plutarch’s eschatological myth, in which Elysium is repositioned as part of an ascending world-system.

1. Plutarch’s Cosmos

As Socrates does in the myth of the *Phaedo*, Plutarch’s Sulla in the *De facie in orbe lunae* will offer us a completely new way of seeing the world. But Sulla turns Plato’s spherical earth in the *Phaedo* inside out. In the *Phaedo*, the earth, in particular its interior system, becomes a graphic representation of the fate of souls. Just as Socrates in the *Phaedo* forces us to revise our understanding of the earth, our place on it, and our place in the cosmic hierarchy, so to understand Plutarch’s cosmos requires a spatial reorientation on the part of the reader. In Plutarch’s dialogue, the graded system for the disposition of souls that was inside the earth in Plato is now externalized. Souls will be disposed through successive cosmic layers, with Hades in the air above

¹ All translations of Plutarch’s *De facie in orbe lunae* in this chapter are from Cherniss and Hembold (1957). Line numbers of the text are given here as in their Loeb text, for ease of reference.

² Cherniss and Hembold (1957) n. ad loc: “In the present passage Plutarch does not say why his interpretation of Homer’s line justifies him in calling the moon τοῦ Ἅιδου πέρας, but the rest of the myth makes it certain that Hades is the region between the earth and the moon.”

the earth, Elysium on the moon.³ The *whole* of the earth, which we live on, will be Tartarus.

Plutarch's new cosmic eschatology is a development of Plato's. In the *De facie*, Plutarch lifts Socrates' description of the true earth from the *Phaedo* but (as with his quotation of Homer) reapplies it to the *moon* (*De facie* 934F10–935C13, excerpted):

τὴν δὲ σελήνην οὐκ εἰκὸς ὥσπερ τὴν θάλασσαν μίαν ἔχειν ἐπιφάνειαν ἀλλ' εἰκέναι μάλιστα τῇ γῇ τὴν φύσιν ἣν ἐμυθολόγει Σωκράτης ὁ παλαιός εἴτε δὴ ταύτην αἰνιττόμενος εἴτε δὴ ἄλλην τινὰ διηγοῦμενος· οὐ γὰρ ἄπιστον οὐδὲ θαυμαστὸν εἰ μηδὲν ἔχουσα διεφθορὸς <ἐν> ἑαυτῇ μηδ' ἰλυῶδες ἀλλὰ φῶς τε καρπουμένη καθαρὸν ἐξ οὐρανοῦ καὶ θερμότητος οὐ διακαοῦς οὐδὲ μανικοῦ πυρὸς ἀλλὰ νοτεροῦ καὶ ἀβλαβοῦς καὶ κατὰ φύσιν ἔχοντος οὐσα πλήρης κάλλη τε θαυμαστά κέκτηται τόπων ὄρη τε φλογειδῇ καὶ ζώνας ἀλουργοῦς ἔχει, χρυσόν τε καὶ ἄργυρον οὐκ ἐν βάθει διεσπαρμένον ἀλλὰ πρὸς τοῖς πεδίοις ἐξανθοῦντα πολὺν ἢ πρὸς ὕψει λείοις προφερόμενον. εἰ δὲ τούτων ὅσιν ἀφικνεῖται διὰ τῆς σκιᾶς ἄλλοτ' ἄλλη πρὸς ἡμᾶς ἐξαλλαγὴ καὶ διαφορὰ τινι τοῦ περιέχοντος, τό γε μὴν τίμιον οὐκ ἀπόλλυσι τῆς δόξης οὐδὲ τὸ θεῖον ἢ σελήνη, <γ>ῇ τις <ὀλυμπία καὶ> ἱερὰ πρὸς ἀνθρώπων νομιζομένη μᾶλλον ἢ πῦρ θολερόν, ὥσπερ οἱ Στωικοὶ λέγουσι, καὶ τρυγῶδες. . . . πολλοῦ δὲ δέομεν ἄνθρωποι τὴν σελήνην, γῆν οὖσαν ὀλυμπίαν, ἄψυχον ἡγεῖσθαι σῶμα καὶ ἄνουν καὶ ἄμοιρον ὧν θεοῖς ἀπάρχεσθαι προσήκει νόμῳ τε τῶν ἀγαθῶν ἀμοιβὰς τίνοντας καὶ κατὰ φύσιν σεβομένους τὸ κρεῖττον ἀρετῇ καὶ δυνάμει καὶ τιμιώτερον. ὥστε μηδὲν οἰώμεθα πλημμελεῖν γῆν αὐτὴν θέμενοι, τὸ δὲ φαινόμενον τουτὶ πρόσωπον αὐτῆς, ὥσπερ ἢ παρ' ἡμῖν ἔχει γῆ κόλπους τινὰς μεγάλους, οὕτως ἐκείνην ἀνεπτύχθαι βάθεσι μεγάλοις καὶ ῥήξεσιν ὕδωρ ἢ ζοφερόν ἀέρα περιέχουσιν ὧν ἐντὸς οὐ καθίησιν οὐδ' ἐπιψαύει τὸ τοῦ ἡλίου φῶς ἀλλ' ἐκλείπει καὶ διεσπασμένην ἐνταῦθα τὴν ἀνάκλασιν ἀποδίδωσιν.

It is likely, however, that the moon has not a single plane surface like the sea but closely resembles in constitution the earth that the ancient Socrates made the subject of a myth, whether he really was speaking in riddles about this earth or was giving a description of some other. It is in fact not incredible or wonderful that the moon, if she has nothing corrupted or slimy <in> her

³ Compare the supraterrrestrial disposition of souls in Dante, pp. 117–18 above.

but garners pure light from heaven and is filled with warmth, which is fire not glowing or raging but moist and harmless and in its natural state, has got open regions of marvelous beauty and mountains flaming bright and has zones of royal purple with gold and silver not scattered in her depths but bursting forth in abundance on the plains or openly visible on the smooth heights. If through the shadow there comes to us a glimpse of these, different at different times because of some variation and difference of the atmosphere, the honourable repute of the moon is surely not impaired nor is her divinity because she is held by men to be a <celestial> and holy earth rather than, as the Stoics say, a fire turbid and dreggish. . . . As men we are far from thinking that the moon, because she is a celestial earth, is a body without soul and mind and without share in the first-fruits that it becomes us to offer to the gods, according to custom requiting them for the goods we have received and naturally revering what is better and more honourable in virtue and power. Consequently let us not think it an offence to suppose that she is earth and that for this which appears to be her face, just as our earth has certain great gulfs, so that earth yawns with great depths and clefts which contain water or murky air; the interior of these the light of the sun does not plumb or even touch, but it fails and the reflection which it sends back here is discontinuous.

Compare this passage with Plato's description of the True Earth, pp. 258–60 above. The ancestry of Plutarch's moon is unmistakable. Like Socrates' earth in the *Phaedo*, the moon is a body with many hollows. These are what, in Plutarch's dialogue, gives the appearance of a "face." Like the True Earth of the *Phaedo*, the moon as a whole is a paragon of purity. Plutarch's φῶς . . . καθαρὸν, *phōs* . . . *katharon*, "pure light," at 935A4, reminds us of Plato's λαμπροτέρων καὶ καθαρωτέρων ἢ τούτων, *lamproterōn kai katharōterōn toutōn*, "much brighter and purer than our [colors],"⁴ at *Phd.* 110c2. Plutarch's "zones of royal purple, gold, and silver not scattered in her depths but . . . bursting forth" (ζώνας αλουργούς . . . χρυσόν τε καὶ ἄργυρον οὐκ ἐν βάθει διεσπαρμένον ἀλλὰ . . . ἐξανθοῦντα, 935A8–10) recalls Plato's τὴν δὲ γῆν αὐτὴν κεκοσμηθῆαι τούτοις τε ἅπασι καὶ ἔτι χρυσῷ τε καὶ ἀργύρῳ καὶ τοῖς ἄλλοις αὖ τοῖς τοιούτοις, "But the earth itself is adorned by all of these and furthermore by gold and silver, and again the other things of this sort" (*Phd.* 110e8–111a1). Plutarch's moon is, in short, an "Olympian (i.e. celestial) earth" (γῆν . . . ὀλυμπίαν).

⁴ All translations of Plato's *Phaedo* in this chapter are from Emlyn-Jones and Preddy (2013).

The implication of its celestuality is that the moon is the earth as it *should* be—a more perfect version of it, inhabited by more perfect people. But instead of being an abstract aspiration, this utopia becomes a visible heavenly body. What we think is the moon, *that* is the true earth. The aliens who live on it are the equivalent of Plato's inhabitants of the true earth, who “see the sun and moon and stars as they really are,” τόν γε ἥλιον καὶ σελήνην καὶ ἄστρα ὁρᾶσθαι ὑπ' αὐτῶν οἷα τυγχάνει ὄντα (*Phd.* 111c1–2). From their lunar vantage point, they also look down and see our earth as it really is.

Plutarch seeks the objective viewpoint of the celestial onlooker, with its roots in the Platonic contemplation of the afterlife “vision” (as at *Phd.* 110b6, where the earth is seen ἄνωθεν, “from above”). But Plutarch's onlookers fail precisely in this quality of objectivity. The lunar aliens would look down on our messy world with incredulity and distaste (*De facie* 940E6–F8):

ἐκείνους δ' ἂν οἶομαι πολὺ μᾶλλον ἀποθαυμάσαι τὴν γῆν, ἀφορῶντας οἷον ὑποστάθμην καὶ ἰλὺν τοῦ παντὸς ἐν ὕγροις καὶ ὀμίχλαις καὶ νέφεσι διαφανομένην ἀλαμπὲς καὶ ταπεινὸν καὶ ἀκίνητον χωρίον, εἰ ζῶα φύει καὶ τρέφει μετέχοντα κινήσεως ἀναπνοῆς θερμότητος. κἂν εἴ ποθεν αὐτοῖς ἐγγένοιτο τῶν Ὀμηρικῶν τούτων ἀκοῦσαι

σμερδαλέ', εὐρώεντα, τὰ τε στυγέουσι θεοὶ περ,

καὶ

τόσσον ἔνερθ' Ἄϊδεω, ὅσον οὐρανὸς ἔστ' ἀπὸ γαίης,

ταῦτα φήσουσιν ἀτεχνῶς περὶ τοῦ χωρίου τούτου λέγεσθαι καὶ τὸν Ἄϊδην ἐνταῦθα καὶ τὸν Τάρταρον ἀπωκίσθαι, γῆν δὲ μίαν εἶναι τὴν σελήνην, ἴσον ἐκείνων τῶν ἄνω καὶ τῶν κάτω τούτων ἀπέχουσιν.

Those men, I think, would be much more amazed at the earth, when they look out at the sediment and dregs of the universe, as it were, obscurely visible in moisture, mists and clouds as a lightless, low, and motionless spot, to think that it engenders and nourishes animate beings which partake of motion, breath, and warmth. If they should chance to hear somewhere the Homeric words,

“Dreadful and dank, which even gods abhor” [*Il.* 20.65 = *Hes. Th.* 810]

and

“Deep under Hell as far as Earth from Heaven” [*Il.* 8.16],

these they would say are simply a description of this place and Hell (*Haidēn*) and Tartarus have been relegated [here] while the moon alone is earth, since it is equally distant from those upper regions and these lower ones.

What the aliens see is our grubby sedimentary earth. At 940E3 Plutarch borrows the word Plato used for “sediment” in the *Phaedo*: ὑποστάθμη, *hupostathmēn* = *Phd.* 109c3. But Plato’s pool of scum has spilled over. No longer is it just the hollows of the earth that are our habitation but the whole planet. Plato’s grubby sedimentary earth is what the aliens see: grubby and sedimentary *in toto* now, not just in its hollows.

The aliens’ disgust at our pool of scum is expressed by judicious selection from Homer and Hesiod. They reinterpret the earth as the Homeric/Hesiodic underworld: *Il.* 20.65 refers to the House of Hades, *Th.* 810 to the Styx, the “roots of Tartarus.” The aliens assimilate their view of the earth to the cosmic stratigraphy of Homer. They argue that the moon is actually the earth, since it sits at the midpoint between high and low assigned to the earth in Homer, *Iliad* 8.13–16 (p. 35 above).

Plutarch’s use of Homeric quotation is not random: it also references Plato’s use of Homer the *Phaedo*. Plato, in his passage on Tartarus at *Phd.* 111e7–112a5 (pp. 266–67 above), quoted *Iliad* 8.14. Plutarch quotes a line that falls very close to Plato’s choice from the Homeric cosmography, *Iliad* 8.16. Plutarch cleverly varies the location from which the Homeric quotation is drawn, but only slightly. There will be a difference, however. Plato quoted the Homeric line in reference to *part* of the earth only, the deepest hollow, Tartarus. Plutarch’s aliens now look down on the *whole earth*, commuted into Tartarus by the suggestiveness of the Homeric quotation.

In relation to the Homeric cosmography, Plutarch’s cosmos follows the same stratified pattern, but misplaced. The equidistant relationship between Hades, earth, and heaven in Homer—τόσσον ἔνερθ’ Αἴδεω ὅσον οὐρανός ἐστ’ ἀπὸ γαίης, “as far beneath Hades as sky is from earth”—is reconfigured by Plutarch as the equidistant relationship between upper regions, the moon, and the earth: γῆν δὲ μίαν εἶναι τὴν σελήνην, ἴσον ἐκείνων τῶν ἄνω καὶ τῶν κάτω τούτων ἀπέχουσιν, “the moon alone is earth, since it is equally distant from those upper regions and these lower ones” (*De fac.* 940F2–3). Plutarch’s tripartite cosmos rises from the earth to the moon to the upper regions, in the same way Homer’s tripartite cosmos was composed of Hades, earth, and sky; and the three elements in each case stand in the same relation to one another.⁵ But Plutarch has taken the whole cosmic model and lifted each of its

⁵ On the idea of a tripartite cosmos in Empedocles, an author heavily drawn on by Plutarch (see nn. 14 and 21 below), see Trépanier (2017): 171.

elements up one notch. He distorts space topologically: spatial relationships remain the same even when the layers are transposed.

Unlike in the *Phaedo*, where Plato fully assimilates the Tartarus of the stratified universe with the spherical universe, in Plutarch the spherical model again jostles with a stratified hierarchy. This results in a permutation of the familiar spatial paradox. Through Homeric quotation, Plutarch gestures toward a stratified notion of the cosmos: but because of its sphericity, Plutarch's cosmos has no up and down in the usual sense.

From the very start of the dialogue, Plutarch sets out to disorient us spatially. In Plutarch all space is relative, the behavior of bodies within it contingent rather than predetermined (*De fac.* 927D10–12):

οὐδὲν ἔοικεν ὅλου μέρος αὐτὸ καθ' ἑαυτὸ τάξιν ἢ θέσιν ἢ κίνησιν ἰδίαν ἔχειν ἦν ἂν τις ἀπλῶς κατὰ φύσιν προσαγορεύσειεν.

No part of a whole all by itself seems to have any order, position or motion of its own which could be called unconditionally “natural” (*haplōs kata phusin*).

Instead, μέμικται δέ πως πρὸς ἄλληλα καὶ συντέτακται κατὰ τὴν ἐκάστου φύσιν, “they have been somehow intermingled and organically combined in accordance with the nature of each” (*De fac.* 928A3). In other words, there is no absolute “natural,” ἀπλῶς κατὰ φύσιν, only *contextually* natural, κατὰ τὴν ἐκάστου φύσιν.

Already in Plato's *Timaeus* there is no absolute, only relative, up and down (*Timaeus* 62c5–d8):⁶

φύσει γὰρ δὴ τινὰς τόπους δύο εἶναι διειληφότας διχῇ τὸ πᾶν ἐναντίους, τὸν μὲν κάτω, πρὸς ὃν φέρεται πάνθ' ὅσα τινὰ ὄγκον σώματος ἔχει, τὸν δὲ ἄνω, πρὸς ὃν ἀκουσίως ἔρχεται πᾶν, οὐκ ὀρθὸν οὐδαμῇ νομίζειν· τοῦ γὰρ παντὸς οὐρανοῦ σφαιροειδοῦς ὄντος, ὅσα μὲν ἀφεστῶτα ἴσον τοῦ μέσου γέγονεν ἔσχατα, ὁμοίως αὐτὰ χρὴ ἔσχατα πεφυκέναι, τὸ δὲ μέσον τὰ αὐτὰ μέτρα τῶν ἐσχάτων ἀφεστηκὸς ἐν τῷ καταντικρὺν νομίζειν δεῖ πάντων εἶναι. τοῦ δὴ κόσμου ταύτῃ πεφυκότος, τί τῶν εἰρημένων ἄνω τις ἢ κάτω

⁶ Plutarch was almost certainly aware of this passage from the *Tim.* On the *De fac.* as a reinterpretation of the *Tim.*, see Hamilton (1934a): 29: “I believe that Plutarch, having the *Timaeus* before him, has deliberately made his myth a copy in miniature of that dialogue.”

τιθέμενος οὐκ ἐν δίκη δόξει τὸ μηδὲν προσήκον ὄνομα λέγειν; ὁ μὲν γὰρ μέσος ἐν αὐτῷ τόπος οὔτε κάτω πεφυκώς οὔτε ἄνω λέγεσθαι δίκαιος, ἀλλ' αὐτὸ ἐν μέσῳ.

It is entirely wrong to hold that there are by nature (*phusei*) two separate regions, divorced from and entirely opposite to one another, the one the regions “below,” toward which anything that has physical mass tends to move, and the other the region “above,” toward which everything makes its way only under force. For given that the whole heaven is spherical, all points that are situated as extremes (*eschata*) at an equal distance from the centre must by their nature be extremes of just the same sort, and we must take it that the centre, being equidistant from the extremes, is situated at the point that is the opposite to all the extremes. Now if this is the world’s natural constitution, which of the points just mentioned could you posit as “above” or “below” without justly giving the appearance of using totally inappropriate language? There is no justification for describing the world’s central region either as a natural “above” or a natural “below,” but just “at the centre.” (Zeyl 2000)

Here Plato denies the absoluteness of “up” and “down.” This is geometrical fact. In a sphere, everything is just relative to the center. But Plutarch goes further: for him, there is no absolute middle either (*De fac.* 925F2–6):

ὅλως δὲ πῶς λέγεται καὶ τίνος ἢ γῆ μέση κείσθαι; τὸ γὰρ πᾶν ἄπειρόν ἐστι, τῷ δ' ἀπείρῳ μήτ' ἀρχὴν ἔχοντι μήτε πέρας οὐ προσήκει μέσον ἔχειν· πέρας γάρ τι καὶ τὸ μέσον, ἢ δ' ἀπειρία περάτων στέρησις.

After all, in what sense is the earth situated in the middle, and in the middle of what? The sum of things is infinite; and the infinite, having neither beginning nor limit, cannot properly have a middle, for the middle is a kind of limit too but infinity is a negation of limits.

Plutarch sounds disconcertingly modern here: if space is infinite, it has no middle. This is, according to Sambursky, the “transformation of the centre into a general and *relative* conception” (my emphasis).⁷

⁷ Sambursky (1956): 207.

This passage should probably be read in opposition to Aristotle's theory of "natural" places and motions as we find it, for example, at *Phys.* 4.1 and 8.4 and *De caelo* 2.14 and 4.3.⁸ Sambursky (1956): 212 sees in the *De fac.* a work that "reaches a conclusion that renders the whole of Aristotelian dynamics null and void."⁹ In the *Physics*, Aristotle argues (perhaps in reaction to Plato) for a concept of the absolute position in space of the elements, irrespective of the position of the observer (*Phys.* 4.1.208b10–19):

ἔτι δὲ αἱ φοραὶ τῶν φυσικῶν σωμάτων καὶ ἀπλῶν, οἷον πυρὸς καὶ γῆς καὶ τῶν τοιούτων, οὐ μόνον δηλοῦσιν ὅτι ἐστὶ τι ὁ τόπος, ἀλλ' ὅτι καὶ ἔχει τινὰ δύναμιν. φέρεται γὰρ ἕκαστον εἰς τὸν αὐτοῦ τόπον μὴ κωλυόμενον, τὸ μὲν ἄνω τὸ δὲ κάτω . . . ἔστι δὲ τὰ τοιαῦτα οὐ μόνον πρὸς ἡμᾶς, τὸ ἄνω καὶ κάτω καὶ δεξιὸν καὶ ἀριστερόν· ἡμῖν μὲν γὰρ οὐκ αἰεὶ τὸ αὐτό, ἀλλὰ κατὰ τὴν θέσιν, ὅπως ἂν στραφῶμεν, γίγνεται, διὸ καὶ ταῦτο πολλάκις δεξιὸν καὶ ἀριστερόν καὶ ἄνω καὶ κάτω καὶ πρόσθεν καὶ ὀπίσθεν· ἐν δὲ τῇ φύσει διώριστα χωρὶς ἕκαστον.

Moreover the trends of the physical elements (fire, earth and the rest) show not only that locality or place is a reality but also that it exerts an active influence; for fire and earth are borne, the one upwards and the other downwards, if unimpeded, each towards its own "place" . . . Now these terms—such as up and down and right and left, I mean—when thus applied to the trends of the elements are not merely relative to ourselves. For in this relative sense the terms have no constancy, but change their meaning according to our own position, as we turn this way and that; so that the same thing may be now to the right and now to the left, now above and now below, now in front and now behind; whereas in nature each of these terms is distinct and stable independently of us. (trans. Wicksteed and Cornford 1929–34)¹⁰

In the cosmos, things gravitate toward their natural positions for no other reason than that this is their inbuilt property (*Phys.* 8.4.255b14–16):

⁸ Thanks to OUP's Reader 2 for this suggestion.

⁹ Sambursky (1956): 212. On Plutarch's Aristotelianism in general, see Donini (1988): 126–44.

¹⁰ On this passage of the *Physics* see Hussey (1983): xxvii–xxxii; and Ross (1936): 370–77 and n. on *Phys.* 4.1.208b13–14, who sensibly critiques Aristotle's argument.

καίτοι τοῦτο ζητεῖται, διὰ τί ποτε κινεῖται εἰς τὸν αὐτῶν τόπον τὰ κοῦφα καὶ τὰ βαρέα. αἴτιον δ' ὅτι πέφυκέν ποι.

If the question is still pressed why light and heavy things tend to their respective positions, the only answer is that [it is in their nature (*pephuke*) to do] so. (trans. Wicksteed and Cornford 1929–34, modified)¹¹

This property is a function of what we'd now call elemental “mass” (*Cael.* 4.3.310a32–b1):

εἰ οὖν εἰς τὸ ἄνω καὶ τὸ κάτω κινητικὸν μὲν τὸ βαρυντικὸν καὶ τὸ κουφιστικόν, κινητὸν δὲ τὸ δυνάμει βαρὺ καὶ κοῦφον, τὸ δ' εἰς τὸν αὐτοῦ τόπον φέρεσθαι ἕκαστον τὸ εἰς τὸ αὐτοῦ εἶδος ἐστι φέρεσθαι.

We may say, then, that the cause of motion upwards and downwards is equivalent to that which makes heavy or light, and the object of such motion is the potentially heavy or light, and motion towards its proper place is for each thing motion towards its proper form. (Guthrie 1939)

At *Cael.* 2.14.296b8–9 this theory of natural motion is translated into the concrete terms of the cosmos:

ἔτι δ' ἡ φορὰ τῶν μορίων καὶ ὅλης αὐτῆς ἡ κατὰ φύσιν ἐπὶ τὸ μέσον τοῦ παντός ἐστιν.

The natural (*kata phusin*) motion of the earth as a whole, like that of its parts, is towards the centre of the universe.

It is to this last that *De fac.* 925E8–11, “the infinite, having neither beginning nor limit, cannot properly have a middle,” most clearly responds.

What happens to the cosmic levels in such a world? And, especially important for us, where is the underworld? What is Plutarch's solution, in a spherical universe, to the lack of absolute vertical orientation and therefore the lack of any “bottom” that can be called the underworld? We've seen how, in the *Phaedo*, the underworld became the interior of the earth. At *Phaedo* 111a, Socrates' discussion of the inhabitants of the True Earth involves a

¹¹ On this passage see Ross (1936): 436.

reorganization of categories. For the people who live “up there,” our air is their water; our “ether” is “air” to them. Plutarch too recategorizes the parts of the cosmos. His is a clearer stratification than Plato’s but, at the same time, a stratification involving a more radical shift in perspective.

2. Plutarch’s Afterlife

Plutarch’s reorientation of Socrates’ True Earth as the moon, and his relegation of the entire earth to the status of Tartarus, might alert us to the fact that we are going to have to reorient ourselves in respect of the afterlife as well as the cosmos. If the earth is Tartarus, then Hades is the intermediate sphere between the earth and the moon (*De fac.* 943C1–10):¹²

πάσαν ψυχὴν, ἄνουν καὶ σὺν νῶ, σώματος ἐκπεσοῦσαν εἰμαρμένον ἐστὶν <έν> τῷ μεταξὺ γῆς καὶ σελήνης χωρίῳ πλανηθῆναι χρόνον οὐκ ἴσον, ἀλλ’ αἱ μὲν ἄδικοι καὶ ἀκόλαστοι δίκας τῶν ἀδικημάτων τίνουσι τὰς δ’ ἐπιεικεῖς ὅσον ἀφαγνεῦσαι καὶ ἀποπνεῦσαι <τοὺς> ἀπὸ τοῦ σώματος ὥσπερ ἀτμοῦ πονηροῦ μiasμοὺς ἐν τῷ πρασιότατῳ τοῦ ἀέρος, ὃν λειμῶνας Ἄιδου καλοῦσι, δεῖ γίγνεσθαι χρόνον τινὰ τεταγμένον.

All soul, whether without mind or with it, when it has issued from the body is destined to wander in the region between the earth and the moon but not for an equal time. Unjust and licentious souls pay penalties for their offences; but the good souls must in the gentlest part of the air, which they call “the Meadows of Hades,” pass a certain set time sufficient to purge and blow away the pollutions contracted from the body as from a bad smell.

Elysium is further up the cosmic ladder, unambiguously in the sky, on the dark side of the moon (944C7–9):¹³

¹² For Hades as the region between the earth and the moon see Cicero *Tusc.* 1.42–3; *Somn.* VIII.21 [*Rep.* 29.2], with Zetzel (1995) ad loc.; Plutarch, *On the E at Delphi* 393a, with Jones (1980): 65 and Dillon (1977): 191. The idea of Hades as the circle between the earth and the moon becomes common in Neoplatonism: e.g. Macrobius *Comm.* 1.11.6, *inter lunam terrasque locum mortis et inferorum vocari*, “the area between the moon and the earth was known as the infernal regions of the dead” (Stahl 1952). Using Plutarch’s *De fac.* as comparandum, Norden (1926): 23–26 interpreted Virgil’s underworld as an allegory for the celestial afterlife: see pp. 100–02 above. In this he follows the Neoplatonists, such as Servius on Virgil, *Aen.* 6.439, who allegorizes the Styx as the nine circles of the universe (see pp. 110–11 above).

¹³ On possible Pythagorean and/or “Orphic” influence on this passage, see Albinus (2000): 131 and 175n12.

ὀνομάζεται δὲ τὰ μὲν πρὸς οὐρανὸν τῆς σεληνῆς Ἥλύσιον πεδίων τὰ δ' ἐνταῦθα Φερσεφόνης οἶκος ἀντίχθονος.

The side of the moon towards heaven is named “Elysian plain,” the hither side “House of Counter-terrestrial Persephone.”

Plutarch's cosmos is still a three-part one, like Homer's (see p. 35 above): but his progression is earth to Hades to Elysium, in ascending order. This cosmic layout is a map for the progress of souls. In Plutarch's worldview, the Homeric language of correlation is shared by the human entity, and the cosmos. At 940F7–8, ἴσον ἐκείνων τῶν ἄνω καὶ τῶν κάτω τούτων ἀπέχουσιν, “[the moon] is equidistant from those things above and these things down here”; at 943A6–7, νοῦς γὰρ ψυχῆς, ὅσω ψυχῇ σώματος ἄμεινόν ἐστι καὶ θεϊότερον, “The mind is better and more divine than the soul in the same degree as the soul is better and more divine than the body.” For each entity, cosmos and human, there are three correlatives.

Likewise, in Plato's *Phaedo*, there was a three-stage release mechanism for souls, from inside the earth, to the earth, to “more beautiful abodes” (*Phd.* 114b7–c10):

οἱ δὲ δὴ ἂν δόξωσι διαφερόντως πρὸς τὸ ὁσίως βιώναι, οὗτοί εἰσιν οἱ τῶνδε μὲν τῶν τόπων τῶν ἐν τῇ γῇ ἐλευθερούμενοί τε καὶ ἀπαλλαττόμενοι ὥσπερ δεσμοτηρίων, ἄνω δὲ εἰς τὴν καθαρὰν οἴκησιν ἀφικνούμενοι καὶ ἐπὶ γῆς οἰκίζόμενοι. τούτων δὲ αὐτῶν οἱ φιλοσοφία ἱκανῶς καθηράμενοι ἄνευ τε σωμάτων ζῶσι τὸ παράπαν εἰς τὸν ἔπειτα χρόνον, καὶ εἰς οἰκῆσεις ἔτι τούτων καλλίους ἀφικνοῦνται, ἃς οὔτε ῥάδιον δηλῶσαι οὔτε ὁ χρόνος ἱκανὸς ἐν τῷ παρόντι. ἀλλὰ τούτων δὴ ἕνεκα χρὴ ὧν διεληλύθαμεν, ὦ Σιμμία, πᾶν ποιεῖν ὥστε ἀρετῆς καὶ φρονήσεως ἐν τῷ βίῳ μετασχεῖν· καλὸν γὰρ τὸ ἄθλον καὶ ἡ ἐλπίς μεγάλη.

But those who are found to have excelled in holy living are freed from these regions within the earth and are released as from prisons; they mount upward into their pure abode and dwell upon the earth. And of these, all who have duly purified themselves with philosophy live henceforth altogether without bodies, and pass to still more beautiful abodes which it is not easy to describe, nor have we time enough.

Plutarch ratchets everything up one level. Plato's inner earth, to the surface of earth, to a "better place" progression becomes in Plutarch earth (= Tartarus) to Hades (air around earth) to Elysium (moon).

We saw in the previous chapter how Plato's earth becomes equivalent to the body: like the body, it respire. In Plutarch the *whole cosmos* becomes the body, partitioned, like the body in Plato's *Timaeus*, into locations for different parts of the *soul*.¹⁴ At *De fac.* 928B9–C9 we're given a medicalizing blow-by-blow comparison of the heavenly bodies to the organs of the body:

ἀλλὰ τοῦ κατὰ λόγον κρατοῦντος οἱ μὲν ὥσπερ ὄμματα φωσφόρα τῷ προσώπῳ τοῦ παντὸς ἐνδεδεμένοι περιπολοῦσιν, ἥλιος δὲ καρδίας ἔχων δύναμιν ὥσπερ αἷμα καὶ πνεῦμα διαπέμπει καὶ διασκεδάννυσιν ἐξ ἑαυτοῦ θερμότητα καὶ φῶς, γῆ δὲ καὶ θαλάσση χρήται κατὰ φύσιν ὁ κόσμος ὅσα κοιλία καὶ κύστει ζῶν. σελήνη δ' ἡλίου μεταξὺ καὶ γῆς ὥσπερ καρδίας καὶ κοιλίας ἦπαρ ἢ τι μαλθακὸν ἄλλο σπλάγχνον ἐγκειμένη τὴν τ' ἄνωθεν ἀλέαν ἐνταῦθα διαπέμπει καὶ τὰς ἐντεῦθεν ἀναθυμιάσεις πέψει τινὶ καὶ καθάρσει λεπτόνουςα περὶ ἑαυτὴν ἀναδίδωσιν.

That is why the stars revolve fixed like "radiant eyes" in the countenance of the universe,¹⁵ the sun in the heart's capacity transmits and disperses out of himself heat and light as it were blood and breath, and earth and sea naturally serve the cosmos to the ends that bowels and bladder do an animal. The moon, situated between sun and earth as the liver or another of the soft viscera is between heart and bowels, transmits hither the warmth from above and sends upwards the exhalations from our region, refining them in herself by a kind of concoction (*pepsei*)¹⁶ and purification.

Plutarch probably takes his cue from the *Phaedo*, where the earth has its "circulatory system" of rivers in which the earth plays the role of nose, Tartarus the role of lungs and heart (p. 270 above); but in Plutarch, we get a full-blown excretory system as well. We—literally—live in the bowels of the earth. The

¹⁴ See *Tim.* 69e3–d4; 89e3–90b1.

¹⁵ Perhaps a reference to the "gray-eyed" moon in Empedocles fr. 54/42 Inwood, which Plutarch refers to at *De fac.* 929A10–11 and 934D1–2 (cf. Inwood 2001 CTXT-37, p. 102). If so, Plutarch in his response makes *all* the stars into "eyes," not just the moon.

¹⁶ A medical term for digestion with parallels in Galen and Hippocrates: see *LSJ*, πέψις III.

moon is like the liver or kidneys, which purifies the waste from our earth. In Plato, the whole mechanism was inside the earth; in Plutarch's analogy, the purificatory role of the liver is transposed up to the moon; the sun becomes the "heart," the driving engine of the universe.¹⁷ Plutarch's cosmos is stratified by analogy with the human body.¹⁸

In the same way as soul is distributed throughout the body in Plato's *Timaeus* (see n14 above), there is a correlation in Plutarch between the tripartite structure of the cosmos and the tripartite structure of the human entity (*De fac.* 943A1–B4).¹⁹

τὸν ἄνθρωπον οἱ πολλοὶ σύνθετον μὲν ὁρθῶς ἐκ δυεῖν δὲ μόνον σύνθετον οὐκ ὁρθῶς ἡγοῦνται. μόριον γὰρ εἶναι πως ψυχῆς οἴονται τὸν νοῦν, οὐδὲν ἥττον ἐκείνων ἀμαρτάνοντες οἷς ἡ ψυχὴ δοκεῖ μόριον εἶναι τοῦ σώματος. νοῦς γὰρ ψυχῆς ὅσῳ ψυχὴ σώματος ἄμεινόν ἐστι καὶ θεϊότερον. ποιεῖ δ' ἡ μὲν ψυχῆς <καὶ σώματος μίξις τὸ ἄλογον καὶ τὸ παθητικὸν ἡ δὲ νοῦ καὶ ψυχῆς> σύνδοδος λόγον, ὧν τὸ μὲν ἡδονῆς ἀρχὴ καὶ πόνου τὸ δ' ἀρετῆς καὶ κακίας. τριῶν δὲ τούτων συμπαγόντων τὸ μὲν σῶμα ἡ γῆ τὴν δὲ ψυχὴν ἡ σελήνη τὸν δὲ νοῦν ὁ ἥλιος παρέσχεν εἰς τὴν γένεσιν <τὰνθρώπων> ὥσπερ αὐτῇ <τῇ> σελήνῃ τὸ φέγγος. ὃν δ' ἀποθνήσκομεν θάνατον, ὁ μὲν ἐκ τριῶν δύο ποιεῖ τὸν ἄνθρωπον ὁ δ' ἐν ἐκ δυεῖν, καὶ ὁ μὲν ἐστὶν ἐν τῇ <γῇ> τῆς Διμήτρος . . . <ὁ> ἐν τῇ σελήνῃ τῆς Φερσεφόνης.

Most people rightly hold a man to be composite but wrongly hold him to be composed of only two parts. The reason is that they suppose mind to be somehow part of soul, thus erring no less than those who believe soul to be part of body, for in the same degree as soul is superior to body so is mind better and more divine than soul. The result of soul <and body commingled is the irrational or the affective factor, whereas of mind and soul> the conjunction produces reason; and of these the former is source of pleasure and pain, the latter of virtue and vice. In the composition of these three factors earth furnishes the body, the moon the soul, and the sun furnishes mind

¹⁷ On the sun as heart see Mihai (2015): 196.

¹⁸ For the phenomenon, see Tuan (1977): 89: "The human body is a hierarchically organized schema; it is infused with values that are the result of emotion-laden physiological functions and of intimate social experiences. Not surprisingly, man has tried to integrate multifaceted nature in terms of the intuitively known unity of his own body." On the theme of microcosm and macrocosm in antiquity see Mihai (2015): 196–97.

¹⁹ "The threefold division of the individual has its equivalent on the cosmic level, in the form of a threefold division of the universe" (Dillon 1977: 214).

<to man> for the purpose of his generation even as it furnishes light to the moon herself. As to the death we die, one death reduces man from three factors to two and another reduces him from two to one; and the former takes place in the <earth> which belongs to Demeter . . . <the latter> in the moon that belongs to Persephone.

In the cycle of human existence, the body is supplied by earth, soul by the moon, and mind by the sun. In the reversal of that process at death, the earth reabsorbs the body, the moon the soul, and the sun, the mind. The tripartite human entity undergoes not one, but several, deaths, the first in which the body is separated from *nous* (“mind”) and *psyche* (“soul”); the second in which *psyche* is gently disentangled from more enduring *nous*; at last *nous*, having shed its various envelopes, is absorbed into the sun. Thereafter the process begins again (*De fac.* 945C1–3):

εἶτα τὸν νοῦν αὖθις ἐπισπείραντος τοῦ ἡλίου τῷ ζωτικῷ δεχομένη νέας ποιεῖ ψυχάς, ἡ δὲ γῆ τρίτον σῶμα παρέσχεν.

Then when the sun with his vital force has again sowed mind in [the moon] she receives it and produces new souls, and earth in the third place furnishes body.

Here again, Plutarch develops a Platonic motif into a full-blown cosmic system. Remember Plato’s image of the “sowing” of souls in the *Timaeus* (*Tim.* 42d2–5, p. 108 above)?²⁰ We recall that the Demiurge “proceeded to sow [the souls], some in the earth, some in the moon, others in the rest of the organs of time.” Plato’s Demiurge broadcasts the souls throughout the universe; it is not said how systematically this is done. In Plutarch, generation is—physically and systematically—interwoven with the tiers of the universe. In Plutarch, life and death become a process of repeated passage from cosmic level to cosmic level, and from one to many and back again: *nous* to *psyche* to body and the reverse; a merry-go-round up and down the cosmic strata from sun to moon to earth and back.

²⁰ This was clearly a purple passage of the *Tim.*, imitated by Virgil and Dante as well (p. 108 and 116–17 above).

In Plutarch's new model, the moon is the crucible, the middle stage in generation. It's this quality of *intermediacy* that defines both moon and soul. The soul is just like the moon, which mediates between earth and sun (945D1–5):

μικτὸν δὲ καὶ μέσον ἢ ψυχὴ καθάπερ ἡ σελήνη τῶν ἄνω καὶ κάτω σύμμιγμα καὶ μετακέρασμα ὑπὸ τοῦ θεοῦ γέγονε, τοῦτον ἄρα πρὸς ἥλιον ἔχουσα τὸν λόγον ὃν ἔχει γῆ πρὸς σελήνην.

The soul is a mixed and intermediate thing, even as the moon has been created by god as a compound and blend of the things above and below and therefore stands to the sun in the relation of earth to moon.

Because the moon is spatially intermediate, it is the resting place for soul, which is the intermediate part of the human organism, sandwiched between body and *nous* (*De fac.* 944F12–945A9):

αὐτός τε γὰρ ἕκαστος ἡμῶν οὐ θυμός ἐστιν οὐδὲ φόβος οὐδ' ἐπιθυμία καθάπερ οὐδὲ σάρκες οὐδ' ὑγρότητες ἀλλ' ὃ διανοούμεθα καὶ φρονοῦμεν, ἢ τε ψυχὴ τυπουμένη μὲν ὑπὸ τοῦ νοῦ τυποῦσα δὲ τὸ σῶμα καὶ περιπτύσσουσα πανταχόθεν ἐκμάττεται τὸ εἶδος ὥστε καὶ πολὺν χρόνον χωρὶς ἑκατέρου γένηται διατηροῦσα τὴν ὁμοιότητα καὶ τὸν τύπον εἰδωλον ὀρθῶς ὀνομάζεται. τούτων δ' ἡ σελήνη, καθάπερ εἴρηται, στοιχεῖόν ἐστιν· ἀναλύονται γὰρ εἰς ταύτην ὥσπερ εἰς τὴν γῆν τὰ σώματα τῶν νεκρῶν.

In fact the self (*autos*) of each of us is not anger or fear or desire just as it is not bits of flesh either, but is that with which we reason and understand; and the soul receives the impression of its shape through being moulded by mind and moulding in turn and enfolding the body on all sides, so that, even if it be separated from either one for a long time, since it preserves the likeness and the imprint it is correctly called an image (*eidōlon*). Of these, as has been said, the moon is the element, for they are resolved into it as the bodies of the dead are resolved into earth.

The soul stands in the same relation to the body and to *nous* as the moon does to the earth and sun respectively. This is why the moon is the soul's element: because they mirror each other's property of intermediacy.

From this extraordinarily beautiful and moving passage, we can imagine the soul as a pressed flower, which both takes the impression of, and leaves

its impression on, the preceding and following pages of the book in which it's pressed—respectively, the body and the *nous*.

Here, incidentally, Plutarch provides his own answer to the problem of Homer's Herakles that we explored in chapter 1. He precedes his “pressed flower” passage with a now-familiar quotation of Homer (*De fac.* 944F5–7):

καὶ Ὀμηρος ὧν εἶπε πάντων μάλιστα δὴ κατὰ θεὸν εἰπεῖν ἔοικε περὶ τῶν
καθ' Ἄιδου

‘τὸν δὲ μετ’ εἰσενόησα βίην Ἡρακληεῖην,
εἶδωλον· αὐτὸς δὲ μετ’ ἀθανάτοισι θεοῖσιν.’

Above all else that Homer said his words concerning those in Hades appear to have been divinely inspired

“Thereafter I marked mighty Herakles—

His shade: but he is with the deathless gods.” [*Od.* 11.601–02]

According to Plutarch at *De fac.* 944F12–945A9, the “self” of each of us is the mind, “that with which we reason and understand.” The soul isn't fundamentally what a person *is*—the “self”—any more than the body is. The “self” is *nous*. But the soul can retain an impression of this hyperintellectual “self,” like a retinal shadow. In this sense the soul is an *eidōlon*—an “image”—the reflection of *nous*, as in a mirror. Herakles' *autos*, “self,” would, on this reckoning, be his mind, *nous*. His *eidōlon*, in Homer's underworld, is that which bears the impression of that *nous*—either his body or soul.²¹

In Plutarch's cosmography of soul, soul bears the impression of *nous* in the same way that the moon reflects the sun's light. What fits the moon for its role as reviver of souls is the shared *material* nature of the two, as we saw at 945D1–3 (see p. 294 above). Both are *mixtures*: the soul is μικτὸν δὲ καὶ μέσον (*mikton de kai meson*, “mixed and intermediate”) “just as” (καθάπερ) the moon is σύμμιγμα καὶ μετακέρασμα (*summigma kai metakerasma*, “a compound and blend”). Specifically, we find the moon is οὐχ ἀπλὴν οὐδ' ἄμικτον, ἀλλ' οἶον ἄστρου σύγκραμα καὶ γῆς οὖσαν, “not simple and unmixed but a blend as it were of star and earth” (*De fac.* 943E6–8). Both the soul and moon in Plutarch share the genealogy of the soul as we find it in the Hipponion gold leaf (see pp. 229–30), where the soul is instructed to say, “I am a son of earth

²¹ On the concept of *eidōlon* in the later Platonic tradition, see further Pepin (1971): 173–75.

and starry sky”. Tellurastral mixture is an essential part of the soul’s identity, and of the moon’s.

The idea of the soul as *mixture* might seem like a retrograde step vis-à-vis Plato’s *Phaedo*, where (we remember) Socrates argues against Simmias’ concept of soul-as-mixture and establishes a new concept of it as a synthesis or unity—a *fusion* of different qualities. Plato explicitly rejected the Pythagorean and/or Empedoclean idea of soul-as-mixture (see p. 252 above). It would not surprise me, given Plutarch’s level of engagement with Empedocles in the *De fac.*, to see him placed in counterpoint with Plato in this context.²² Plutarch seems to add his voice to the argument of the *Phaedo*, siding with Simmias and Cebes against Socrates: a late fly in the Platonic ointment.

But Plutarch has a reason, I think, for accepting the idea of the soul-as-mixture. This is his desire to assimilate it to the cosmic mixture. And it may not, ultimately, undermine the Platonic argument but merely add another level to it. We’ve seen in the Intermezzo how the universe “expands.” As this happens, the sphere of ultimate order does not disappear but rather moves further and further away from the center. And just as the universe expands, so does the soul. Plutarch’s idea of the soul-as-mixture is a product of the expansion—not in this case of the *universe*—but of its human analog. There is now a higher principle of order than soul: *nous*. That is now the supreme ordering principle and—we should not be surprised to find—unmixed: ὁ δὲ νοῦς ἀπαθὴς καὶ αὐτοκράτωρ, “The mind is impassible and sovereign” (945C15–D1).²³ The mind, then becomes the ultimate principle of order: there is a rearrangement of both the human and the cosmic structure to accommodate it.

Given that mind is the ultimate, unmixed, principle of order in Plutarch’s cosmos, it is natural that Plutarch’s sun should take on the role of Demiurge. We’ve seen how, in Plutarch’s psychic cosmogony at *De facie* 945C4–6, the sun, in its demiurgic role, “sows” Mind into the Moon, which produces Soul, and the process is complete when Earth supplies Body. The significance of

²² Plutarch cites Empedocles at *De facie* 920C, 922C, 925B, 926E, 927A, 927F, 929C–E, and 934D, to restrict myself only to references where Empedocles is named. Empedocles is the *first* citation of any authority in the *De fac.*, at 920C. He is also the *last* citation before the closing myth, at 934D.

²³ This perhaps responds to Aristotle *De anima* 3.5.430a17–18, καὶ οὗτος ὁ νοῦς χωριστὸς καὶ ἀπαθὴς καὶ ἀμειγρὴς, τῇ οὐσίᾳ ὧν ἐνέργεια, “And this mind when acting is separable, not acted upon and unmixed in its essence” (trans. Hett 1935). Hicks (1907) ad loc. remarks, “Χωριστός means here not merely ‘separable,’ but ‘actually separate,’ i.e. ‘not involved in physical life.’”

the sun's demiurgic role is nowhere better illustrated than in the passage that appears to engage directly with Plato's own use and modification, in the *Phaedo*, of the Empedoclean image of painting (see pp. 264–65 above). The sun, like the Demiurge in Plato's *Timaeus* 40a5–7 (see p. 43 above), is the agent of decoration (*De fac.* 934E8–F3):

. . . ὄρεσι δὲ καὶ πεδίοις καὶ θαλάσσαις πολλὰ μὲν ἀφ' ἡλίου μορφὰι
χρωμάτων ἐπιτρέχουσι, καὶ σκιαῖς καὶ ὁμίχλαις οἷας φαρμάκοις γραφικοῖς
μιγνύμενον ἐπάγει βαφὰς τὸ λαμπρόν.

but over mountains, plains, and sea flit many kinds of colours from the sun, and blended with the shadows and mists his brilliance induces such tints as brilliance does when blended with a painter's [carrying agents] (*pharmakois graphikois*).

Here the image of painting that we saw in Empedocles and in Plato's *Phaedo* is applied to the *sun*. The sun becomes the agent of color. But as in the *Phaedo*, the significance of different ways of working with color defines the nature of the worldview behind the text. We saw that in the *Phaedo*, the image of painters' samples points us away from the material world, which is the context of the analogy in Empedocles' painting simile, toward the abstract world. In the *Phaedo*, the True Colors of the True Earth are pure pigments, unmixed as they are on our earth.

In Plutarch, the image illustrates the reverse process: the diffusion and mixture on earth of what is pure. The sun, like Plato's True Earth, is the vessel of pure pigments. I have amended Cherniss' Loeb translation of *pharmakois* in the passage just quoted, from "pigments" to "carrying agents," because it is clearly the sun that provides the pigments which, when blended with the "carrying agents" of mist and shadow, like the blending of pigments with linseed oil or egg white, create "our" colors. It is the blending of the pure pigments from the sun with the exhalations of the sordid earth that provides the color mixtures we find here. The sun therefore transmits information from the intelligible (pure, unmixed) sphere to the sensible world, from which we can, in true Platonic fashion, infer the greater purity of the former. So too the mind, seated in the sun, becomes the unmixed and enduring element of humanity in its purest form, at the point where it is reduced from many to one, from composite to incomposite.

Conclusion

Plutarch puts man into the moon. The human soul and the moon are physically as well as hierarchically congruent. More than that, soul and cosmos in Plutarch are bound up in a sequence of functional interrelationships. The *De facie* gives us the clearest instance we've yet seen of the phenomenon of psychic harmonization. Plutarch's tripartite cosmos *functions like the human entity* and in fact *is* the physical area of operation in the life and death of the human entity.

Cosmos in Plutarch is the theater for soul. There is a truly intertwined relationship between the tripartite human entity and the tripartite cosmos: a three-stage cosmos gives a three-stage cycle of death to life and back, from the sun to the moon to the earth, over and over again. Plutarch's *whole cosmos* takes on the role of Plato's telluric convection system in the *Phaedo*.

Souls are elementally integrated in Plutarch's cosmos. Both the soul and the moon are "mixtures." Although this may seem a retrograde step vis-à-vis Plato's discussion of the soul-as-harmony in the *Phaedo*, in fact it makes room for a larger principle of order: *nous*, mind. Psychically as well as cosmically, order ripples out so that it remains the final circle, the ultimate principle. Mind is now the higher authority, the pure pigment which colors this cosmos that acts as a backdrop to the flickering display of the human entity.

10

Dante's Poem of Fire¹

The relationship between a model of the cosmos and the cosmos itself has a powerful ambiguity.

—Alexander Jones, *A Portable Cosmos*

Introduction

In Dante's *Commedia*, the journey through the universe represents the integration of the human intellect into the cosmos. This is the cosmos as it's seen at the apogee of the Classical worldview, in the form of the totalizing vision of the fourteenth-century universe.² Dante's journey yokes together the diverse parts of the Platonic universe, progressing from the depths of the earth, which we've seen explored in the *Phaedo*, to the heights of heaven, as we saw them in the *Phaedrus*. The cosmic ladder of Dante's work stretches fully from the top to the bottom of the universe. The whole of this universe is the setting for an *afterlife* narrative.

As we would expect by now, there are two types of space in Dante's *Commedia*. The universe that is traversed in Dante's journey is also set forth in a revelatory vision toward the end of the work, at *Paradiso* XXVIII. In our final chapter, we'll study this vision, which is both a culmination of the Platonic vision and a departure from it. Whereas the vision in Plato was a vehicle toward psychic harmonization, the vision in Dante explores not merely the need for psychic harmonization but the difficulties of it. The most prominent way in which this is done is through the theme of reflection and mirror image.

¹ Scriabin, *Prometheus: The Poem of Fire*, op.60 (1910), for orchestra and colour organ.

² See Kuhn (1957): 112.

1. Spiegel im Spiegel³

(i) *Reflection in the Platonic Tradition*

In Plutarch's *De facie*, studied in the last chapter, soul and moon both have the qualities of being intermediate; of being "reflections." The moon is doubly reflective: it both takes its light from the sun and holds the impression of the earth's shadow. Soul takes the image of mind, which is situated in the sun above, and of body, with its origin and end in the earth below; in a process of mutual reflexivity, soul like a pressed flower leaves its imprint, its reflection, on both.

Plutarch's dialogue about the moon began, appropriately, with the theme of reflection or mirror image. The very first theory expounded is that the moon's appearance of a face results from εἰκόνας ἐσοπτρικός, "mirrored likenesses," *De fac.* 920F11. Parts of the earth appear to be displaced by a double process of reflection (921A5–B3):

ὥσπερ οὖν τὴν ἱ<ριν> οἶεσθ' ὑμεῖς ἀνακλωμένης ἐπὶ τὸν ἥλιον τῆς ὄψεως ἐνορᾶσθαι τῷ νέφει λαβόντι νοτεράν ἡσυχῇ λειότητα καὶ <πῇ>ξιν, οὕτως ἐκεῖνος ἐνορᾶσθαι τῇ σελήνῃ τὴν ἔξω θάλασσαν οὐκ ἐφ' ἧς ἐστι χώρας ἀλλ' ὅθεν ἡ κλάσις ἐποίησε τῇ ὄψει τὴν ἐπαφὴν αὐτῆς καὶ τὴν ἀνταύγειαν.

Just as you think, then, that the reflection of the visual ray to the sun accounts for the appearance of the <rainbow> in a cloud where the moisture has become somewhat smooth and <condensed>, so Clearchus⁴ thought that the outer ocean is seen in the moon, not in the place where it is but in the place whence the visual ray has been deflected to the ocean and the reflection of the ocean to us. (Cherniss and Hembold 1957)

Appearances are deceptive. Reflection is also distortion. Things may appear in ways or in places we don't expect them to, or in locations where they aren't really.

Plato, of course, lies behind Plutarch's account. Mirrors in Plato both distort and unify (*Tim.* 46a2–c6):

³ Arvo Pärt, *Spiegel im Spiegel* (1978).

⁴ A pupil of Aristotle.

τὸ δὲ περὶ τὴν τῶν κατόπτρων εἰδωλοποιίαν καὶ πάντα ὅσα ἐμφανῆ καὶ λεῖα, κατιδεῖν οὐδὲν ἔτι χαλεπὸν. ἐκ γὰρ τῆς ἐντὸς ἐκτός τε τοῦ πυρὸς ἐκατέρου κοινωνίας ἀλλήλοις, ἐνός τε αὖ περὶ τὴν λειότητα ἐκάστοτε γενομένου καὶ πολλαχῇ μεταρρυθμισθέντος, πάντα τὰ τοιαῦτα ἐξ ἀνάγκης ἐμφαίνεται, τοῦ περὶ τὸ πρόσωπον πυρὸς τῷ περὶ τὴν ὄψιν πυρὶ περὶ τὸ λεῖον καὶ λαμπρὸν συμπαγοῦς γιγνομένου. δεξιὰ δὲ φαντάζεται τὰ ἀριστερά, ὅτι τοῖς ἐναντίοις μέρεσιν τῆς ὄψεως περὶ τὰναντία μέρη γίγνεται ἐπαφὴ παρὰ τὸ καθεστὸς ἔθος τῆς προσβολῆς· δεξιὰ δὲ τὰ δεξιὰ καὶ τὰ ἀριστερὰ ἀριστερὰ τοῦναντίον, ὅταν μεταπέση συμπηγνύμενον ᾧ συμπηγνύται φῶς, τοῦτο δέ, ὅταν ἡ τῶν κατόπτρων λειότης, ἔνθεν καὶ ἔνθεν ὕψη λαβοῦσα, τὸ δεξιὸν εἰς τὸ ἀριστερὸν μέρος ἀπώσῃ τῆς ὄψεως καὶ θάτερον ἐπὶ θάτερον. κατὰ δὲ τὸ μῆκος στραφὲν τοῦ προσώπου ταῦτόν τοῦτο ὕπτιον ἐποίησεν πᾶν φαίνεσθαι, τὸ κάτω πρὸς τὸ ἄνω τῆς αὐγῆς τό τ' ἄνω πρὸς τὸ κάτω πάλιν ἀπώσαν.

And so there is no longer any difficulty in understanding how images are produced in mirrors or in any other smooth reflecting surfaces. On such occasions the internal fire joins forces with the external fire, to form on the smooth surface a single fire that is reshaped in a multitude of ways. So once the fire on the face [of the mirror] comes to coalesce with the fire from sight on the smooth and bright surface, you have the inevitable appearance of all images of this sort. What is left will appear as right, because the parts of the fire from sight connect with the opposite parts of the fire from the face, contrary to the usual manner of encounter. But, on the other hand, what is right does appear as right, and what is left as left, whenever light switches sides in the process of coalescing with the light with which it coalesces. And this happens whenever the mirror's smooth surface is curled upwards on both sides, thereby bending the right part of the fire from sight toward the left, and the left part toward the right. And when this same smooth surface is turned along the length of the face [i.e. vertically], it makes the whole object appear upside-down, because it bends the lower part of the ray toward the top and the upper part toward the bottom. (Zeyl 2000).⁵

A mirror is a plane of intersection between two sources of fire: that of the object it reflects and that which emanates from the eye of the perceiver. Plato explains the phenomenon of reflection and inversion in mirrors as result

⁵ All translations of Plato's *Tim.* in this chapter are from Zeyl (2000).

of the different kinds of coalescence of these two different flames, “inner” (i.e. emanating from the human eye) and “outer” (emanating from the thing reflected). The mirror is the meeting point of outer and inner: a locus of unification.

Plato follows this passage on optics with his comments on the use of sight as hearing as tools of psychic harmonization (*Tim.* 47b6–d1, pp. 130–31 above). Plato’s discussion of mirror and image thus forms part of a larger discussion of the alignment of the soul with the principles of the universe. The discussion of optics in the *Tim.* represents the *visual* understanding required to harmonize soul and universe; music the *auditory*. What follows from the section on optics is thus the discussion of the auditory means of psychic harmonization, i.e. music, described in terms of both harmony and rhythm (*Tim.* 47d2–e2):

ἡ δὲ ἄρμονία, συγγενεῖς ἔχουσα φορὰς ταῖς ἐν ἡμῖν τῆς ψυχῆς περιόδοις, τῷ μετὰ νοῦ προσχρωμένῳ Μούσαις οὐκ ἐφ’ ἡδονὴν ἄλογον καθάπερ νῦν εἶναι δοκεῖ χρήσιμος, ἀλλ’ ἐπὶ τὴν γεγонуῖαν ἐν ἡμῖν ἀνάρμοστον ψυχῆς περιόδον εἰς κατακόσμησιν καὶ συμφωνίαν ἑαυτῇ σύμμαχος ὑπὸ Μουσῶν δέδοται· καὶ ῥυθμὸς αὖ διὰ τὴν ἄμετρον ἐν ἡμῖν καὶ χαρίτων ἐπιδεᾶ γιγνομένην ἐν τοῖς πλείστοις ἔξιν ἐπικούρος ἐπὶ ταῦτα ὑπὸ τῶν αὐτῶν ἐδόθη.

And harmony, whose movements are akin to the orbits within our souls, is a gift of the Muses, if our dealings with them are guided by understanding, not for irrational pleasure, for which people nowadays seem to make use of it, but to serve as an ally in the fight to bring order to any orbit in our souls that has become unharmonized and make it concordant with itself. Rhythm, too, has likewise been given us by the Muses for the same purpose, to assist us. For with most of us our condition is such that we have lost all sense of measure, and are lacking in grace.⁶

The reharmonization of the soul is a progress εἰς κατακόσμησιν καὶ συμφωνίαν, “toward order (*katakosmēsis*) and *symphōnia*.” This process requires both of the two ways of organizing sound employed in music, namely harmony (auditory frequency) and rhythm (temporal duration). In terms of harmony, the soul, like a lyre, has to be properly “tuned.” When it’s

⁶ On this passage see Spitzer (1963): 13, and Barker (2007): 323–26.

tuned from a position of true understanding, the process should produce *symphōnia*.⁷ Second, the state of the disordered soul is ἀμετρον, “a-metric” — like a metronome that keeps the beat unevenly or members of an orchestra playing out of time.⁸ For this reason, we need ῥυθμός, “rhythm.” By exposure to rhythm, the soul must learn to keep the beat, become “measured,” aligned with the proper rhythm, that of the universal cycles.

Through music, then, with its two ordering principles, the soul can come to be both “in tune” and “in time” with the cosmos. In the passage just quoted Plato refers to the “orbits” (*periodoi*) within our souls; we’ve seen earlier in this book (p. 164) that these are shared with the orbits of the universe. Not by chance does Plato’s term for bringing order to the soul, *katakosmēsis*, contain within it the word that designates both “order” and “universe”: *kosmos*. Soul in Plato is a reflection of the cosmos. In the proper alignment of the soul, original and reflection must merge. The soul, which in its unharmonized state is an inaccurate reflection of the cosmos, must become its exact duplicate.

(ii) *Reflection in Dante*

Cosmic diffraction and mirror imaging are dominant themes in Dante’s *Paradiso*.⁹ A high point comes the twenty-eighth canto of the *Paradiso*, the equivalent to the vision we’ve seen in our texts so far. The canto begins with a simile (*Par. XXVIII.4–12*):

come in lo specchio fiamma di doppiero
vede colui che se n’alluma retro,
prima che l’abbia in vista o in pensiero,
e sé rivolge per veder se ’l vetro
li dice il vero, e vede ch’ el s’ accorda
con esso come nota con suo metro:
così la mia memoria si ricorda
ch’io feci riguardando ne’ belli occhi
onde a pigliarmi fece Amor la corda.

⁷ Cf. my comments about lyre tuning, pp. 146–47. For a definition of *symphōnia* see p. 144.

⁸ Cf. *Tim.* 53a8, ἀλόγως καὶ ἀμέτρως.

⁹ For the theme of reflection see also pp. 117–18 (in chapter 4) on the “didactic” disposition of the souls in *Par. IV*, *reflected* in the moon—shown there, but not really there.

As in a mirror the flame of a torch is seen
 by one who is lit by it from behind, before he
 sees it directly or in his thought,
 and he turns to see whether the glass is
 telling him the truth, and he sees that it
 agrees with it as a note with its meter:
 so my memory recalls that I did, looking
 into the beautiful eyes where Love made the
 cord to capture me. (*DM*)¹⁰

A *doppiero* is a double torch made from twisted candles (*DM* ad loc.). The image establishes the idea of “doubling,” developed in what follows. Beatrice’s eyes (line 11) are the “mirror” in which the character Dante sees the vision. By virtue of the fact that Beatrice has two eyes, there is a *prima facie* doubling of the image. Moreover, the image Dante sees is like (*come*) the double torch (*doppiero*), seen in a mirror. Already we are in a baffling hall-of-mirrors scenario, where images are duplicated and reduplicated.

So too Dante is baffled by what he sees reflected in Beatrice’s eyes, and turns, seeking verification, to the “real” thing. What he then sees is itself expressed by doubling of the image, a simile within a simile, a poetic mirroring of the image. Whereas the first simile was visual (“like a torch reflected”), the second simile is auditory: he sees that, despite its apparent strangeness, the reflection agrees with reality, “as a note with its metre (*metro*, 9).”

In this complex simile, Dante builds on the Platonic theory of sight and hearing as means toward harmonization of the soul.¹¹ Dante’s double simile works toward an assimilation of sensory faculties: it activates simultaneously the senses of sight (mirror) and hearing (note). Plato is probably the direct ancestor of the image here too. The components of the visual part of Dante’s simile—flame and mirror—are both found in Plato’s passage on optics (pp. 300–01 above). Further, Dante’s image of the alignment of note and meter (i.e., rhythm) responds to what follows in the *Timaeus*, the passage on psychic harmonization, in which rhythm is invoked as an index of psychic harmony. The progression of Plato’s argument at *Tim.* 46a–47d is as follows: (1) sight (optics), (2) sight and hearing as means of psychic

¹⁰ All translations of Dante in this chapter are from *DM*.

¹¹ The Platonic affiliations of this canto have been overlooked. For the image of the mirror scholars typically cite Paul, 1 *Cor.* 13.12 (see p. 307 below); e.g. Contini (1970): 195; *DM* ad loc. The musical problem I will discuss later in this chapter has not been spotted at all.

alignment, and (3) hearing (harmony and rhythm). In Dante's simile, we see the same components at work. The simile of the mirror (= Plato's no. 1) takes place in the context of an attempt to align what is seen with a correct understanding of it. Dante's accommodation of what he sees in the universe with his understanding is a move toward the psychic harmonization (Plato's no. 2). The second analogy for psychic harmonization in Dante is that of musical agreement, the heard note agreeing with its notated "reflection" (Plato's no. 3). This image, then, lies within the same Platonic sequence. Hearing as well as vision is an instrument that leads us toward the correct functioning of soul in relation to the world around it.

But, as in the visual, so in the case of the auditory aspect of psychic harmonization in Dante: things are not straightforward. A contemporary (fourteenth-century) musical problem gets in the way, and this is testament to the difficulty of seeing truly. At *Par.* XXVIII.7–9 Dante sees that reality accords with its mirror image "as a note with its metre." It's straightforwardly assumed by the commentators that written and sounded note "agree," e.g. "A performed note will (or should) agree with its metrical notation: the mirror is playing the same tune as 'reality.'"¹² But this was not always the case. In fact, such agreement is barely established, if at all, by Dante's time. The agreement of sounded note and notated rhythm was a very recent innovation indeed at the beginning of the fourteenth century.

The first music in the Western tradition to notate rhythm was the so-called School of Notre Dame. The earliest Western treatises on musical rhythm concerned Notre Dame polyphony. These were John of Garland's *De mensurabili musica* (c. 1250)¹³ and Franco of Cologne's *Ars cantus mensurabilis* (1280).¹⁴ John first adapted existing "neumatic" notation to the expression of rhythm. He adopted the short-long principles of Classical quantitative verse, taking over six Classical meters to give six rhythmic "modes." The drawback of this system was that the notes ("neumes") had no inherent rhythmic value, but this was dependent on context, i.e. on which mode was being used. It was Franco who gave each individual note a designated length, creating an absolute system of rhythmic notation, as opposed to John's relative one.¹⁵

¹² *DM* ad loc. Cf. Moevs (2005): 141: "Notes accord perfectly with their rhythm (*metro*) and cannot misrepresent it, because rhythm constitutes their being, so to speak: notes have no existence apart from rhythm, from some duration in time."

¹³ On John of Garland, see Berger (2008): 628–31.

¹⁴ See Taruskin and Gibbs (2013): 73–76, "Measured Music."

¹⁵ Berger (2008): 631–35; p. 634: "We have, then, in Franco a theorist who in his revisions of an already existing notational system places the separate note value rather than the modal pattern at the centre."

In other words, the ability to “fit” rhythm and note first arrived no more than twenty-odd years before the *Commedia* was composed. Dante’s own generation was a period of musical innovation too, one that culminated in the so-called *Ars Nova* style of polyphony.¹⁶ This system arose from mathematics—from the study of Plato’s *Timaeus* in particular.¹⁷ It rested on a twofold “imperfect” system (notes divisible by two) and a threefold “perfect” system (notes divisible by the trinitarian three). The first standard time signatures were a semicircle, the *tempus imperfectum*, and full circle, *tempus perfectum*. Once developed, this system held, in fact increased in complexity, until “eventually the whole field became a jungle, and a new notational ‘revolution’ was necessary, which happened around the beginning of the seventeenth century.”¹⁸

Dante, then, writes at a crucial period of development in rhythmic notation, just as rhythm was beginning to be notated, a period that would culminate in the complexities of the *Ars Nova*. His musical simile rests on this newly acquired ability of musicians to align note and meter. Bringing a note into line with its written value was a recent, perhaps still precarious, innovation.¹⁹ Dante’s image of rhythm aspires toward something that is only just beginning to be achieved.

As a reader of Plato’s *Timaeus*, with its emphasis on rhythm as a measure of psychic harmonization, it’s natural that Dante would have had a vital interest in any debate about rhythm and would have recognized the connection of rhythm to the cycles of the universe. But this idea was also of Dante’s own time.²⁰ The development of the *Ars Nova* system a little later was to serve a symbolic, as well as a practical, notational purpose: “Its periodicities were

¹⁶ On the *Ars Nova* see Taruskin and Gibbs (2013): 91–129; Spitzer (1963): 43. Its theoretical exponents were Jehan de Murs (*Ars novae musicae*) and Philippe de Vitry (*Ars nova*), both 1322–3. We might suppose that these treatises may have reflected innovations in performance practice taking place earlier, in the time of Dante (c. 1307): see Taruskin and Gibbs (2013): 94.

¹⁷ On the mathematical impetus to the development of rhythms in the *Ars Nova* period, see Taruskin and Gibbs (2013): 92–95.

¹⁸ Taruskin and Gibbs (2013): 94.

¹⁹ This system was more of an ideal than a reality: “Theory is rarely pure description. It is often a representation not of the world the theorist actually sees but of a more orderly, more perfect, or more easily described world the theorist would like to see” Taruskin and Gibbs (2013): 78. Despite the theoretical advances made in the thirteenth and fourteenth centuries, rhythmic notation in fact remained a problem until after the widespread adoption of Hindu-Arabic numerals to express fractions, in the fifteenth century: see Berger (2008): 642–45.

²⁰ “The harmonizing imagination of Dante succeeds in welding together, not only the spheres of the Beyond with those of this world, but also the techniques of modern humanity and the beliefs of antiquity” (Spitzer 1963: 93).

meant to reflect those of nature, such as celestial orbits, tides and seasons.”²¹ This was a result of the “Medieval objective of translating number into sound, thus more fully revealing the ideal significance of music as cosmic metaphor.”²² This idea, of course, arises ultimately from Plato’s *Timaeus*, and is a medieval interpretation of it.

The imperfection of musical notation in Dante’s time might have spoken, in the medieval imagination, to the difficulty of true Platonic alignment of soul with universe. If it is the case that psychic harmonization, alignment with the universe, can only be achieved through proper seeing and hearing, that is more difficult than you might think. In *Par.* XXVIII the uncomfortable relationship between rhythm and note, hearing and sight, exemplum and exemplar, stands as evidence of human disharmony. Dante’s soul is as yet unharmonized by full revelation of the celestial hierarchy and its own destiny within it.

We should not be surprised to find that the image of psychic alignment that Dante chooses stands somewhere between hard fact and aspiration. Human perception is imperfect. Behind Dante’s mirror and note lies not just Plato, but Paul’s vision of the imperfection of human sight: *videmus nunc per speculum in enigmate, tunc autem facie ad faciem; nunc cognosco ex parte, tunc autem cognoscam sicut et cognitus sum*, “For now we see in a mirror, dimly, but then we will see face to face. Now I know only in part; then I will know fully, even as I have been fully known.”²³ The full harmonic potential of the soul—self-knowledge of its existence as part of the universe—cannot be fully realized in this life (or in Platonic terms, in embodied life). Reflected images and imperfectly notated notes are all we are capable of perceiving.

2. The Vision of the Universe (*Paradiso* XXVIII)

We’ve seen that Dante’s *Commedia* is a journey through the tiers of the fourteenth-century universe *in toto*, from the depths of the earth to the outermost sphere of the heavens. The culmination of that journey is, yet again, the vision, the representation of the structure of the cosmos, *Paradiso* XXVIII.16–39:

²¹ Taruskin and Gibbs (2013): 100, on “isorhythm” (use of repeated rhythmic patterns in the *Ars nova*).

²² Taruskin and Gibbs (2013): 94.

²³ 1 *Cor.* 13.12 in the Vulgate text, with translation from the *New Revised Standard Version* of the Bible (cf. p. 304n11).

un punto vidi che raggiava lume
 acuto sì che 'l viso ch'elli affoca
 chiuder conviensi per lo forte acume,
 e quale stella par quinci più poca,
 parrebbe luna, locata con esso
 come stella con stella si collòca.

Forse cotanto quanto pare appresso
 alo cigner la luce che 'l dipigne
 quando 'l vapor che 'l porta più è spesso,
 distante intorno al punto un cerchio d'igne
 sì girava sì ratto, ch'avria vinto
 quel moto che più tosto il mondo cigne,
 e questo era d'un altro circumcinto,
 e quel dal terzo, e 'l terzo poi dal quarto,
 dal quinto il quarto, e poi dal sesto il quinto.

Sopra seguiva il settimo sì parto
 già di larghezza che 'l messo di Iuno
 intero a contenerlo sarebbe arto.

Così l'ottavo e 'l nono, e ciascheduno
 più tardo si movea, secondo ch'era
 in numero distante più da l'uno;
 e quello avea la fiamma più sincera
 cui men distava la favilla pura,
 credo, però che più di lei s'invera.

And when I turned back, and my own
 eyes were struck by what appears in that
 turning, whenever one eyes its circuit carefully,

I saw a point that was radiating light so
 sharp that any eye into which it shines must
 close at its piercing intensity,

and whatever star from here seems
 smallest, would seem a moon if placed near
 it, as in the sky star is placed next to star.

Perhaps as closely as the halo seems to
 gird the light that projects it, when the vapor
 that carries it is thickest,

so around the point a circle of fire was
 turning so swiftly that it would have surpassed
 the motion that girds the world most swiftly,
 and this was girt about by another, and that
 by a third, and the third then by a fourth, by
 the fifth the fourth, and then by the sixth the fifth.
 Beyond there followed the seventh, already
 so expanded in circumference, that the messenger
 of Juno would be too narrow to contain it.
 Thus the eighth and the ninth, and each
 moved more slowly as it was numerically
 more distant from the one,
 and that had the purest flame from which
 the pure spark was least distant, I believe
 because it more fully entruths itself therein.

This passage distills into one instant of revelation the layers of the cosmos through which Dante has passed in his journey. We are by now programmed to read this passage as an eschatological vision, parallel to Plato's True Earth in the *Phaedo* or Plutarch's Moon in the *De facie*. And much of the imagery is in common with these accounts. It's no surprise, for instance, to find an image of painting in Dante's vision, at lines 22–23—*forse cotanto quanto pare appresso/alo cigner la luce che 'l dipigne*, “perhaps as closely as the halo seems to gird the light that projects (*dipigne*, literally “paints”) it.” The image reminds us of the Demiurge-as-artist in Plato's *Timaeus* (see p. 43 above); of the painters of Empedocles, whose pigments are analogous to the disposition of elements in the universe (pp. 260–61 above); of Plato's True Earth in the *Phaedo* (pp. 259–60 above); of the image of the sun-as-Demiurge in Plutarch's *De facie* (p. 297 above). In Dante's case, the artist is light itself, which “paints” a halo around a bright celestial object. Dante himself may only have had direct access to the first of these texts; but this aspect of Dante's vision is not the product of a literary pedigree, rather a human necessity: the need to understand cosmic order on the analogy of human artistry. This is the vision as *psychological* idiom.

At the same time, Dante transcends the vision. His description is *not* of the universe but of its inversion or mirror image. It is not distorted, or laterally or horizontally inverted, like the images in Plato's mirrors: it is *turned inside out*, so that the middle becomes the outside and vice versa. In the Classical

universe, the *outer* spheres have the greatest “angular velocity.” Because their circles are bigger, they have to travel the longest distance around the earth and so have to go faster to keep up with the smaller orbits, like the outermost horses in a musical ride, who gallop while the inner horses are walking.²⁴ Macrobius explains (*Comm.* 2.4.4),

ergo et superiores orbes, dum pro amplitudine sua impetu grandiore voluntur, dumque spiritu, ut in origine sua, fortiore tenduntur, propter ipsam ut ait concitatiorem conversionem, “acute excitato moventur sono, gravissimo autem hic lunaris atque infimus,” quoniam spiritu ut in extremitate languescere iam volvitur, et propter angustias, quibus paenultimus orbis artatur, impetu leniore convertitur.

Accordingly the outer spheres, revolving at high speeds on account of their great size and constrained by a breath that is more powerful because it is near its source, as Cicero puts it, “with their swifter motion give forth a higher pitched tone, whereas the lunar sphere, the lowest, has the deepest tone” [*Somn.* V:10 [*Rep.*18.3]]; the latter is motivated by a breath which at that great distance is weak, and revolves at a slow speed because of the small space in which it, the sphere last but one, is confined. (Stahl 1952; Latin text Armisen-Marchetti 2001–03)

In this passage, as in all other Classical accounts, the source of movement for the celestial apparatus is its *outermost* sphere: the spheres get progressively slower the further away from it they get. But in the vision of *Par.* XXVIII something strange is happening. Instead of the outermost circle moving fastest, the circle nearest to the *middle* point has the greatest velocity. Likewise, it's the *inner* circle that is brightest and most divine, whereas in the Classical universe the outermost sphere has this privilege.²⁵

Dante is confused. He himself points out to Beatrice the reverse order of the spheres (*Par.* XXVIII.46–51):

E io a lei: “Se ’l mondo fosse posto
con l'ordine ch'io veggio in quelle rote,

²⁴ Cicero at *Somnium* V:10 [*Rep.* 6.8.3] describes the outermost sphere as *summus ille caeli stellifer cursus, cuius conversio est concitatio*, “the highest orbit, that of heaven, carrying the stars, [of which the] revolution is faster” (Powell 1990, slightly modified for syntax). A very clear summary of the Classical motions of the spheres is Heath (1913): 156 on Plato's Spindle of Necessity.

²⁵ For instance, at *De caelo* 1.2.269a32 *aither* is described by Aristotle as “more divine” (θειοτέρα) than the sublunar elements.

sazio m'avrebbe ciò che m'è proposto,
 ma nel mondo sensibile si puote
 veder le volte tanto più divine
 quant'elle son dal centro più remote."

And I to her: "If the world were arranged
 with the order that I see in those wheels,
 what is set before me would have satisfied me,
 but in the visible world we see that the
 vaults are more divine *the further they are
 from the center.*"

Dante misinterprets the image in the way all of us would who are versed in the Classical vision of the universe. This is doubly confusing, because, at the same time, we're being directed toward the Platonic worldview, as we've seen it before, in *Par.* IV (pp. 117–22 above). We've seen that, very broadly speaking, Plato's vision of the universe is constructed along a faultline between what's visible, the world of change, and what's invisible, the world of the abstract, the Forms. In Calcidius' translation of Plato's *Timaeus* (p. 119 above) this is expressed as an opposition between what is *sensibile* and what's *intelligibile*. We've seen Dante responding to the Platonic opposition, imitating its Calcidian terminology at *Par.* IV.34–42, where there's an opposition between *da sensato*, by observation of sense objects, and *d'intelletto*, by purely intellectual understanding. Here again, at *Par.* XXVIII.49, Dante remarks on the difference between what we see *nel mondo sensibile*, in the visible world, and what he sees in the vision. *Sensibile* is one half of the Platonic polarity.

So Dante comes at the vision from the wrong direction: he can only envisage the vision of the universe in terms of its copy in the *sensible* world.²⁶ He's duped by his Platonic heritage. In the *Timaeus*, the visible world is a copy of the divine pattern (*Tim.* 29b1–c3, 29e1–3).²⁷ Dante is aware of this tradition: at *Par.* I.103–5 he has Beatrice remark, "*Le cose tutte quante/hanno ordine tra loro, e questo è forma/che l'universo a Dio fa smigliante,*" "All things whatsoever have order among themselves, and this is a form that makes the universe resemble God." The Platonic idea is probably mediated to Dante via Calcidius, who translates Plato's πάντα ὅτι μάλιστα ἐβουλήθη γενέσθαι παραπλήσια ἑαυτῷ, "[The god] wanted everything to become as much like

²⁶ See Cornish (2000): 111–17.

²⁷ On "model" and "copy" in this passage of the *Tim.*, see Cornford (1937): 27–32.

himself as was possible" (*Tim.* 29e3), as *cuncta sui similia, prout cuiusque natura capax beatitudinis esse poterat, effici voluit*, "He desired that all things should be made like himself insofar as the nature of each proved capable of a state of happiness" (Magee 2016 p. 44).²⁸ Dante glosses Plato-Calcidius: *le cose tutte quante*, "all things" (= Plato's πάντα/Calcidius' *cuncta*) are *smigliante*, "like" (= Plato's παραπλήσια/Calcidius' *similia*) god. Dante adds the rider that this likeness arrives *by virtue of the fact that they have order (ordine)*.

The Platonic metaphor of the mirror prefaces a debate about the proper alignment of what is seen and heard with what is understood, of example with exemplar.²⁹ In Plato, what's seen is an exact copy of the abstract template. But at *Par.* XXVIII this worldview fails. It's precisely his Platonic worldview that means, at lines 55–56, that Dante can't understand why *l'esempio / e l'esemplare non vanno d'un modo*, "the pattern and the copy do not go by the same measure" (*modo*). In the *Timaeus* the universe is the copy of the pattern; here, the universe is the pattern turned inside out.

Beatrice explains that what Dante is seeing are the "intelligences," "*intelligenze*," of the spheres (*Par.* XXVIII.76–78):

tu vederai mirabil conseguenza
di maggio a più e di minore a meno,
in ciascun cielo, a sua intelligenza.

you will see a marvellous correspondence
of greater to more and of smaller to less,
between each heaven and its intelligence.

Each circle of the universe corresponds in reverse order to its intelligible (i.e. abstract) form, its "intelligence" (*intelligenza*). This is imagined as an "angelic mover," the force behind what we see as the celestial spheres. The universe looks and moves like it does because it mirrors the structure of the celestial hierarchy. In Dante this is a hierarchy of angels.³⁰ Their position in the layers of spheres corresponds to their capacity for sight of the divine (100–2):

²⁸ = Waszink (1962) p. 22 lines 19–20.

²⁹ Mirrors are a significant theme in the *Paradiso*, occurring at least ten times there: see Moevs (2005): 115; *DM* on *Par.* III.20 (arguing that the mirrors in the *Par.* represent the celestial spheres); Hollander and Hollander (2007) on *Paradiso* II.94–105.

³⁰ Dante's source for the "angelic movers" is probably the *Celestial Hierarchy* attributed to Pseudo-Dionysius the Areopagite, in fact written by a follower of Proclus, "the last major pagan Neoplatonist" (*DM* on *Par.* 28.97–139).

così veloci seguono i suoi vimi
per somigliarsi al punto quanto ponno,
e posson quanto a veder son sublimi.

so rapidly do they follow their bonds, in order to
resemble the point (*punto*) as much as they can, and they
can to the degree that they are raised up to see.

In Dante's vision, what is most divine is at the center, not the periphery, as in the Classical texts. The *punto* represents God, the one-dimensional "point" into which all images collapse.³¹ In Dante, the "angels" are able to assimilate themselves to the divine "point" "to the degree that they are raised up to see."³²

Dante stretches the eschatological narrative to accommodate a suprasensory vision. What he's seeing is impossible in embodied life: a vision of the abstract celestial hierarchy, a vision that ought to be *intelligibilis*—conceivable in thought only. Hence, above all, his confusion. Before he can right his erroneous view, he must behave like a celestial circle himself, "wrap himself around the question" (*intorno da esso t'assotiglia*, *Par.* XXVIII.63), take on circular motion. In this, he strives for "psychic alignment" as we've seen it in the *Timaeus*, where the soul circles must be aligned with circles of the universe (*Tim.* 90c7–d1):

τῷ δ' ἐν ἡμῖν θείῳ συγγενεῖς εἰσὶν κινήσεις αἱ τοῦ παντός διανοήσεις καὶ
περιφοραί· ταύταις δὲ συνεπόμενον ἕκαστον δεῖ.

For the divine part within us the congenial motions are the intellections
and revolutions of the universe. These each one of us should follow.

Only when Dante has become a "Platonic" soul can he correct his vision.
We'll see presently whether this succeeds or not.

³¹ "The collapse of all reality into a dimensionless burning point of love" (Moevs 2005: 167). On the Neoplatonic affiliations of God as the point or the "one," see *DM* on *Par.* XXVIII.34–36.

³² This passage might bring to mind Plato's account of the ride of souls in the *Phaedrus* (discussed in chapter 7) although there is no necessary line of direct descent (Dante would not have known the *Phdr.* in the original). Any "celestial hierarchy" in Plato rests on the distinction between the souls of gods and others. In Plato, the gods are able to "behold the things outside of the heaven" (*Phdr.* 247b1–c2): others will have to struggle to see (248a1–8).

3. Intersensory Experience

We've seen that the means by which psychic harmonization happens in Plato is through sight and hearing. The use of these two faculties is how we bring the revolutions of our souls into harmony with the "orbits of intelligence in the heavens" (*Timaeus* 47b6–d1; discussed at pp. 130–31). Through its imagery of (1) mirrors and (2) musical rhythm, the vision of *Par.* XXVIII stands in intimate relation to the passage on perception in the *Timaeus*, where the soul's attempts at harmonization with the orbits of the universe are articulated through the media of sight and hearing. Sight and hearing are simultaneously activated in Dante's double simile at the beginning of *Par.* XXVIII. Comparing the original image with its copy in the mirror, Dante "*vede ch' el s'accorda / con esso come nota con suo metro*," "sees that it / agrees with it as a note with its meter" (*Par.* XXVIII.8–9). This is a multisensory simile: through it, we simultaneously see and hear.

We've seen in the course of this book that the layering or interpenetration of different kinds of space is an essential part of how we conceive of the afterlife. Just as it is possible for discrete kinds of space to coexist in the free space of the afterlife landscape, so the freedom of the soul from the sensory dividedness inherent in the body makes it possible to shed the barriers between the senses in afterlife narratives. The senses become permeable to one another in afterlife landscapes.

So in Plato's *Phaedrus* the unification of different sensory perceptions is a necessary part of remembering the greater powers of vision experienced in the state of disembodiment (*Phdr.* 249b6–c4).³³

δεῖ γὰρ ἄνθρωπον συνιέναι κατ' εἶδος λεγόμενον, ἐκ πολλῶν ἰὸν αἰσθήσεων
εἰς ἓν λογισμῷ συναιρούμενον· τοῦτο δ' ἐστὶν ἀνάμνησις ἐκείνων ἃ ποτ'
εἶδεν ἡμῶν ἢ ψυχὴ συμπορευθεῖσα θεῶν καὶ ὑπεριδοῦσα ἃ νῦν εἶναι φαμεν,
καὶ ἀνακύψασα εἰς τὸ ὄν ὄντως.

³³ Cf. Rosen (2013): 102: "A synaesthetic aesthetic of multiplicity is prerequisite for understanding Beauty as an immaterial unity." Here I avoid the use of the term "synesthesia" advisedly, preferring "multi-" or "intersensory," meaning the simultaneous activation of more than one sense (e.g. sight and hearing). This is not to say that the process of sensory interpenetration described here cannot be a form of synesthesia more narrowly understood, on which, see Baron Cohen and Harrison (1997). It must be said that synesthesia itself lacks firm definition, with interpretations ranging from "coloured hearing" (Baron Cohen and Harrison 1997: 21) to a disorder or clinical abnormality (see for instance Sacks 1986).

For a human being must understand a general conception formed by collecting into a unity by means of reason the many perceptions of the senses; and this is a recollection (*anamnesis*) of those things which our soul once beheld, when it journeyed with [the god] and, lifting its vision above the things which we now say exist, rose up into real being. (Rowe 1993)

This passage speaks of the process of forming abstract concepts on the basis of impressions collected from the different senses. Such concepts, presumably, are a product of both sight and hearing but, being abstract, are directly attributable to neither.

Similarly, the description of the Spindle of Necessity in Plato's *Rep.* 616b1–617d1 is visual (colored like the rainbow) and auditory (produces the Harmony of the Spheres). Such interpenetration of the senses is part of—in fact only possible in—the afterlife narrative. Because there is no language that can express the intersection of the senses—for that we'd have to invent a whole new set of sensory terminology—sensory joining is expressed through myths of the afterlife. The afterlife represents the desire, ordinarily unachievable, for a joining of sensory faculties, the closing of the perceptual loop—the integration of our scattered senses. The coalescence of the discrete senses acts as a metaphor for the harmonization of the sensible with the intellectual (abstract) world. The afterlife is the bridge between the sensible and intellectual.

In the *Paradiso* Dante offers many interpenetrating images that unify the senses: music, color, reflection; polyphony and rainbows, mirrors and fire. In *Paradiso* XII, to take just one example, Dante draws interchangeably on the senses of sight and hearing.³⁴ *Par.* XII.1–21 is an aesthetically complex passage in which Dante likens the two circles of souls revealed to him in the sun to a double rainbow:

Sì tosto come l'ultima parola
la benedetta fiamma per dir tolse,
a rotar cominciò la santa mola,
e nel suo giro tutta non si volse
prima ch'un'altra di cerchio la chiuse,
e moto a moto e canto a canto colse,
canto che tanto vince nostre muse,

³⁴ On *Par.* XII, see especially Ciabattini (2010): 176–77.

nostre serene, in quelle dolci tube,
quanto primo splendor quel ch' e' refuse.

Come si volgon per tenera nube
due archi paralleli e concolori,
quando Iunone a sua ancella iube,
nascendo di quel d'entro quel di fori
a guisa del parlar di quella vaga
ch'amor consunse come sol vapori,
e fanno qui la gente esser presaga,
per lo patto che Dio con Noè puose,
del mondo che già mai più non s'allaga:
così di quelle sempiterno rose
volgiensi circa noi le due ghirlande,
e sì l'estrema a l'intima rispuose.

Poi che 'l tripudio e l'altra festa grande,
sì del cantare e sì del fiammeggiarsi
luce con luce gaudiose e blande,
insieme a punto e a voler quietarsi,
pur come li occhi ch'al piacer che i move
conviene insieme chiudere e levarsi . . .

As soon as the blessed flame finished speaking
the last word, the holy millstone began to turn,
and it had not completed the circle before
another enclosed it and took motion from its
motion and song from its song,

song that in those sweet pipes surpasses our
muses, our sirens, as much as a first shining
surpasses its reflection.

As through a tenuous cloud two arcs curve
parallel and coloured alike, when Juno commands
her handmaid,

the outer born from the inner one, like the
speech of that desirous nymph whom love
consumed as the sun does vapours,

and cause people here to predict the
weather, and thanks to the pact God made with
Noah, that the world will never again be flooded:

so the two garlands of those sempiternal
roses turned about us, and so the outer replied
to the inner one.

After the solemn dance and the great
rejoicing, both of the singing and of the flaming
of light with light, joyous and affectionate,
ceased altogether in one instant and with
one will, like eyes which by the pleasure that
moves from them must always be closed or lifted together . . .

The imagery proliferates here into a multisensory experience. With the somewhat ungainly image of a talking flame (lines 1–2), it begins by combining sound and sight (word and fire). The circular course of the sun is likened to the turning of a heavenly millstone (*a rotar cominciò la santa mola*, line 3).³⁵ It simultaneously conveys motion and sound to the second circle (*moto a moto e canto a canto*, line 6). The sound the circles make, i.e. the Harmony of the Spheres³⁶—surpasses our music in the same degree that an original surpasses its mirror image, *canto che tanto vince nostre muse,/nostre serene, in quelle dolci tube, / quanto primo splendor quel ch' e' refuse*, “song that in those sweet pipes surpasses our muses, our sirens, as much as a first shining surpasses its reflection,” lines 7–9—a striking juxtaposition of sound and sight that anticipates the jostling between original and mirror image, rhythm and note, in *Par. XXVIII*.

In lines 13–15 the extravagant image of the double rainbow is both visual (*concolori*, line 11) and sonic, with the learned reference to the nymph Echo. That image itself tails off into yet another, internal, simile of Love consuming Echo “as the sun does vapors,” *ch' amor consunse come sol vapori*, lines 13–15; the image, as it were, consumes itself.

As we've seen, reflection is an inexact science: it is not mere duplication. In *Par. XXVIII*, we saw that (in visual terms) the universe was an *inverse* reflection of the celestial hierarchy and (in auditory terms) that the note could only be precariously mapped onto its rhythm. Likewise, in Canto XII, the two circles are compared to “the double rainbow, with the second inverting

³⁵ For the sources of the millstone image, see *DM* ad loc.

³⁶ Dante's source is possibly Macrobius, *Comm. 2.3.1*, where the nine Muses, distributed in the heavens, fulfill the function of the Sirens in Plato's Spindle of Necessity, *Rep. 617b–c* (*DM* ad loc.).

the sequence of colours of the first" (*DM* ad loc.): in other words, an *inverted* reflection, like the universe's copy in *Par.* XXVIII.

In turn this is likened to an echo, which, again, is not the same as a direct imitation: "The doubling of the voices is not in unison . . . because it is a mirror image, generated in the same way as a rainbow reflects sunbeams, or as an echo . . . returns to us: the echo is an imitation of our voice, but with a slight delay. The type of imitation that Dante describes to us is therefore not simple monophony, as in the *Purgatorio*, but something more complex, namely imitative polyphony, in which a second voice is extracted from the principal voice at a specified distance of tempo and/or pitch."³⁷

Imitative polyphony is the aural equivalent of a mirror image—where one voice aurally "mirrors" another. The texture of imitative polyphony was exploited par excellence in the polyphony of the Notre Dame school of the mid-thirteenth century, by the composers active in the generation before Dante. Their approach to music was as radical as any composer of the early-twentieth-century second Viennese School: they brought about a radical shift in musical language. The Notre Dame composers characteristically took a melody from ecclesiastical chant and added intricate patterns of other voices around. Their compositions are breathtaking both in their harmonic movement and in their lithic monumentality: Perotin's *Viderunt*, for instance, opens with a massive foursquare chord in which the voices of the *duplum*, *triplum*, and *quadruplum* over the principal note create a chord that is a composite of the perfect consonances (the octave, fourth, and fifth).³⁸ As the piece gradually builds, the voices move apart by step, to create ear-shriveling departures from these consonances, designed to achieve maximum dissonance, before the final resolution.³⁹ To thirteenth-century ears, this must have been a psychedelic experience.

This is the experience Dante delivers in his simile of the double rainbows. Sensory images are multiplied to the point where they become almost unbearably complex: the harmony of the senses moves apart, then coalesces again in a single point, *insieme a punto* (line 25). This is a musical cadence

³⁷ Ciabattoni (2010): 176.

³⁸ On the perfect consonances—*symphōniai*—see p. 144. The interval of the third, concordant to our ears, and the main component of major/minor triadic harmony, was dissonant to both Greek and medieval ears.

³⁹ "We have, in short, the beginnings of a cadential practice here, in which the motions of the individual parts are subordinated to an overall harmonic function (maximum dissonance resolving to maximum consonance)," Taruskin and Gibbs (2013): 77.

(harmonic resolution), a sensory joining, and, as at *Par.* XXVIII.16 (above p. 308), the cadence of the universe, the node of God, one-from-many.⁴⁰

4. One from Many: The Silent Cadence

Polychromaticism—*poikilia*—is characteristic of sense objects.⁴¹ It's only in the afterlife state that we can reduce polychromaticism to monochromy. Throughout the *Paradiso*, Dante struggles to express the principle of one-from-many, unity-from-diversity. At *Par.* II.133–38 one-from-many-ness is expressed both in the form of the stars and in the human body:

E come l'alma dentro a vostra polve
per differenti membra e conformate
a diverse potenze si risolve,
così l'intelligenza sua bontate
moltiplicata per le stelle spiega,
girando sé sovra sua unitate.

And just as the soul within your dust resolves
itself through different members conformed to
different faculties,
so the intelligence unfolds its goodness, diversified
through the stars, turning itself about its unity.

The “intelligence,” God, the motive principle of the universe, is both “diversified” and a “unity.” One thing, it holds the many within itself. The stars in the cosmos represent the principle of the many: the universe is a mirror ball, one thing, composed of countless reflections.

Likewise, the diverse faculties of the human organism “resolve,” as dissonance resolves in a musical cadence. The analogy between the cosmos and the body itself represents, of course, another manifestation of the principle of one-from-many—the unity of humanity, the microcosm, with the universe, the macrocosm. The many parts (of the body or of the universe) must work as one harmonious whole entity. Likewise, on the larger scale, human entity

⁴⁰ Cf. *Par.* XXX.11–12, XXXIII.94.

⁴¹ On *poikilia*, and on Plato's description of optical astronomy in *Rep.* 529d7–e3, see p. 263 above.

and universe, *in toto*, must be harmonized with one another by intelligence, to reach a state of oneness (Dante's *unitate*).

Psychic harmonization, the unification of all the ducts and conduits that make up the human organism, in line with the principle of unity in the universe, is the goal of human existence—the one true eschatology. In order to achieve it, we must surpass the embodied state, with its fragmentation of information via diverse sensory receptors. This is what Dante calls “transhumanizing,” surpassing the human state. But there's a drawback: “*Trasumanar significar per verba / non si poria*,” “To signify transhumanizing *per verba* is / impossible” (*Par.* I.70–71).⁴² If the soul is fully “harmonized,” i.e. identified with the universe, you can no longer talk about it, because to be identical with what's being described is to collapse subject and object, thereby rendering description obsolete. As when you are in a moving car it is impossible to hear the distortion of sound caused in the ear of an observer by its passage, so when the soul is finally harmonized with the universe, it is undifferentiated from it. We can no longer speak of the universe as something outside ourselves.

This becomes apparent in the final canto of the poem, *Paradiso* XXXIII, where mutually reflective images of mirrors, rainbows, and color enmesh in a climactic vision of the Circles of the Trinity (*Par.* XXXIII.115–20):⁴³

Ne la profonda e chiara sussistenza
de l'alto lume parvermi tre giri,
di tre colori e d'una contenenza,
e l'un da l'altro come iri da iri
parea riflesso, e 'l terzo pareo foco
che quinci e quindi igualmente si spiri.

In the profound and clear Subsistence of the
deep Light I saw three circles, of three colours and
of one circumference,
and one seemed reflected from the other like a
rainbow from a rainbow, and the third seemed
fire breathing equally from both.

⁴² “The bold coinage *transumanar* . . . attests to the poet's effort at representation, and has suggested to commentators an ascent culminating in the pilgrim's vision at the end of the poem . . .” (*DM* ad loc.). On the failure of language see Moevs (2005): 81–82.

⁴³ See Moevs (2005): 81 on this passage.

Rather than resolving into a single cadence, the end of the work is marked by a frantic proliferation of now-familiar images: circularity (*tre giri*, line 116); colors (*tre colori*, line 117); reflection (*reflesso*, line 119); rainbows mirroring one another into the distance. Rather than serving to bring us closer to what's real, these images seem to separate us further from it. A rainbow (lines 118–19) is already a reflection. A rainbow reflected by a rainbow is an image of an image: two degrees of separation from the original.⁴⁴ Verbs of seeming proliferate: *parvermi* (line 116), *parea reflesso . . . parea* (line 119). This is because, in human discourse, seeming is all that is expressible. Ultimately none of Dante's images of sensory joining will be wholly satisfactory, because all of them are metaphors for an *invisible* and *inaudible* harmony between the soul and the divine that is unsusceptible to human expression.

Expression falls short when it comes to the perfect harmony that results when soul and universe cease to be distinguishable from one another (*Par.* XXXIII.121–32):

O quanto corto è il dire, e come fioco
al mio concetto! e questo, a quel ch' i' vidi,
è tanto, che non basta a dicer "poco."

O luce eterna che solo in te sidi,⁴⁵
sola t'intendi, e da te intelletta,
e intendente te ami e arridi!

Quella ciculazion che sì concetta
pareva in te come lume reflesso,
da li occhi miei alquanto circunspetta,
dentro da sé, dal suo colore stesso
mi parve pinta de la nostra effige:
per che 'l mio viso in lei tutto era messo.

Oh how short is speech and how hoarse to my
thought! and this, next to what I saw, is such that
to say "little" is not enough.

⁴⁴ Cf. the parallel image of a double rainbow in *Par.* XII (pp. 315–17 above); and see Ciabattoni (2010): 176–77.

⁴⁵ The formulation of the closing "hymn" is Neoplatonic. Compare for instance Boethius, *Consolatio Philosophiae* 3.9, *o qui perpetua mundum ratione gubernas . . .*, reproduced by DM, vol. 3, pp. 686–87. For the hymnic formulation in the Neoplatonic context, compare also the texts cited in Gee (2013a): 148–79.

O eternal light, who throne only within yourself,
 solely know yourself, and, known by yourself
 and knowing, love and smile:

that circulation which seemed in you to be
 generated like reflected light, surveyed by my
 eyes somewhat,

within itself, in its very own colour, seemed to
 me to be painted with our effigy, by which my
 sight was all absorbed.

In the Empyrean, the abstract upper heaven, “just as the distinction between time and space is no longer valid . . . , so light and sound cannot be separated.”⁴⁶ Dante’s sense of sight is submerged. Sight and sound pass over the event horizon where light and darkness are no longer distinguishable from one another, just as the distinction between self and universe collapses.

We’ve seen that in order to understand what he’s “seeing” in the vision of the celestial hierarchy, Dante must ride the revolutions of the universe, take on circular motion (*Par.* XXVIII.63, p. 313 above). In the closing lines of the poem Dante will achieve a final synthesis with the celestial circles (*Par.* XXXIII.142–45):

A l’alta fantasia qui mancò possa,
 ma già volgeva il mio disio e ’l velle,
 sì come rota ch’ igualmente è mossa,
 l’Amor che move il sole e l’altre stelle.

Here my high imagining failed of power; but
 already my desire and the velle were turned, like
 a wheel being moved evenly,
 by the Love that moves the sun and the other stars.

Dante’s perceptive faculties at last become one with the universe: his desire and will⁴⁷ follow the circular, wheel-like motion of the cosmos, the sun and

⁴⁶ Meyer-Baer (1970): 356. On the Empyrean (the tenth sphere) see Duhem (1913–59), vol. 1: 81; Nardi (1967): 167–214; Meyer-Baer (1970): 117–22; Moevs (2005): 33.

⁴⁷ On the meaning of *velle*, see *DM* ad loc. The *velle* (according to *DM*) is the intellective part of the will.

stars. But complete harmony with the cosmic circles comes at the price of silence. Psychic harmonization is a culmination beyond seeming, where speech, the discourse of seeming, falls silent.⁴⁸ So too must our narrative fall silent.

Conclusion

We are not surprised, now, to discover that there are two modalities of space in Dante's *Commedia*, as in our other afterlife texts: (1) the journey through the medieval universe in its totality and (2) the summative vision of it that we find in *Paradiso* XXVIII. In this vision Dante explores the relationship between universe and soul using two sensory metaphors: the visual theme of reflection and the auditory motif of rhythm and its notation.

This chapter, like others in this book, places a particular focus on music. Speaking from a musicological point of view, we see that relationship between rhythm and notation is an uncomfortable one at the beginning of the fourteenth century, which was a period of musical innovation. The problematic nature of the relationship between note and rhythm is in line with the similarly problematic nature of the relationship between the universe and its mirror image, which forms the visual element of Dante's vision in *Par. XXVIII*.

In each case, there's a problematic relationship between original and representation. Given what we know from Plato—that the human soul, too, is a copy of an original (the universe)—the problematic series of relationships that Dante presents indicates a problematic relationship between soul and universe, translated into a Christian world in which the Ultimate is unknowable and unspeakable. Dante's *Commedia* has a deeply ambivalent relationship with the Platonic universe: ultimately, perhaps, it represents both the culmination and the failure of Platonic eschatology.

⁴⁸ "The mental realisation of space is . . . felt as an immensity so great that it cannot be represented even by astronomical space because it cannot be represented at all," Bion (1970): 12.

Conclusion

No-one should deny the danger of the descent, but it can be risked. No-one need risk it, but it is certain that someone will. And let those who go down the sunset way do so with open eyes, for it is a sacrifice which daunts even the gods. Yet every descent is followed by an ascent; the vanishing shapes are shaped anew, and a truth is valid in the end only if it suffers change and bears a new witness in new images, like a new wine that is put into new bottles.

—C. G. Jung, *Symbols of Transformation*

No image expresses the actuality of death better than Achilles' futile attempt, in Homer's *Iliad*, to grasp the *psyche* of his lover Patroclus (*Il.* 23.99–101):

ὥς ἄρα φωνήσας ὠρέξατο χερσὶ φίλησιν,
οὐδ' ἔλαβε· ψυχὴ δὲ κατὰ χθονὸς ἥυτε καπνὸς
ῥέετο . . .

So saying [Achilles] reached out with his hands, yet clasped him not; but the spirit like smoke was gone beneath the earth . . . (Murray rev. Wyatt 1999)

When someone dies, you are deprived of the physical body of the dead loved one: there is no way to detain them, to get them back. It's appropriate, then, that the form of the afterlife, as the habitat of the soul, proves, after all, impossible to pin down. The afterlife resists our attempts to simplify, reduce, render one-from-many. We can only ever tell an εἰκὼς μῦθος, a likely story, about it.

So what, if anything, can finally be said? Above all, perhaps, that the afterlife represents a search for harmonization, for a resolution into a state of one-ness, a progression from *poikilia* to *symphōnia*. This can never take place in “real” life: we need the landscape of the afterlife to express it.

The function of afterlife myth is to convey psychic possibility. Descriptions of the afterlife show us what it would be like if all space and all histories were to coexist; if all sounds were harmony with each other; if all the senses were

connected; if soul were an unblemished copy of the universe. This is why the theme of one-from-many in its various forms—spatial, musical, visual—is an essential element of afterlife myths.

What we call the afterlife is the desire in the present, unachievable and so projected into the future, for a joining of faculties, the dissolution of the divide between us and the universe, the closing of the perceptual loop between what we are and what is. For this, we need to stop perceiving the universe as extraneous to ourselves. The presence of the vision of the universe in the landscape of the afterlife is one attempt to do this—to encapsulate cosmos in the landscape of soul. This is the function of what I have called in this book the journey-vision paradigm of afterlife space.

Text, music, painting, geography—all are ways of expressing the unity of inner and outer worlds: the creation of an alternative world by way of art. Works of art are expressions of the unconscious. All are road maps of the soul. That is why the many different ways of mapping intersect. A painting may be “read” as a chorography, like Pausanias’ description of Polygnotus’ painting of the underworld (pp. 47–48 above); a geography may be couched in the same terms as a work of graphic art (as in the case of Strabo 2.5.17, p. 57). Musical harmony, as described in the Spindle of Necessity, is an auditory “map” of the planetary circles (pp. 191–96).

Music, in particular, is an area for joining different areas of psychic aspiration: the most holistic, perhaps, of human activities. Music can be read geographically, as in the following description of the music of the contemporary composer Harrison Birtwistle:

Birtwistle has likened his musical forms to labyrinthine journeys on a number of occasions. Part of its appropriateness as a metaphor, especially in comparison with that of the processional, lies in the way in which it accommodates the combination of cyclical and linear temporal processes that is so characteristic of Birtwistle’s music.¹

Birtwistle’s music is both linear and cyclical, like the sun’s path. It is simultaneously a map, and an account of temporal process. In this way, it is like the accounts of the afterlife we’ve seen, which map space as an arena for soul, and fill it with a gallery of characters that, while simultaneously present in psychic form, span all the moments of a history.

¹ Adlington (2000): 116.

Music is particularly apt to our study, because it is a temporal event that generates in the soul of the listener a spatial and visual map. This too it has in common with narratives of the afterlife. This might go part way to answering a question that must have occurred to readers during the course of this book: why so much music? *Au fond*, this is a book about harmony. The afterlife is how we harmonize soul and universe. Remember Plato, *Tim.* 47d2–7 (cf. p. 216 above):

ἡ δὲ ἁρμονία, συγγενεῖς ἔχουσα φοράς ταῖς ἐν ἡμῖν τῆς ψυχῆς περιόδοις, τῷ μετὰ νοῦ προσχρωμένῳ Μούσαις οὐκ ἐφ' ἡδονὴν ἄλογον καθάπερ νῦν εἶναι δοκεῖ χρήσιμος, ἀλλ' ἐπὶ τὴν γεγонуῖαν ἐν ἡμῖν ἀνάρμοστον ψυχῆς περίοδον εἰς κατακόσμησιν καὶ συμφωνίαν ἑαυτῇ σύμμαχος ὑπὸ Μουσῶν δέδοται.

And harmony, whose movements are akin to the orbits within our souls, is a gift of the Muses, if our dealings with them are guided by understanding, not for irrational pleasure, for which people nowadays seem to make use of it, but to serve as an ally in the fight to bring order to any orbit in our souls that has become unharmonized and make it concordant with itself.

Leo Spitzer observed, à propos of this passage, “One must . . . realize the cosmic overtones of the key words used by Plato to describe the musical harmony: *περίοδοι* (*periodoi*) are the periods of the life of the soul that are comparable to those celestial revolutions that produce the harmony of the spheres; *συμφωνία* (*symphōnia*) is the order introduced into the soul by music, an order that reestablishes the order of the cosmos; *ἁρμονία* (*harmonia*) is the result of being well joined, well fitted together.”² Perception of musical sound, in particular, is a joining activity: it joins our soul to the universe. Small wonder, then, that the harmony of the spheres should figure, elsewhere, in the afterlife, which is the location where things are joined, a *symphōnia* of soul and universe.

But, as Dante in particular has shown us (chapter 10), harmony can never be achieved in artistic form: to be spoken about or played upon, it must remain an aspiration. In life, “by giving up preference for harmony, we accept dissonance to be as desirable as consonance.”³ Try as we might to resolve it, the irresolution and instability of the afterlife landscape remains the best possible symbol of the compromise that characterizes human existence.

² Spitzer (1963): 13.

³ Albers (1963): 42.

Epitaph

Scholarliness belongs to the spirit of this time, but this spirit in no way grasps the dream, since the soul is everywhere that scholarly knowledge is not.

—C. G. Jung, *The Red Book, Liber Primus*

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