

Introduction

Phillip Sidney Horky

I Preface

Self-reflection excites questions about our relationship to the world in which we live: is that world a priori ordered, or a chaos well arranged, or simply an indiscriminate chaos? If there is an observed order, is that order *merely* observed, or is it an image that obscures a more fundamental order, or *even* a disorder? If we do accept that there is a concept of ‘order’ at play, what is that order made up of? Does it have constituents, or perhaps properties that are unique to it? Assuming that we exist in some ordered world that we can describe, how do we set out to define it? Where, and how, do we draw its boundaries, either conceptual or physical? Is the ordered world one, or many? If many, are there ordered worlds within an ordered world, or even ordered worlds, or are there separately existing ordered worlds? Does this order repeat? If so, what unifies it in such a way that it can be observed as persisting? Are we human beings ‘ordered’ in a way similar to the world around us? And if there *is* order at various levels of reality (psychological, social, natural), what is ultimately responsible for such an order?

These are not novel questions: they are just as relevant today as they were in the ancient world, from the Delphic Oracle’s enigmatic injunction to know and explain oneself, to St Augustine’s search for human meaning within the world of change.¹ Modern scholars who work on ‘systems theory’ and ‘systems philosophy’ ask similar questions to these in the pursuit of a holistic understanding of the many parts of a ‘system’ and the ways in which they come to relate to one another.² According to Alexander Laszlo and Stanley Krippner, a ‘system’ is most generally understood to be a ‘complex of interacting components together with the relationships among them that permit the identification of a boundary-maintaining entity or process’.³ For some

¹ For Augustine’s response to Platonic, Aristotelian and Plotinian cosmology, see Nightingale 2010: Chapter 2.

² See e.g. Capra and Luisi 2014, Rosen 1991, Laszlo 1972, and Von Bertalanffy 1968.

³ Laszlo and Krippner 1998.

scholars working in this idiom, such ‘systems’ can be proper to individual disciplines and areas of scientific enquiry, whereas a sort of ‘supra-system’ is assumed to obtain over and above particular disciplines: the investigation of this ‘supra-system’ is the project of formulating a ‘general system theory’, following the terminology of biologist and philosopher Ludwig von Bertalanffy.⁴ So, while individual scientific pursuits might have special laws that we enquire after in the hunt for knowledge, and that condition the knowability of those sciences, there is a kind of isomorphism that obtains across the laws that govern particular sciences, which indicates the possibility of a universal system under which particular systems of knowledge fall.⁵ For committed systems theorists, it is possible to discover, or at least to approximate, a general theory of systems which applies to all sciences, but most notably those that deal with the sphere of human action and experience.⁶

Recently, scholars seeking to find an ancient imprimatur for their notion of ‘general system theory’ turned to the ancient world, and in particular to Presocratic and Classical philosophy in Ancient Greece.⁷ In particular, they noticed that a special concept that helped the ancient Greeks to explain the many inner workings of various spheres of life was established sometime in the mid to late sixth century BCE: *kosmos* (κόσμος). *Kosmos* was a term common from Homer a few centuries prior, where it was applied interestingly to the good arrangements of soldiers as well as to well-spoken words;⁸ and it was also employed in political discourse from the Archaic period forward, to refer to administrators whose responsibilities

⁴ See Von Bertalanffy (1968: xxi): ‘There is systems philosophy, i.e. a reorientation of thought and worldview ensuing from the introduction of “system” as a new scientific paradigm (in contrast to the analytic, mechanistic, one-way causal paradigm of classical science). As every scientific theory of broader scope, general system theory has its “metascientific” or philosophical aspects.’

⁵ Consider Wittgenstein’s discussion of systems and their relationship to knowledge in *On Certainty* (§105): ‘All testing, all confirmation and disconfirmation of a hypothesis takes place already within a system. And this system is not a more or less arbitrary and doubtful point of departure for all our arguments: no, it belongs to the essence of what we call an argument. The system is not so much the point of departure, as the element in which arguments have their life’ (tr. by Paul and Anscombe).

⁶ See e.g. Rosen’s description of the relationship between ‘formal’ and ‘natural’ systems (1991: 44): ‘The extraction of a formalism from a natural language has many of the properties of extracting a system from the ambience. Therefore, I shall henceforth refer to a formalism as a *formal system*; to distinguish formal systems from systems in the ambience or external world, I shall call the latter *natural systems*. The entire scientific enterprise, as I shall argue, is an attempt to capture natural systems within formal ones, or alternatively, to embody formal systems with external referents in such a way as to describe natural ones. That, indeed, is what is meant by a *theory*.’ Italics original.

⁷ See Capra and Luisi 2014: 1–6 and Rosen 1991: 5, where Pythagoras is credited with establishing the dualism between idealism and materialism, the basis for his own distinction between formal and natural systems.

⁸ For the significance of *kosmos* to Homeric poetics, see Elmer 2013: 49–55. Consider the challenges offered by Parmenides to the Homeric notion of *kosmos*, discussed in the contributions by Macé (Chapter 2) and Schofield (Chapter 3).

Introduction

3

must have included keeping some sort of order in the city-state. It had taken on new meanings that went far beyond, and perhaps in contradistinction to, Homer's usage.⁹ Still, the early usages hardly implied a 'general system', in the sense of the meta-system whose laws apply to diverse systems subordinate to it. Around the time that democracy was born in Athens, the kings expelled from Rome, and the Persian Empire established as a major world power, in the late sixth century BCE, something had changed, and *kosmos* took on a significance beyond its traditional deployment in Greek culture. Amazingly, over the next millennium – a period which saw dramatic growth and expansion in philosophy, science, music, literature, art and performance across the Greco-Roman world – various figures involved in the production of human knowledge and art continued to investigate what sorts of 'order' could be fruitfully explained by appeal to *kosmos*. Whatever *kosmos* was taken to mean at various points throughout antiquity – at some fundamental level, it indicated an order that is somehow arranged through forces of opposition, equilibrium or measure – the word and its derivatives were employed in order to illustrate not only how the universe, in its myriad constituent parts, works, but also how it *should* work. That is, *kosmos*, as it was deployed by ancient thinkers for their understanding of the world that surrounded them, functioned both descriptively and normatively to structure knowledge of reality.

This double aspect of *kosmos*, which, as the following chapters in this volume will aim to demonstrate, persists throughout its history in Greco-Roman antiquity, reflects a similar binarism that one sometimes finds in investigation into *kosmos* and its usages: descriptive approaches to *kosmos* tend to pursue a unified notion, an absolute *kosmos*, or, if we are to go one step further, *the kosmos*; this is a powerful idea that, so far as we can tell, received its most memorable illustration in the philosopher Plato of Athens' (ca. 428/7–348/7 BCE) masterpiece *Timaeus*, probably the most influential cosmological text in the ancient world.¹⁰ As Plato's authoritative interlocutor Timaeus of Epizephyrian Locri, who delivers Plato's most complete discussion of the universe and its nature, says:

The entire heaven – whether *kosmos*, or indeed any other name that it would be most convenient to call it by, let it be called so by us – we must make an

⁹ On which, see the contribution of Atack in Chapter 8 of this volume.

¹⁰ The influence of *Timaeus* upon later philosophy and science is paramount: see, among others, Baltes 1976, Reydam-Schils 1999, the essays collected in Sharples and Sheppard 2003 and the essays collected in Mohr and Sattler 2010. Excellent recent comprehensive studies of the *Timaeus* itself include Johansen 2004 and Broadie 2012. *Timaeus* will appear in references throughout this volume, but given the ubiquity of its importance, there is no single chapter devoted to this work.

investigation concerning it, the sort of investigation that, it is granted, should be undertaken concerning everything at first, whether it has always existed, having no origin of generation, or whether it was generated, having originated from a certain beginning. It was generated. (Plato, *Timaeus* 28b2–7)

Hence, Plato's character Timaeus understands that the fundamental question we face in our investigation of the universe is whether it originated from a particular beginning, or has existed eternally. It was one of the most important questions in ancient philosophy. Within the dialogue, discussion of the *kosmos* leads to examinations of its many parts, and to the question of how its parts were brought together by the divine Demiurge and his ancillaries to form a complete living universe, subject to change over time, but nevertheless eternal after its initial generation. This discussion comes to inform Timaeus' description of the biological generation of the human being, bridging the macro- with the microcosm, as Plato sought to provide a unified image of anthropo-cosmic generation.¹¹

In the same light, consider the Roman statesman and philosopher Cicero's (106–43 BCE) marvellous Dream of Scipio, which, like the Myth of Er in Plato's *Republic*, closed his dialogue of the same name. A young and ambitious Scipio Aemilianus gladly receives a vision of the universe, described by his grandfather Scipio Africanus, with the commitment to follow in his grandfather's footsteps and gain glory in Rome. His adoptive grandfather responds by comparing the body (*corpus*) with the *kosmos* (here using the Roman term for the same concept, *mundus*).¹²

Keep at it; and know this: it is not you that is mortal, but your body. You are not what your physical shape reveals, but each person is his mind, not the body that a finger can point at. Know then that you are a god, as surely as a god is someone who is alert, who feels, who remembers, who looks ahead, who rules and guides and moves the body of which he is in command just as the leading god does for the world [*quam hunc mundum ille princeps deus*]. And just as the eternal god moves the world, which is partly mortal [*ut mundum ex quadam parte mortale ipse deus aeternus*], so too does the eternal soul move the fragile body.¹³ (Cicero, *On the Republic*, 6.26)

Scipio Africanus' association of the animal body with the *kosmos* reveals Cicero's Platonic inheritance, but it is notable that Cicero's cosmology reveals a point of ambivalence among philosophers of the Post-Hellenistic

¹¹ The macro- and microcosm relation is drawn explicitly at the end of the dialogue (*Ti.* 89a–90d).

¹² See the first epigram to this book, from the incipit of Lucius Ampelius's *Liber Memorialis* (1.1): 'Mundus est universitas rerum, in quo omnia sunt et extra quem nihil, qui graece dicitur κόσμος'.

¹³ Translation after Zetzel.

Introduction

5

period, namely whether the *kosmos* was mortal or immortal – he claims, rather vaguely, that it possesses a ‘certain mortal part’. Is this a way of accepting Plato’s claim that the universe was generated? Is it a differentiation of the cosmic body from the cosmic soul (or ‘World-Soul’)? Or is it perhaps referring to the World-Soul’s ‘mortal’ parts, which are the spirited and appetitive aspects? Despite the ambivalence on this point, Scipio goes on to make claims that run counter to Plato’s position in the *Timaeus*, but reflect positions staked out elsewhere in his dialogues, such as in the *Phaedrus*:¹⁴ consider the statement at *On the Republic* 6.28 that the soul is not generated (a claim expressly rejected by Timaeus at 34 c). As soon as Plato has solidified the analogy between the generation of the *kosmos* and the human in the *Timaeus*, he initiates a messy, if persistently potent, debate that fuelled speculation for at least a millennium, in both the Greek and Roman worlds.¹⁵

At the other end of the historical spectrum in antiquity, the problem of relating the eternal and the generated natures of the *kosmos* is taken up by the Neoplatonist philosopher Proclus (ca. 411–485 CE). It prompts him to seek to explain how the universe could persist in its various fluctuations to and from Being:

Before his entire journey begins, Plato appropriately makes definitions regarding these terms, when he names the universe ‘heaven’ [οὐρανός] and ‘*kosmos*’ [κόσμος] and states of ‘the entire heaven’ – to ensure that you do not think that he is only speaking about the divine body – ‘let it be called “*kosmos*” by us or any other name’ that it is ‘pleased to be called’ [*Ti.* 28b2–3]. It seems that he calls it ‘heaven’ on the grounds that it seems best to everyone, but ‘*kosmos*’ on the grounds that [it seems best] for himself, for he says of the heaven, ‘let it be called “*kosmos*” by us’. It is appropriate to apply the name ‘*kosmos*’ because it is something crafted, even if it is also possible to call it by both [names], ‘heaven’ because it looks upon the things above [ὁρῶντα τὰ ἄνω] and contemplates the intelligible realm, and because it participates in the intellective essence; and ‘*kosmos*’ because it is always filled and arranged [κοσμοῦμενον] apart from the beings that really exist; also ‘heaven’ as having reverted [to its source], ‘*kosmos*’ as proceeding [from that source], for it is from there that it is generated, and reverts back, to Being. (Proclus, *Commentary on Plato’s Timaeus* 2, pp. 272.26–273.10 Diehl)

Nearly nine centuries after Plato had laid the foundations for the debate concerning the *kosmos* and its nature, Proclus finds himself employing the philosophical and hermeneutic tools that had accumulated in the study of

¹⁴ Cicero here is translating into Latin Plato’s *Phaedrus* 245c–246a.

¹⁵ For the early history of the debate, see Reydam-Schils 1999: Chapter 1.

Plato – from his earliest exegetes and critics in the Academy, such as Xenocrates and Aristotle, to those who would ultimately codify his philosophical views in a new system, such as Plotinus. His account gives us a place where we might draw the line in late antiquity concerning the assessment of Platonic cosmology. Proclus' lexical analysis of the term '*kosmos*' builds from Plato's account of the generation of the universe, but employs etymologisation from the term's function – the 'entire heaven' is called '*kosmos*' due to its being arranged (κοσμούμενον) apart from true beings, e.g. the Forms or the Demiurge. There is, of course, only one *kosmos* but it undergoes constant change despite its propensity for unity and existence.¹⁶ In this way, because the *kosmos* is the paradigm of what changes but retains its identity, it functions as a heuristic model for the individual, the person who persists in growing older while remaining the same. By understanding the universe in its manifold generation, I better understand myself as a potentially well-ordered being.¹⁷

Normative discussions of *kosmos* in Greco-Roman antiquity sometimes focus on the multiplicity of the term, how there can be many well-ordered things, or how many participants in the larger *kosmos* can be 'arranged' so as to be *kosmioi*: the stars, planets, and other meteorologica;¹⁸ city-states and their laws;¹⁹ land and buildings;²⁰ speeches, poems, and other dramatic performances;²¹ social practices and habits;²² the souls and bodies of individual human beings;²³ and the basic elements of the universe.²⁴ Others reject, or scorn, the centrality of the notion of *kosmos* to questions of nature or theology.²⁵ *Kosmos* features quite a range of applications and goes far beyond the notion of the *kosmos*:²⁶ the sophist Gorgias of Leontini, who flourished in the mid-fifth century BCE, contributes something quite

¹⁶ Compare with his predecessor Plotinus' presentation of the *kosmos*, discussed in Remes's contribution (Chapter 7).

¹⁷ See especially the contributions of Brisson and Remes (Chapters 6 and 7).

¹⁸ See Sauron's, Gagné's and Shearin's contributions to this volume (Chapters 11, 9 and 12).

¹⁹ See the contributions of Attack and Brisson (Chapters 8 and 6).

²⁰ These are discussed in the contributions of Brisson, Germany and Sauron (Chapters 6, 10 and 11).

²¹ See Macé's, Germany's and Gagné's contributions (Chapters 2, 10 and 9).

²² See the contributions of Brisson and Boys-Stones (Chapters 6 and 5).

²³ These topics are treated in the contributions of Brisson, Boys-Stones and Remes (Chapters 6, 5 and 7).

²⁴ Discussed in Schofield's and both of Horky's contributions (Chapters 3, 1 and 13).

²⁵ See Johnson's discussion of Aristotle and Horky's discussion of early Christianity in this volume (Chapters 4 and 13).

²⁶ In analysing the *kosmos* of law and rhetoric in Classical Athens, Wohl (2010: 2) helpfully identifies the possible divergences between 'order' and 'adornment', showing that a preference for the former is implicit in many accounts of early Greek law.

remarkable to the history of the concept by assuming that a *kosmos* must be a *kosmos* of something; and that each *kosmos* of something is diverse, peculiar to that object. Or, put more philosophically, *kosmos* is fundamentally *relative*. The beauty of Gorgias' sentiment lies in the pithiness of its expression:

The *kosmos* of a polis is manpower, of a body beauty, of a soul wisdom, of an action virtue, of a speech truth, and the opposites of these make for *akosmia*. (Gorgias, *Encomium of Helen* 1)

Gorgias excites the possibilities for understanding *kosmos* by grounding it in its many relative applications; but implicit is the assumption that *kosmos* itself is a meta-system with universal application across many areas of human experience, including warfare, aesthetics, ethics and rhetoric. Indeed, Gorgias' conceptualisation, marked by differentiation of 'order' from 'disorder' by contrariety, was influential in antiquity: not only does Plato mark a nuanced, if slippery, notion of *kosmos* in his dialogue concerned with challenging the dominance of rhetoric in his dialogue *Gorgias*.²⁷ Plato's student Aristotle (384–322 BCE) adapts Gorgias' distinction between '*kosmos*' (good arrangement) and '*akosmia*' (chaotic arrangement) in a fragment from one of his lost dialogues (perhaps *On Philosophy*; see Fr. 17 Rose³), which is used to point to the notion that a single first principle is one over many other principles:

The first principle is either one or many. If there is one, we have the object of our investigation. If there are many, either they are ordered or disordered. If, on the one hand, they are disordered, their products are more disordered [than they are], and the *kosmos* is not a *kosmos* but an *akosmia*, and this is the thing that is contrary to nature, whereas what is in accordance with nature does not exist. But if, on the other hand, they are ordered, they were either ordered by themselves, or by some external cause. But if they were ordered by themselves, they have something in common that conjoins them, and this is the first principle.

Because this fragment was originally embedded in a dialogue, it is difficult to know whether it reflects Aristotle's alleged Platonic metaphysical inclinations, or whether it represents a summary of a Platonic 'one over many' argument that he sought to criticise elsewhere, including his fragmentary treatise *On Ideas*.²⁸ It is possible that it is meant to represent a 'Platonic'

²⁷ As discussed by Horky in Chapter 1 and Boys-Stones in Chapter 5.

²⁸ The standard work on Aristotle's criticisms of Plato's 'One Over Many' arguments is Fine 1993. See Johnson's discussion of this fragment in the larger context of Aristotle's criticisms of theories of the *kosmos* and *kosmoi* in Chapter 4.

view that would have been subject to dialectical challenge later on in the dialogue. Regardless, this passage supports the proposition that what is *kosmos* is, in some fundamental way, *in accordance with nature*; and what is its opposite is contrary to nature. In this way, the argument builds upon Gorgias's seemingly trifle speculations concerning the fundamental – we might even venture to say axiomatic – divergence between what is *kosmos*, and what is *akosmia*.

One of the most remarkable aspects of *kosmos* in its usage throughout antiquity is its applicability at the macro- or micro-levels. As we emphasised before, the Greeks seem to have understood *kosmos* extensively, and to have applied it in the case of all kinds of ordered beings, at all levels, from the inestimable expanses of space and time, to the imperceptible principles and elements of existence.²⁹ This appears to have obtained from early on in the life of the concept, and it is attested in two fragments of the Presocratic Heraclitus of Ephesus (fl. around 500 BCE) that concern themselves with *kosmos*:

This *kosmos*, the same for all – neither did any god nor any human make it, but it eternally was, is, and will be: ever-living fire, being kindled in measures and being snuffed out in measures. (Heraclitus, DK 22 B 30)

The most beautiful *kosmos* is a heap of sweepings at random. (Heraclitus, DK 22 B 124)

Like Gorgias, Heraclitus conceives of multiple species of *kosmos*. But Heraclitus' usage denies to *kosmos* what, in the writings of Aristotle and Plato, is a property genial to it: conceptual isomorphism in reference to the objects that take it on. In the first fragment, the *kosmos* under discussion, the one that is the 'same for all', is eternal but ungenerated, and subject to measure as it increases and decreases. One wonders, with Malcolm Schofield in his contribution to this book (Chapter 3), whether Heraclitus is referring to *the kosmos*, i.e. the world, as Heraclitus' ancient commentators took him to be doing³⁰ – yet it would be difficult to account for the deictic 'this' (τόνδε) in that circumstance, and, if we compare with other fragments, the sun is revealed to be the most likely referent of the specific *kosmos* under discussion.³¹ On the other hand, in the second fragment, the *kosmos* described as 'most beautiful' is but a heap of dust,

²⁹ See especially Schofield's discussion in Chapter 3. ³⁰ E.g. Clem. Al. *Strom.* 5.105.

³¹ See Plato's jocund criticisms of Heraclitus at *R.* 497e–498b along with DK 22 B 94 and *P. Derv. Col.* IV. For a good discussion of this issue, see Hülz 2012.

Introduction

9

collected at random.³² It is hence an ‘arrangement’ of any sort that obtains in natural conditions. With Heraclitus, we are quite far from the position of, say, the fifth-century BCE Pythagorean Philolaus of Croton, who anticipated later philosophers, physicists, and systems theorists in believing that ‘nature in the *kosmos*’, as well as the ‘whole *kosmos* and all things in it’, were ‘fitted together out of limiters and unlimiteds’ (DK 44 B 1). For Heraclitus, even though it can indeed be considered at the macro- or microcosmic level, the arrangement implied in *kosmos* is not always the same for all the objects to which it is applied. Nevertheless, we could still see family resemblance between Aristotle’s and Heraclitus’ notions of *kosmos*: both are revealed in nature, and what this shared conceptualisation does is show how, throughout the ancient world, the peculiar way in which intellectuals formulated *kosmos* as a sort of good arrangement often has a knock-on effect on what they thought nature to be. And, indeed, one of the most important legacies of Presocratic philosophy was the identification of ‘nature’ as a fundamental object of scientific inquiry.

If Plato and Heraclitus are to be taken as roughly representative of two extreme points in the spectrum of meaning and usage for *kosmos*, we might further consider whether this notion is proprietary to Ancient Greece, or can be detected, with similar conceptual parameters, in other cultures of the ancient world. Of course, other ancient cultures had notions of an ordered universe. The Romans called this the *mundus*, and they distinguished between various sorts of *mundus* that they could, in their religious practices, observe and contemplate.³³ Some scholars have attempted to link these terms together through comparative linguistics, and although their arguments must remain tentative – nobody is actually sure exactly what the etymology of *kosmos* and related words is – there can be no doubt that the Roman and Greek notions are kindred.³⁴ There may be some shared semantics with Hebrew texts as well: according to Genesis 2:1, on the sixth day, Yahweh created the heaven and the earth, and שָׁמַיִם וָאָרֶץ (šā-bā-’ām), a word that the Septuagint translates in the third/second centuries BCE into κόσμος, but whose semantics indicate the assembly or mass of an army (i.e. the ‘host’) – the translation represents a throwback to a usage found in Homer. Beyond the Greco-Roman and Jewish worlds,

³² The consequences of this fragment will be discussed in Wohl’s Afterword.

³³ See especially Germany’s contribution (Chapter 10).

³⁴ Generally, see Puhvel 1976. Also see Alexander von Humboldt’s (1849: 52–53) eccentric summary of the etymologies of Greek κόσμος and Latin *mundus*, which he traced back to, respectively, Sanskrit *sud*, or ‘to purify’ (e.g. in Greek καθαρός), and Sanskrit *mand*, or ‘to shine’. The *Etymologicum Magnum* (532.12–13 Sylburg) derives κόσμος from κάζω and καίνυμαι, or ‘I excel’.

there are some interesting comparisons with other cultures, but no strictly equivalent concepts: the Egyptians posited *Maat* as the moral ideal of order and righteousness, as did the Babylonians *Kittu* and *Misharu*,³⁵ and the Zoroastrians *Aša*.³⁶ These conceptual ideals are perhaps closer to the notion of ‘justice’ or ‘righteous order’ than to *kosmos*: they refer to cosmic order as essentially just, something that was likely emphasised by Anaximander, but we must remember that justice, in the sense of equilibrium, need not be an *essential* attribute of *kosmos* (consider Gorgias’ description earlier in the Introduction).³⁷ Moreover, from the period in which *kosmos*, conceived of as good arrangement, becomes the *kosmos*, the links to mathematics, and especially to technical harmonics, are uniquely attested in the Greco-Roman traditions.³⁸ Indeed, one might think that the concepts of *Maat*, *Kittu*, *Misharu*, and *Aša* are closer in meaning to early Greek Δίκη or θέμις.³⁹ A complete comparison of notions of ‘order’ or ‘system’ in these cultures is beyond the scope of this volume, but it would surely lead to promising results in the history of thought.⁴⁰ One might expect that it would highlight the strangeness of the Greek concept of *kosmos* in the relief of these other moral and existential ideals, which persist across ancient cultures regardless of linguistic family origin.

This book aims, among other things, to present thirteen diverse contributions to our understanding of *kosmos* as a formative concept that has had impressive effects upon Western thinking. It is one of many core notions bequeathed by the Greco-Roman traditions to us today. Individual chapters vary in their treatment of this concept, ranging from historical-philological assessments, philosophical investigations, analyses of literary expression and evaluations of its practical application in ancient societies. The scholars who have generously contributed their papers were encouraged to embrace the many possibilities afforded by *kosmos* and *mundus*, broadly from Homer in the eighth century BCE through Nonnus in the fourth/fifth centuries CE; each contribution is interdisciplinary, selecting as relevant the topics it pursues with a close attention to the ancient evidentiary bases available to us. The reader will encounter

³⁵ For a useful summary of *Maat*’s attributes and scholarship relating to this topic, see Karenga 2004: 5–11.

³⁶ For the latter as a cosmological principle, see Horky 2009: 55–60 and West 2010: 12–13.

³⁷ Anaximander DK 12 B 1. See Burkert 2008: 68–69. ³⁸ See Horky’s contribution in Chapter 1.

³⁹ Burkert (2008: 69 n. 29) notes that Parmenides’ notion of the alternation of day and night is based on justice (DK 28 B 1.11–15); but this need not refer to *kosmos* itself, a term that Parmenides found problematic (see Schofield and Macé’s contributions in Chapters 2 and 3).

⁴⁰ An excellent recent collection of papers on comparative approaches to cosmology and cosmogony is Derron 2015.