

Zurvanist Supersubstantivalism

Daniel Nolan, University of Notre Dame

Draft. Final version to appear in the *Asian Journal of Philosophy*

Zurvanism was an influential strand of Zoroastrianism, and it appears to have reached its pinnacle under the Sassanid rulers of Persia from the third to seventh centuries CE. It is difficult to be certain of much about Zurvanism, since it does not seem to have left its mark directly on the practice of contemporary Zoroastrians in Persia, India, and elsewhere. It has, to my knowledge, received almost no contemporary philosophical attention in the English speaking world.¹ There are no doubt many reasons for this, but among them must be that very little Zurvanist writing has survived, and that writing seems to overwhelmingly deal with doctrine and practice rather than material that would be most naturally treated as philosophical today. While there is no doubt much more to philosophically excavate in Zurvanist pictures of the world, my focus today is on a metaphysical doctrine briefly reported by Eudemus of Rhodes in the fourth century BCE, which appears to have its origin in distinctly Zurvanist cosmology and is the earliest secure dating for Zurvanist thought. It suggests a metaphysical picture alien to the option space of contemporary Anglo-American metaphysicians, but strikes me as an interesting option to think through carefully.

This project of reconstruction is necessarily speculative. We have almost entirely lost the literature written by Zurvanists, even though it was an influential movement that lasted hundreds of years at a conservative estimate, across a region with a high population and a highly educated elite. The report I will focus on is by a Greek writer, and it is very difficult to tell how much his report reflects his source and how much it reflects his own philosophical presuppositions in classifying views he encountered. Finally, the report is brief, and we have to employ a lot of filling-in from both what little we can make out of the reporter's general understanding, and what we can infer might have been the reasons for the view coming from Zurvanist cosmology.

¹ Zaehner 1955 contains some discussion of philosophical themes in Zurvanism, but his speculations about Zurvanist thought have been searchingly criticised by Boyce 1982 and Boyce and Grenet 1991. My impression is that the contemporary consensus of experts is that Zaehner has gone too far beyond our evidence. Shaul Shaked's work, including Shaked 1994 and the papers collected in Shaked 1995, is crucial for our contemporary understanding of Zurvanism, but he does not discuss philosophical themes in any extended way. The only paper engaged in a primarily philosophical examination of Zurvanist doctrines that I could uncover is Gololobova 2017. (Though it is hard to draw a line between philosophical and theological discussions.) For a recent general introduction to Zurvanism, see de Jong 2014.

While I will do my best to explore what the view reported might have been, my main interest in this paper is to develop some metaphysical options that build on the basic idea that has been transmitted. No doubt this building will be anachronistic in some ways. I present the developments of the option, not primarily to capture what was "really behind" the original doctrine reported, but because I think the resulting views are an interesting alternative to the usual menu of options for the relationships between objects, events and time offered in contemporary thought. Using the historical record to broaden *our* minds and give *us* more options can easily take us beyond what long-dead thinkers themselves thought, or even the problem matrix those thinkers faced. It is a valuable activity for all that, so long as we do not confuse the question of what theoretical options may be interesting for us with the question of what doctrines from other places and times involved in their own terms.

This paper will begin by laying out what seems to me the important pieces of evidence about the doctrine in question, together with a brief primer on Zurvanist thought. The paper will then move to discuss some ways of developing the idea that has been reported, including the supersubstantialist option of the title, together with some immediate challenges such a view might face and how they might be overcome.

1. Zurvanist Principles

Eudemus of Rhodes gives us a fascinating though brief report about one kind of doctrine current among the Persians of his day. Eudemus was a student of Aristotle's, and was writing in the late fourth century BCE, though our knowledge of what he had to say is due to the neo-Platonist Damascius, writing in the early to mid sixth century CE.² We are told:

As for the Magi and the entire Iranian race, as Eudemus writes about this some of them call the intelligible and unified universe Space (Topos) and others call it Time

² de Blois suggests that Damascius's report misrepresents Eudemus, and "the Zurvanite content of the passage goes back, I think, not to Eudemus but to Damascius" (de Blois 2000 p 5 fn 12). de Blois seems to favour dates for the development of Zurvanism in Persia that are much later than the time of Eudemus, but I think his interpretation does not receive any support from Damascius's text itself. Boyce 1982 pp 239-241 discusses a wide range of other evidence that Zurvanism had arisen by the time of Eudemus's writing, and while none of it is conclusive, it does suggest that we need not discount Damascius's report of what Eudemus said.

(Chronos), from which are differentiated either a good deity and a bad demon, or light and darkness before these, as some say. And they then themselves posit the twofold differentiated rank of the superiors after the undifferentiated nature, one leader of which is Horomasda, and the other of which is Areimanios. (Damascius 2010 chapter 125.2, p 418)

The context in Damascius's work is that Damascius is summarising a number of ancient theological positions which support, according to Damascius, the doctrine that the ultimate philosophical principles come in triads. Damascius thinks the "theurgists" of different religious traditions have received divine revelations about fundamental philosophical matters, and in this context cites Eudemus as telling us what the "whole Iranian people" say about the fundamental principles of the world.

The Magi Eudemus refers to were a priestly caste or order, and "the entire Iranian race" likely generalised not only over Persians, but related groups such as Medes and Sogdians. As we will see, Damascius or Eudemus is overgeneralising when he attributes this worldview to "the Magi and the entire Iranian race". "Horomasda" in this report is no doubt the Zoroastrian deity Ahura Mazda/Ohrmazd, and "Areimanios" is no doubt his great enemy Angra Mainyu/Ahriman. The former is associated with the light, and the latter with the darkness. The primary entity in this system appears to be the intelligible and unified universe, identified with either time or space.

To see the connection between Eudemus's report and Zurvanism, a few remarks about Zurvanism and its place in Zoroastrian thought would be valuable. This potted introduction is of necessity painted with a broad brush: for a more in depth introduction to Zoroastrianism and Zurvanism see Boyce 1975, Boyce 1982 and Boyce and Grenet 1991. Zoroastrianism has about 120 000 contemporary adherents, and I beg their indulgence in particular for painting with such a broad brush. No religion is monolithic, and a few paragraphs will not do full justice to a tradition that is thousands of years old.

Zoroastrianism is an Iranian religion flowing from the teachings of the prophet Zoroaster (Avestan *Zarathustra*). There is considerable controversy about Zoroaster's dates: he lived sometime between 1800 BCE and 500 BCE, with Boyce 1982 estimating that his dates fall in a range between 1700 BCE and 1000 BCE. We know him almost entirely through the text traditionally held to be his creation: the

Gathas, the oldest and most sacred part of Zoroastrianism's central sacred text, the *Avesta*. Enough time passed between Zoroaster's composition and later parts of the *Avesta* for there to be a language shift: the *Gathas* were composed in Old Avestan or Gathic, while some of the younger texts of the canon were composed in Young(er) Avestan. Many of the important Zoroastrian commentaries that have come down to us are in Pahlavi, or Middle Persian, which appears to be later still. I favour earlier dates for Zoroaster on the grounds of how old the language of the *Gathas* seems to be: if forced to choose I would guess the parts of the *Gathas* most likely composed by Zoroaster appeared around 1400-1300 BCE, though little in the rest of the paper would have to change if we discovered a date closer to 600 BCE. Zoroastrianism is often thought of as the traditional religion of Persia, though it seems to have been very widespread among neighbouring Iranian peoples such as Medes and Sogdians, and it perhaps became influential in Mesopotamia during the Achaemenid period through to the fall of the Sassanian empire.

The central message of Zoroaster's teaching is that the world is divided in a struggle of good versus evil, light versus darkness. At the head of the forces of good stands the great god Ahura Mazda (Pahlavi Ohrmazd). At the head of the forces of evil stands the great evil spirit Angra Mainyu (Pahlavi Ahriman). Through the ages Zoroastrians have used varying names for these two, but I will standardise and call them Ahura Mazda and Angra Mainyu except when dealing with quotations. The world is locked in a cosmic struggle between the two, and it is the duty of Zoroastrians to assist Ahura Mazda through right conduct and appropriate rituals, including purity rituals to prevent good being defiled with evil. Angra Mainyu, the great spirit of evil, is assisted by hordes of *daiwas* or devils, many of whom seem to have close connections with the gods of the Sanskrit Vedas—one of the chief *daiwas* in the Vendidad section of the *Avesta*, for example, is Indra (Vd 19-43), who is portrayed as one of the greatest gods (*devas*) in the Rig Veda). Ahura Mazda, as well as his mortal assistants, is aided by the Amesha Spentas, divine benevolent spirits, as well as various good divine beings/gods such as Mithra.

Orthodox Zoroastrianism today, and so far as we can tell for much of its history, took the chief deity to be Ahura Mazda. I will call that variety of Zoroastrianism Mazdaism, for the sake of a label, and its adherents Mazdeans. (It should not be confused with Mazdakism, a variant Persian religion from the Sassanian period named after an important religious figure, Mazdak). At some stage a variant of Zoroastrianism developed which posited a greater god, prior to both Ahura Mazda and Angra Mainyu.

This greater god was Zurvan, who was associated with time, or infinite time. Zurvanists treated Ahura Mazda and Angra Mainyu as twin sons of Zurvan, created by him and given their power over the world by him. While the Gathas talks of "two primal spirits" as being "brothers" (Y 30:3), and while some Zoroastrians have interpreted this passage as talking about Ahura Mazda and Angra Mainyu (Boyce 1982 p 232)³, the scholarly consensus is that Zurvanism was a much later development than Mazdaism. Dating the rise of Zurvanism is difficult. One of the first clear pieces of information we have to date the presence of Zurvanism is from outside Zoroastrianism, in the translation choices of the early Manicheans. The followers of the prophet Mani, or perhaps Mani himself, translate Mani's name of the good god of his religion (the "Father of Greatness") as "Zurvan" in the Persian and Sogdian translations of his teachings, but as "Ormuzd" (i.e. Ahura Mazda) in the Parthian translation. These works date from the early third century CE. Later evidence suggests that Zurvanism was the court religion of the Sassanid empire, or at least of some of the Sassanid emperors: the Sassanids controlled Persia and its surrounds from the early third century CE to the Muslim conquests in the mid-seventh century.

It is reasonable to suppose that Zurvanist thought long pre-dated the first secure datings we have: there are numerous hints of reverence for Zurvan from considerably earlier. One of the important data points, in fact, is Eudemus's report, which adds time (or space) as a principle along with light (associated with Ahura Mazda) and darkness (associated with Angra Mainyu).⁴ Boyce 1982 pp 239-41 suggests that Zurvanism first became the preferred form of Zoroastrianism at the Persian court during the late Achaemenid dynasty, in the reign of Artaxerxes II (404-358 BCE, i.e. likely before Eudemus's composition). If this is right, the first appearance of Zurvanism itself is likely considerably earlier. While the datings of its origin and rise to influence are a matter of speculation with our current state of evidence, it looks reasonable to interpret Eudemus's report as reflecting Zurvanist ideas, and so to use what we know of later Zurvanist cosmology to suggest hypotheses about the doctrine Eudemus describes.

3 As Boyce points out, others in the Zoroastrian tradition interpret this passage as being about Spenta Mainyu and Angra Mainyu (pp 232-3, and fnt 106). We need not resolve this question of interpretation, since whatever the original meaning of this Yasna, it is plausible that Zurvanists, at least, took it to be Gathic support for taking Ahura Mazda and Angra Mainyu as being offspring of a common parent. Thanks to an anonymous referee for discussion on this point.

4 Our evidence from Greek reports also suggests that Mazdaism was also alive and well at the time of Eudemus of Rhodes: Theopompus, writing at roughly the same time as Eudemus, reports that Zoroaster taught Mazdean doctrine, with no apparent mention by Theopompus of Zurvan: see Plutarch, *Isis and Osiris* s 47, citing Theopompus.

It is an unresolved historical puzzle why Zurvanism disappeared so completely while Mazdean Zoroastrianism survived. One possibility is that Zurvanism was primarily the religion of an elite while Mazdaism survived among common folk and rural areas, much as paganism lasted longer among the *pagani* or villagers of Western Europe than it did in the cities as Christianity spread. Another possibility is that Zurvanism was identified with the Sassanian ruling class and was discredited, or scapegoated, because of the defeat of the Persian state during the Muslim conquest. (Though the *Ulema-i Islam*, discussed below, seems to have been composed in the thirteenth century CE or even later, many centuries after the Muslim conquest. So Zurvanism did not disappear completely when Islam arrived.)

According to the Zurvanist creation story, the primordial, uncreated, infinite deity was Zurvan, associated with time. For a long age (or perhaps always from an infinite past?) Zurvan existed alone, before birthing both Ahura Mazda and Angra Mainyu. From birth the two divine brothers were in conflict, so Zurvan created the material world as a venue for them to battle. Or in other versions, Ahura Mazda and Angra Mainyu created the material world as the place of their struggle, with Ahura Mazda contributing the good elements and Angra Mainyu the bad. As with Mazdaism, Zurvanists believed Ahura Mazda would eventually defeat and eliminate Angra Mainyu. Zurvanists seem to have treated both Ahura Mazda and Angra Mainyu as gods, while Mazdaism may have been more inclined to treat Angra Mainyu as not being the same kind of being as Ahura Mazda. Even if Zurvanists recognised Angra Mainyu as a god, they would have agreed that it was evil to worship him.

One way the stories of the gods were sometimes interpreted in the ancient world were as allegories conveying information about cosmological or metaphysical truths. Eudemus is naturally interpreted as reporting this sort of understanding about the relationship between Zurvan/Time, Ahura Mazda/"Horomasda"/light, and Angra Mainyu/"Areimanios"/darkness. Eudemus attributes this understanding to the Magians and all the Iranians, and I suspect this practice of understanding stories of the gods in cosmological terms was present among some Iranian thinkers. It is possible, however, that this metaphysical reading of the myth of Zurvan and his sons is due to Greek interpreters, perhaps including Eudemus himself. (Or e.g. Mesopotamian interpreters, since broadly Zoroastrian thought may have undergone some changes after the Persian conquest of Babylonia and other lands where the language of literature and culture was Aramaic.)

Whatever the currents of influence, Eudemus presents us with an intriguing philosophical doctrine. Somehow, the most important, or most fundamental, principle is identified with time, or perhaps with space. Beneath it are two subsidiary principles, light and darkness. (Or perhaps we could understand these as good and evil, if light and darkness stand for good and evil in the way that Ahura Mazda, symbolised by the light, is identified with the forces of good and Angra Mainyu, symbolised by darkness, is identified with the forces of evil.) If these principles are understood on the analogy of Aristotelian principles, they are somehow responsible for everything we come across in the world. And somehow the first "undifferentiated" principle underpins the others, and so directly or indirectly underpins everything. Let us turn to the question of how to put flesh on these bones.

2. Time as a Zurvanist Fundamental Principle

Let us turn to exploring some philosophical options for a system in which the fundamental principles are Time, Light and Darkness, conceived of as a Zurvanist might. Or at least as a Peripatetic of Aristotle's day or the generation after might, should one try to reconstruct the metaphysical basis of Zurvanist cosmology. It seems to me that we have four important sources for this project. One is the information we have about Eudemus's philosophical world-view and intellectual influences. Fortunately we are relatively well-equipped here, since Eudemus was Aristotle's student and sometime collaborator, and we have plenty of information to go on about early Peripatetic metaphysical assumptions. The second is what we can glean about broadly Zoroastrian attitudes of the time: here we have some scattered Greek references (including Eudemus, but also Theopompus (see above note 3) and Aristoxenus (see below <p 16>)), but the central sources of information are Zoroastrian religious writings themselves, particularly the *Gathas*, the most ancient part of Zoroastrian texts, in part or whole composed by Zoroaster himself; the rest of the *Avesta*, traditionally divided into the Old Avesta which very likely predated our time period, and the Young Avesta which was likely collated hundreds of years after Eudemus's report; and the *Zand*, a set of commentaries on the Avesta that also likely date from a few hundred years after Eudemus.

The third valuable source, is later Persian writings that are plausibly by Zurvanist authors, authors sympathetic to Zurvanism, or non-Zurvanist authors criticising recognisibly Zurvanist views, in both Persian and other languages. One advantage of this source is that some of the discussions are much more philosophical in nature. The main disadvantage is that they date from much later: perhaps more

than a thousand years in some cases after the thinkers Eudemus is reporting on. Among plausibly Zurvanist sources, the most useful for our purposes is the pair of peculiarly-named texts by unknown authors known as *Ulema-i Islam*, (Dabhar 1932) which seem to have been composed in the thirteenth century CE or even later. Even though the title translates roughly as "the scholars of Islam", the two texts appear to be intended as answers given by a *mobed*, a Zoroastrian priest, to questions about the Zoroastrian faith by Islamic scholars. The second of the two texts claims that Ohrmazd is created by Time who is his master, and is unquestionably Zurvanist. The first also appears to be Zurvanist, claiming that neither Ohrmazd nor Ahriman can do anything without time. I will refer to the two texts as *Ulema-i Islam I* and *Ulema-i Islam II* below. We need to be careful, of course, in projecting anything from these texts back to the fourth century BC, especially since they look on their face to contain mixtures of ideas with very different origins.

A fourth source consists of non-Zurvanist criticisms of Zurvanist doctrines from later eras. One useful source is Christian critiques and attacks on the religion of the various Persian states they interacted with. Early Christian Armenia distinguished itself from Zoroastrian Sassanid Persia, and yields several useful sources outlining the Zurvanist version of Zoroastrianism they were resisting. Particularly useful are the writings of the theologian Eznik/Yeznik of Kolb in the fifth century, who attributes to "the Persians" doctrines that are thoroughly Zurvanist. Indeed, one of the clearest surviving statements of the Zurvanist creation myth is due to Eznik. (Yesnik 1986 p 35-48) Another useful sub-group are Islamic descriptions and criticisms of pre-Islamic Iranian doctrines, especially al-Shahrastānī's apologetic work *Tathbit dala'il Al-nubuwwa*, which was probably composed in the twelfth century CE (see Shaked 1994 16-73). al-Shahrastānī presents a great variety of views held by different groups he identifies as Zurvanist, which serves as a useful reminder that we should not assume that all Zoroastrians who attributed a superior position to Zurvan agreed on points of doctrine, let alone what cosmology or metaphysics should go along with those doctrines.

While vital for a broader understanding of Zurvanism, I have not found anything in the anti-Zurvanist texts to illuminate my current topic, with one exception. al-Shahrastānī (likely writing in the twelfth century CE) claims that Hormizd and Ahreman are referred to with the expressions "light" and "darkness" respectively. This could be a mere matter of symbolism, but it could indicate that some Zoroastrian thinkers at least shared a reading of their myths as capturing cosmological/metaphysical

truths about principles like light and darkness. (See Shaked 1994 p 47 for a discussion of the significance of this identification in al-Shahrastānī.) On its own al-Shahrastānī's remark can bear little weight, since it comes so many centuries after Eudemus's report and could easily result from misinterpretation, but since it suggests something that was antecedently plausible it is worth mentioning.

The fifth and final source is perhaps the richest and most fascinating of all, though its connection with our current investigation is obscure to say the least. Theorising about time plays a significant role in Indian thought of the time period and for centuries after, particularly in the Atharvaveda and a number of the Upanishads. (See the discussion in Cohen 2020.) It would be surprising if there was *not* continuing influence in one or both directions between Hindu and Zoroastrian thought, especially in light of the extensive trade and political connections between Persian and Indian areas from the birth of Zoroastrianism onwards. The doctrines about time discussed in the Atharvaveda and at least some of the early Upanishads likely dates from the time of Eudemus's report or before. The Atharvaveda appears to assert that time is the father of the creator god Prajapati (Atharvaveda 19.53), while the Brhadaranyaka Upanishad 1.5.14-15 appears to identify Prajapati himself with time. The parallel with Zurvanist creation stories is apparent (e.g. Ulema I-Islam I which identifies Ohrmazd (Ahura Mazda) as the creator, though also says that the creator cannot do anything without the help of time, or Ulema I-Islam II 8-17 which identifies Zurvan as the creator of all things, albeit with Ohrmazd (Ahura Mazda) as responsible for much of the subcreation of the physical world). Some of the discussion in the Svetasvatara Upanishad seems directed *against* the view that Brahman, the creator, and the physical world all have their ultimate source in time itself. That is, it raises and rejects an option that Zurvanists may have been inclined to endorse (See Cohen 2020 pp 4-5). It would not follow that this Upanishad is a response to Zurvanist doctrine, especially since it can be construed as engaging with lines of thought present in the Atharvaveda and the Svetasvatara Upanishad, but a connection is not impossible, especially given the proximity of Iranian peoples to India. Speculation about links between broadly Indian philosophical doctrines and Zurvanist metaphysics would be best left to those with a more thorough grounding in Indian metaphysical thought of the period, so despite the temptation I will do what I can without bringing in hypotheses about influence in one direction or the other here.⁵

⁵ An even more intriguing parallel is between Zurvanism and ancient Chinese cosmology. From at least the fourth century BCE, some Chinese thinkers have conceived the world in terms of three principles: two represented by darkness and light (*Yin* and *Yang*), somehow arising from an ultimate *Taiji*, sometimes associated with time, or with infinite being. (Some daoist traditions derive Yin and Yang from the Dao, or the Way: see ch 42 of the *Dao de Jing* for one

First, we can ask ourselves what Eudemus of Rhodes might have had in mind in identifying something as a "principle", even in the work of others. As a student and longtime collaborator with Aristotle, it is reasonable to assume that he is thinking about "principles" roughly the way Aristotle did, in e.g. *Physics* 1. Aristotle does not stop to define what would count as a principle, but moves directly to describing his predecessor's views in terms of principles before laying out what he sees as the options for the number of principles (one, two, three, more but finitely more, infinitely many), and finally offering his own account of what the principles are, and how many there are. The sorts of things Aristotle identifies as proposed principles in his predecessors are the One of the Eleatic monists, the infinite kinds of Anaxagoras. Aristotle's own suggestion for the principles, at least of change, is that they are three: contrary Forms and the matter underlying transformations (*Physics* 1.7).

Principles are somehow "primary" for Aristotle, but not epistemically primary: they are not the starting points of investigation. Instead, they seem to play the role of ultimate explanations, or alternatively the things that are basic in appropriate theories of a subject matter. Aristotle's forms and matter are "constituents" of changing beings in one good sense of "constituent", though I think he would resist the idea that they are literally parts of substances. We will not go very far wrong if we interpret Eudemus to be talking about the ultimate explanations of the phenomena of the everyday world. Aristotle says of principles "for things to qualify as principles they must not consist of one another or of other things, and everything must consist of them" (*Physics* 1.5a26, Waterfield 1996 p 20). I suspect "everything" here may be restricted somewhat, maybe to things that change, since Aristotle probably does not mean e.g. that the principles themselves must consist of principles.

One aspect of Aristotle's discussion in *Physics* 1.5-6 is particularly interesting in this context. In *Physics* 1.6 he argues against there being only two principles. Exactly what Aristotle's position here is controversial, but part of it seems to be that if there are two principles they will be opposed to each other, and we may need some mediating principle to account for their interaction. Aristotle's own view of the three principles of change appears to satisfy this requirement: the contrary forms in change successively occupy the same matter, providing a connection between the forms. Eudemus might have been inclined to see a similar challenge to only having light and dark, or good and evil, as principles.

puzzling derivation.) It is hard to know if this is anything more than coincidence. Thanks to Graham Priest for discussion.

So he might have seen the appeal of postulating a third principle to somehow connect them or mediate between them. We have no reason to think Zurvanist metaphysicians would have been motivated by this Aristotelian concern about opposites, but it may have influenced Greek reception of their ideas.

Given the Zurvanist background, light and darkness are likely to be active principles that explain change in the material world, since Ahura Mazda and Angra Mainyu are the primary entities in the great cosmic struggle. Time might be a principle that plays some different role, since it is not conceived of as in tension with the other principles, in the way light and darkness oppose each other, and because it is supposed to be somehow primary relative to the others, which are somehow derivative or subordinate. What metaphysical options are available to fill in the details?

Some deflationary options are available. Perhaps Time, Light and Darkness are just the main efficient causal forces in the world we experience around us: Ahura Mazda and Angra Mainyu are the interventionist generals of cosmic armies, and Zurvan is their progenitor and perhaps plays some kind of refereeing and stage-setting function. While a Zurvanist inclined to take the myths literally would no doubt agree, that theology does not seem to me to go as deep as would be suggested by Eudemus's talk of principles. My guess is that Eudemus, at least, is interpreting Zurvanist myths as containing more metaphysical doctrines about the ontological grounds of the phenomena we see around us, just as when Aristotle identifies the principles as form and matter he is doing more than remarking that many of the things we see around us are efficiently caused by e.g. form-matter compounds.

If we want an account of time, light and darkness as principles in some more metaphysically heavyweight sense, what are some of our options? One option is suggested by the Persian alternative Eudemus mentions in the quote above. Eudemus mentions that some Persians take the three principles to be light darkness and *space*. One way to make space a fundamental entity on which everything else (or at least everything concrete) depends is to identify apparently self-standing material substances with regions of space, and then to hold that the other furniture of the spatio-temporal world, such as events and shadows and relationships, depend in turn on the regions of space in a way analogous to the way they are thought to depend on concrete material substances.

This *supersubstantivalism* about space is a well-known metaphysical option. Once we accept the existence of both absolute space and objects located in space, a natural question arises about the relationship between objects and the space they occupy. This question gets an unmysterious answer if occupying a region of space is just being identical to that region. supersubstantivalism also appeals on parsimony grounds: we already need to posit the instantiation of various physical properties at various places, so if a theory takes those places to be the *bearers* of those properties, we cut out a mysterious middle-man which would bear those properties and then be located in those places. Nolan 2014 discusses a number of advantages supersubstantivalism about space has. supersubstantivalism about space arguably has a number of historical precedents, including Descartes (Skow 2005 59-62), Newton (Skow 2005 64-69, Thomas pp 2018 122-123), Spinoza and Samuel Alexander (Thomas 2013).

Contemporary supersubstantivalism is often supersubstantivalism about *spacetime*, following the picture offered by the general theory of relativity of space and time being aspects of the one more fundamental system of locations, and indeed the very distinction between being at different places at the same time versus different places at different times being relative to a reference frame. Explorations of spacetime supersubstantivalism include Sklar 1974, Earman 1989 and Schaffer 2009.⁶ Supersubstantivalists who treat material objects as being identical to regions of spacetime have a natural reduction of events and processes to regions of spacetime available as well, since many of the arguments for not distinguishing things and the spacetime they occupy transfer over naturally to events and processes.⁷

To my knowledge, no-one in the contemporary literature has suggested identification of objects or processes with the *times* at which they occur. This sort of identification would have many of the advantages of traditional supersubstantivalism about space. We would have a straightforward analysis of temporal location: to be at a time is just to be identical to that time or to a stretch of time of which that time is a part. Stretches of time would have characteristics that we would not normally associate with times, such as quacking or being round or repeating regularly, but learning to think and talk this

6 Lehmkuhl 2018 reserves "supersubstantivalism" for a weaker view, according to which spacetime is the only (kind of) substance, and material objects somehow ontologically depend on it (Lehmkuhl 2018 p 27). According to Lehmkuhl's usage, what I am calling supersubstantivalism about spacetime is the "identity view", which is only one variant of supersubstantivalism. On Lehmkuhl's more generous usage, many more of the views canvassed in this paper would count as supersubstantivalism about time, since there are various options for taking time to be fundamental and other things in the world to be derivative besides treating everything as *identical* to some stretch of time or other.

7 I will tend to talk of events or processes interchangeably, since I see little fundamental ontological difference, though some of course do. I leave it to them to decide which better fits the Zurvanist motivation.

way may not be much more difficult than making similar ascriptions to regions of space or regions of spacetime.

Are there any philosophical advantages to identifying temporal entities with the *times* they occupy rather than the spaces or spacetimes they are located at? This may turn on whether we think of entities like Aristotelian substances as fundamental, or we instead take events or processes to be the fundamental building blocks of the world around us. It is easier to think of objects as being primarily spread out in space and processes primarily spread out in time, even though objects persist through periods of time and processes occur across regions of space. (A cricket match does not just take some time, it needs a place to happen too.) A philosophical emphasis on objects or processes does not force one to give ontological priority to time or space over the other. But an emphasis on processes and change would make a prioritising of time more natural.

There is some reason to think that some Zurvanist thinkers may have seen processes and change as fundamental to the concrete world we find around us. In the *Ulema-i Islam*, as well as many versions of the Zurvanist creation myth that have come down to us from non-Persian sources, the whole purpose of the material world and its contents is to be a venue for the cosmic struggle between Ahura Mazda and Angra Mainyu. This process of struggle and change between good and evil/light and darkness is fundamental at least as far as the purpose of the material world, and it may be reasonable to suppose that this process and change is fundamental to the world in more metaphysical ways as well, if one has a Zurvanist starting point in metaphysical speculation. Working within a religious tradition where the ultimate deity and creator is primarily associated with time may also naturally lead Zurvanist metaphysicians to look for a way time is at the base of all things in some metaphysically significant sense.

There is an obvious problem with identifying e.g. processes with the times they occupy. Two things could be happening at once, and presumably even for the same duration. But if they are each identical to the time at which they occur, they must then be identical to each other. This problem is like the problem that faces the supersubstantialist about space when confronted with the possibility of two objects in one place. But it is easier for a spatial supersubstantialist to bite the bullet and say that two objects cannot exactly co-locate without being identical; while it is harder for a temporal

supersubstantialist to rule out that two processes could occur at once. (Why couldn't, in principle, two clocks strike noon at the same time in different rooms? And if they do, isn't it plausible that these are different strikings, not identical to each other?) At least in space we have three dimensions to allow different existences to be in different places. In time, we only have one dimension to play with.

There are several ways a temporal supersubstantialist could address this challenge, and I will not try to present an exhaustive menu. One flat-footed way would be to insist that no two processes ever occur at *exactly* the same time, contrary to appearances. While coherent, that response does look *ad hoc*. Another option is to identify a privileged event or process with each stretch of time, and treat the other "simultaneous" processes as being aspects or somehow facets of the privileged process. A natural candidate for the privileged process is a maximal one: a stretch of time is the *entire* concrete goings-on, and distinct aspects of it, such as the two clocks chiming, are only modes or features of the whole thing. (One way to approach this is to think of different processes at the same time being like the numerically distinct modes in a Spinozistic monist world.) A metaphysical picture on which Time is the ultimate reality and mundane history is just some modifications of it may not be unappealing to someone already committed to thinking time is the chief metaphysical principle.

A third option is a partial retreat from identifying times with processes. Perhaps the time of a process is only a central constituent of that process, perhaps an essential one (either specifically essential if, despite appearances, processes could not have happened at other times than the ones they do, or at least generically essential—no process without its time, even if it could have had a different time from the one it actually takes). One option is that times are a special kind of *part* of processes.⁸ A variant of this that inches even closer to identity is analogous to the way spacetime regions are parts of objects in the system of Leonard 2021, according to which an object has its location as a part *and its location has that object as a part*. We could, at the cost of a non-standard theory of the part-whole relationship, allow that a process is part of the temporal stretch in which it occurs, as well as the temporal stretch being part of the process, while preserving their non-identity (and allowing that distinct processes occur at the same time, though if we followed Leonard we would have to allow the processes were part of each other as well). Another way to unify processes and stretches of time mereologically would be to allow

8 Note that on one way of developing a Kim-style theory of events, times are constituents of events, along with objects and properties/relations. See Kim 1976, even though there he only adopts the weaker view that events are one-to-one correlated with certain triples of objects, properties and times. Thanks to Mike Rea for discussion.

that processes were parts of the time they occur in, but *not* vice versa: if we wanted a theory where time was primary we could also hold that time's parts were grounded in it, or depended on it, rather than vice versa.

Perhaps part-to-whole is not the best model for the relation between processes and times, where time is thought of as a principle underlying the processes. One alternative would be to take events to be *properties* of times: Montague 1969 pp 160-161 proposes this ontology of events on quite different grounds, and Lewis 1986 makes the closely related proposal, in effect, that events are properties of spacetime regions. Or perhaps time is more like a substratum in which events are the changes. (Or that somehow processes are "disturbances" in time in something like the sense of Karmo 1977.) One option for someone who wishes to take time to be somehow the ground of events or processes is a hylomorphic one, treating time as the matter of processes, where processes themselves are some sort of non-mereological compound of their matter and the features which distinguish them from each other. This hylomorphic understanding of time as a principle underlying the goings-on of the world might appeal to Aristotelians like Eudemus. Aristotle in the *Physics* identified matter as one of the principles, along with opposite Forms, involved with change (*Physics* 1.7, 191a), so the language of "principles" would not be out of place here in Eudemus's reporting.

One unusual feature of taking time to be the matter or material of processes is that Zurvanists seem to treat time as primary, while Aristotle often talks as if substances are primary, and a substance's form and matter are derivative from it. Seeing processes as ontologically downstream of the time in which they occur goes against the spirit of invoking Aristotelian hylomorphism to explain their connection, at least in this respect, though of course hylomorphist options need not be Aristotelian in all respects.

One advantage of a hylomorphic approach is that it could give us a straightforward way of denying the identity of processes that occur at exactly the same time and with exactly the same duration: conceptually, at least, there seems room to have different objects share their matter (as a statue and a piece of bronze from which it is made share their bronze while being numerically distinct, according to some thinkers). If we did use time-as-matter in this way, the downside would be that times could not also be used as a *principle of individuation* in at least one sense of that slippery expression. When we have two descriptions of events, we might hope that a principle of individuation could be appealed to in

order to let us know, at least in principle, whether we are dealing with one event described in two ways, or two distinct events. Appeal to the time of an event can sometimes do this: if the only time event A occurs is distinct from the only time event B occurs, A and B are distinct events. But if we allow distinct events to occur at the same time, the times of the events will not always be sufficient to determine whether we have one event or two. This is not fatal to the proposal that times are the matter of events: "matter" in traditional hylomorphic theories has been called on to play various of a cluster of roles, and figuring in necessary and sufficient identity conditions of entities of the same kind is only one among several of the traditional, and putative, roles matter supposedly plays.

Whatever one says about the problem above, this style of approach faces other puzzles to resolve. (Indeed, any approach to questions of the relationships between objects and events, on the one hand, and the times and places where they are, on the other, faces a range of difficult questions to answer.) One class of problems, urged upon me by a referee, are problems about explaining the spatial relationships at a time (and indeed across times) of ordinary objects or events. If we treat times as having spatial dimensions as well, the view starts to look more like a spacetime supersubstantivalism than a temporal one. On the other hand, if the times are one-dimensional entities, it is hard to see how they could construct a three- (or four-) dimensional manifold. If we can handle spatial facts in a "relationalist" manner, construing them as being a matter of relations between things or events, standing in spatial relations need be no more mysterious than any other relations: it would be odd to say one time is to the left of another, but perhaps no more odd than to say one stretch of time loves another. If we are under pressure to treat space substantially, on the other hand, temporal substantivalism will face the kind of pressure purely spatial substantivalism faces when arguments for substantial four-dimensional spacetime are offered. Those pressures can be resisted in turn, but it would take us too far afield to assess all the ways that dialectic could play out.

Another problem urged by the referee is explaining how ordinary objects and events can be at *different* times: I have been around for many years, but how can I be at different times if I am identical to a time? One natural way to handle this would be to associate me with a long stretch of time, rather than e.g. any individual year, and to explain my relationship e.g. to 2020 by saying it is a part of the longer stretch of time that I am identical to (or am constituted by; or which I have as my matter, or however exactly we spell out the connection). Another natural way to respond to the problem would be to take

me (or various events) to have temporal parts, each of which is identical (/etc.) to a shorter stretch of time. The whole is then derivatively at many shorter times. Even objects or events with discontinuous histories, such as a watch that is disassembled and later rebuilt, could be identified with discontinuous stretches of time. These are not the only options: a contemporary metaphysician's toolkit contains many resources to build out a theory to respond to these and other challenges, though of course this may move the resulting theory even further from anything we could be confident of attributing to Zurvanist thinkers.⁹

3. Light and Darkness

While my interest here has primarily been in the thought that time is the fundamental principle of the world, it may be interesting to discuss the prospects for taking light and darkness to be the other principles. Again, there are at least two interesting questions: how might Zurvanist thinkers themselves have conceived of the roles of light and darkness, and what are the most interesting contemporary developments of this general thought? Of course the answers to these questions will ideally inform each other, as we use our own sense of the options to inform our historical speculations, and we use our historical speculations to inform us about what the most interesting options are.

As with taking time to be a principle, there are some straightforward options. We can think of light and darkness as the two most powerful entities causally, perhaps after time itself. The most straightforward theological reading of the claim is like this, with the power and will of Ahura Mazda and Angra Mainyu struggling for control over outcomes. Eudemus seems to suggest that what is intended is a less theological and more cosmological reading of the claim that light and dark are fundamental principles. One style of cosmological theory is that light and dark are *elements* of everything in the concrete world—at its most flat-footed, that the small parts of everything we encounter are somehow light or

⁹ A different kind of argument against supersubstantivalism, of any sort, is offered in Leonard 2022. There Leonard argues that supersubstantivalism cannot handle cases of vague location (e.g. when it is vague which region I am). Leonard's argument generalises in an obvious way to identification of objects (or ordinary events) with stretches of time. Effingham 2009 and Nolan 2014 have both offered consistent, and to my mind attractive, pictures of vague location in the context of supersubstantivalism, and these can both be adapted to the case of temporal supersubstantivalism. Leonard, in effect, includes as a premise a strong and controversial principle about the interaction of determinacy and identity (Leonard 2022 p 3478-3479). It is a principle similar to the one Evans 1978 appears to defend, but even Evans was not defending that principle, if we follow Lewis 1988's interpretation of Evans. See Barnes 2009 for another approach for allowing indeterminate identities that illustrates how the position offered in Leonard 2022 can be resisted.

darkness. There are at least two historical sources that suggest that some Zurvanists may have been thinking of things in these terms.

One is a retelling of a legend we have (probably) from Aristoxenus, another one of Aristotle's pupils. (Or perhaps partly or wholly from an otherwise unknown figure, Diodorus of Etria.) (See Kingsley 1990 pp 245-256 and Boyce and Grenet 1991 pp 368-370.) Aristoxenus reports that Pythagoras studied with "Zaratas the Chaldean", presumably Zoroaster himself. We have the report from the much later writings of the Christian controversialist Hippolytus. According to Hippolytus, Aristoxenus (or Diodorus of Etria) reports that Zoroaster told Pythagoras:

[E]verything derives from two primordial causes: a father and a mother. And the father is light; the mother is darkness. The constituent parts of the light are: hot, dry, light and swift. The parts of the darkness are: cold, wet, heavy and slow. Out of these the entire cosmos is composed—that is, from female and male. And he says the cosmos is also a musical harmony, and that this is why the sun performs its cyclical orbit in accordance with the laws of harmony (translated in Kingsley 1990 pp 248-249)

Pythagoras's alleged meeting with Zoroaster is pure myth, but the idea that light and dark, and their "parts" are elemental principles out of which the material world is made might well be from a Zoroastrian source.¹⁰ (There is no suggestion in any Persian texts that we should see Ahura Mazda and Angra Mainyu as father and mother. Perhaps this is a piece of Eastern speculation less connected with the Zoroastrian traditions that come down to us, or perhaps it reflects the interplay between broadly Persian thought and the Pythagorean cosmic binary between male and female.) If the report is from Aristoxenus, it was likely a view that was still in circulation at the time of Eudemus. Another possibility, however, is that this is a report of a doctrine from Pythagoras or his school, attributed to Pythagoras's alleged teacher Zoroaster. So we must handle this evidence with due caution.

¹⁰ It is curious of course that light is supposed to be one of the (proper) parts of light. My guess is that light and dark are intended to be more fundamental principles of which e.g. dry or cold are meant to be derivative manifestations. There is much more that we would like to know about the details of this doctrine.

The second is the much later *Ulema-i Islam*, the Zurvanist text written in Islamic times mentioned above. At one point it attributes the view to "some sects", presumably of Zurvanists, that "Ohrmazd and Ahriman were created (by Time) so that it [i.e. Time] may mix up good and evil and various things may be produced thereby." (*Ulema-i Islam* II s 24) It later (s 44) talks of Ahriman being mixed in us, and suggests that when we are purified Ahriman will be driven out of us. Ahriman here is of course Angra Mainyu, associated with darkness. This talk of mixture may of course be metaphorical in one or both places, and at other places in *Ulema-i Islam* there is talk of the "four elements" as if the only elements are air, earth, fire and water (*Ulema-i Islam* II s 21). The *Ulema-i Islam* seems to be an amalgam of different lines of cosmological thought, though it suggests that some Zurvanists, at least, saw light and darkness (or good and evil) as constituents out of which all the objects of our experience were compounded. Whether this elemental view dated back to Eudemus's time is impossible to determine with our present evidence.

As in the previous section, there are other options besides a brutally causal story and a story where light and dark are elements of the rest of the world. They could be the fundamental properties of time, for example (as events and processes are properties of time in Montague 1969): this story might be developed much as the elemental story above, but with the total distributions of light and dark at a time being even more ontologically derivative of time than the elemental story might suggest. Or they might be the fundamental forms to time's matter, if some hylomorphic option is pursued. Just as with the elemental story, it is not obvious how to get all the diversity we find around us out of such a narrow range of ingredients, but the speculation about elements above give us some ways to see how that might go.

There is one more option for treating them as principles that I want to record, though I have not been able to find any direct textual evidence that it was what Eudemus's sources might have had in mind, or indeed that it was present in later Zurvanist thought. Suppose that the concrete world is conceived primarily in terms of processes: the cosmic struggle between good and evil, and the many local processes that contribute to that great conflict. Many processes would be mixed processes, with good and evil aspects or elements, just as a person who does some good and some evil is in some sense a mixture of the two. Good and evil could then be supposed to be the *end* or telos of each unmixed thing, with mixed things and processes having ends that are combinations of good and evil. This would give

us a sense in which good and evil are the twin purposes of everything, and so in one sense principles of everything we encounter. It is hard to see time as a principle in the same sense: presumably duration is not in general a *purpose* of processes even if it is a condition of the possibility of those processes. But perhaps it would not be alien to Zurvanist thought to see time as underlying the world in a different, perhaps deeper sense than the struggle of good and evil.

4. Conclusion

In this discussion I have attempted to lay out some metaphysical options for "translating" the interesting suggestion relayed by Eudemus into our contemporary idiom. I do not want to make any claim to exhaustiveness: there might easily be other ways to fill the idea that time is a fundamental principle behind the world we encounter. Nor do I wish to claim that Eudemus's long-lost informant must have had one or more of the ideas in mind that I have sketched here. We know too little about the intellectual environment of Achaemenid Persia in the fourth century BCE to make any firm predictions about their metaphysical opinions, and it would be very surprising if they saw any of the theoretical options in quite the same way we do.

With these caveats, I hope this discussion can be of value in two ways. The first is as an initial contribution of ideas for understanding Zurvanist metaphysical thought: a range of hypotheses can be useful to guide inquiry even if subsequent inquiry disconfirms some or even all the preliminary options. The second way this discussion is of potentially useful is as a sketch of ideas that contemporary metaphysicians may find of value. Treating time as an ultimate principle is not found very often in contemporary metaphysical systems, and options like identifying everything in the concrete world with times, as opposed to regions of space or spacetime, is novel in the contemporary literature.¹¹ Excavating

11 One referee suggested that it may be possible to translate spacetime supersubstantivalism into a form of temporal substantivalism via the identification of *times* themselves with regions of spacetime, and then a reduction of objects and events to those regions. This would require an unusual characterisation of times, or of objects and events, or both. The typical candidates to be "instants" of time in a spacetime theory are hypersurfaces that themselves include all spacetime points that are classed together by a suitable foliation of spacetime (in special relativity, a suitable foliation might be given by the relation of simultaneity relative to a reference frame). The typical candidates to be stretches of time in these theories are regions bounded by such hypersurfaces. Those "instants" or "stretches of time", or spacetime regions like them, are usually not very good candidates to be cats or cabbages or battles or football matches. Perhaps a suitably ingenious identification of times would yield times as spatiotemporal regions with the sizes and shapes that would better fit these objects and events. If that can be plausibly done, then I should restrict my claim about novelty: identifying concrete objects and events with times is novel in the contemporary literature *unless* spatiotemporal supersubstantivalism, twinned with an ingenious enough definition of times, counts as identifying these objects with times.

ancient Persian thought is difficult in the face of what appears to be the almost entire loss of texts in Persian from the Achaemenid period, and very great loss of Persian texts from any pre-Islamic period. Even the percentage of pre-Islamic texts in any language relevant to Persian thought must be a minute fraction of the texts produced. Nevertheless, even the shards that we can recover indirectly may give us insights into lines of thought and ways of seeing the world that we would miss if we stick only to better documented philosophical traditions.¹²

Daniel Nolan
 100 Malloy Hall
 University of Notre Dame
 Notre Dame, Indiana, 46556
 USA
 dnolan2@nd.edu

References

Atharvaveda.

Avesta.

Barnes, E. 2009. "Identity and Counterparts: Evans Reconsidered". *Synthese* 168.1: 81–96

de Blois, F. 2000. "Dualism in Iranian and Christian Traditions" *Journal of the Royal Asiatic Society* 3.10.1:1–19

Boyce, M. 1975. *A History of Zoroastrianism, Volume I: The Early Period*. Leiden: Brill.

Boyce, M. 1982. *A History of Zoroastrianism, Volume II: Under the Achaemenians*. Leiden: Brill.

¹² Thanks to Sara Bernstein, Jay Garfield, Graham Priest, Michael Rea and Emily Thomas for discussion, and to several anonymous referees for feedback and suggestions.

Boyce, M. and Grenet, F. 1991. *A History of Zoroastrianism, Volume III: Zoroastrianism Under Macedonian and Roman Rule*. Leiden: Brill.

Cohen, S. 2020. "Time in the Upaniṣads". *Religions* 11.60: 1–12

Damascius. [2010] *Problems and Solutions Concerning First Principles*. Translated with Introduction and Notes by Sara Ahbel-Rappe. New York: American Academy of Religion and Oxford University Press.

de Jong, A. 2014. "Zurvanism" in *Encyclopædia Iranica*, online edition, New York.
<<https://www.iranicaonline.org/articles/zurvanism> > Accessed 10 September 2022.

Dhabhar, B.N. (tr.) 1932. *Persian Rivyats of Hormazyar Framarz and Others*. Bombay: K.R. Cama Oriental Institute, pp 437–457. The two Ulema-i Islam texts translated by Dhabhar are available at <http://www.avesta.org/mp/ulema.htm>

Earman, J. 1989. *World Enough and Space-Time: Absolute versus Relational Theories of Space and Time*. Cambridge MA: MIT Press.

Effingham, N. 2009. "Universalism, Vagueness and Supersubstantivalism". *Australasian Journal of Philosophy* 87.1: 35–42

Evans, G. 1978. "Can There Be Vague Objects?". *Analysis* 38.4: 208

Gololobova, K. 2017. "Zurvan: The Concept of Time in Zoroastrianism and its Impact on Religion and Philosophy". *Skhid* 1.147: 89–92. (in Ukrainian).

Karmo, T. 1977. "Disturbances". *Analysis* 37.4: 147–148

Kim, J. 1976. "Events as Property Exemplifications" in Brand, M. and Walton, D. *Action Theory* Dordrecht: Reidel, pp 159–177

- Kingsley, P. 1990. "The Greek Origin of the Dating of Zoroaster". *Bulletin of the School of Oriental and Asian Studies* 53.2: 245–264
- Lehmkuhl, D. 2018. "The Metaphysics of Supersubstantivalism". *Noûs* 52.1: 24–46
- Leonard, M. 2021. "What is it to be Located?" *Philosophical Studies* 178: 2991–3009
- Leonard, M. 2022. "Supersubstantivalism and Vague Location". *Philosophical Studies* 179: 3473–3488
- Lewis, D. 1986 "Events" in Lewis, D. *Philosophical Papers Volume II*. Oxford: Oxford University Press, pp 241-269
- Lewis 1988. "Vague Identity: Evans Misunderstood". *Analysis* 48.3: 128–130
- Montague, R. 1969. "On the Nature of Certain Philosophical Entities". *The Monist* 53.2: 159–194
- Nolan, D. 2014. "Balls and All" in Kleinschmidt, S. (ed). *Mereology and Location*. Oxford: Oxford University Press, pp 91–116
- Plutarch, *Isis and Osiris*.
- Schaffer, S. 2009. "Spacetime the One Substance". *Philosophical Studies* 145.1: 131–148
- Shaked, S. 1993. "Some Islamic Reports Concerning Zoroastrianism". *Jerusalem Studies in Arabic and Islam* 17: 43–84
- Shaked, S. 1995. *From Zoroastrian Islam to Iran*. Aldershot: Variorum.
- Sklar, L. 1974. *Space, Time and Spacetime*. Berkeley: University of California Press

Skow, B. 2005. *Once Upon a Spacetime*. Dissertation, New York University.

Thomas, E. 2013. "Space, Time and Samuel Alexander". *British Journal for the History of Philosophy* 21.3: 549–569

Thomas, E. 2018. *Absolute Time: Rifts in Early Modern British Metaphysics*. Oxford University Press: Oxford.

Upanishads.

Waterfield, R. and Bostock, D. 1996. *Physics*. Oxford: Oxford University Press.

Yeznik Koghbatsi. 1986. *Refutation of the Sects* (Translation and introduction by Samulian, T.). New York: Armenian Church of America.

Zaehner R.C. 1955. *Zurvan: A Zoroastrian Dilemma*. Oxford: Oxford University Press.