

I – ARTICLES

UNPROFITIOUS TINCTURES.

Alchemy, Astrology & Gnosis According to Zosimos of Panopolis *

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Introduction

The Egyptian alchemist Zosimos of Panopolis was a pivotal figure in the history of Greek alchemy. In his works alchemy was placed at the service of a mystical religion aimed at spiritual *gnosis*, but its practical dimension remained a central concern ¹. Unlike his immediate successors, the commentators, for whom alchemy became primarily a speculative endeavor centered on the exposition of texts ², Zosimos maintained an active interest in the performance of chemical operations. Indeed, many of his works display a deep interest in the technology of furnaces and apparatus and the minutiae of chemical recipes. Two of his treatises in which the theme of spiritual salvation is most prominent, *On the Letter Omega* and *The Final Count*, concern an alchemical product known as propitious tinctures (*kairikai baphai*). This article examines Zosimos's views on these tinctures and their relationship to his religious and philosophical convictions. The two treatises that serve as the basis for this investigation complement one another, making it possible to piece

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¹ Zosimos is believed to have flourished around the late third and early fourth centuries A.D. (See Michèle Mertens, *Les alchimistes grecs*, IV, *Zosime de Panopolis: Mémoires authentiques* [Paris: Les Belles Lettres, 1995], xii-xvi.) On the division of ancient alchemy into three chronological stages – 1) alchemy as an art (technique without theory); 2) philosophical alchemy (technique joined with theory); 3) alchemy as a mystical religion aimed at salvation (with Zosimos as its exemplar) – see A. J. Festugière, *La révélation d'Hermès Trismégiste*, 4 vols (Paris: Librairie Lecoffre, 1944-1954), I, 218-219, and Ch. VII, *passim*.

² See J. Festugière, *op. cit.*, I, 239; cf. Robert Multhauf, *Prelude to Chemistry* (New York: Franklin Watts, Inc., 1966), 111-112.

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together a coherent picture of Zosimos's attitude towards the propitious tinctures and the world-view that provided their context. This picture reveals that Zosimos was adamantly opposed to alchemical methods that were dependent on the observance of astrologically propitious times.

The first part of this article attempts to define the nature of the propitious tinctures by an analysis of *On the Letter Omega* and *The Final Count*. I show that Zosimos distinguished between two methods for obtaining the product that he designated by the term "propitious tinctures", one good and one bad. Only the bad method was literally propitious, in the sense that it depended on propitious times for success. The good method worked independently of such influences and required a technical knowledge of furnaces and other apparatus, as well as spiritual discipline. Zosimos's use of the term *kairikai* to designate the second kind of tinctures, which did not depend on propitious times, has led to misunderstanding. The interpretation presented here challenges those of Howard Jackson and W. Gundel, both of whom have understood Zosimos's statements about the propitious tinctures as evidence of the observance of favorable astrological times. The second part of this article explains Zosimos's views on the propitious tinctures in terms of philosophico-religious concerns about spiritual salvation. I argue that a Gnostic world-view, which rejected all intercourse with powers considered agents of Fate, motivated Zosimos to espouse an alchemy that was purged of elements dependent on propitious times and demons. In *The Final Count*, the link between Zosimos's Gnostic repudiation of the cosmic gods and his teaching concerning the propitious tinctures takes a remarkable form: in order to demonstrate the difference between the good and bad tinctures Zosimos invented a Gnostic myth about the origin of an alchemical doctrine. The article concludes with a speculative coda, in which I suggest that alchemy served Zosimos as a Gnostic equivalent of Neoplatonist theurgy, a ritual praxis to assist the adept on the path to divine union without involving evil cosmic powers.

1. *Spiritual and demonic alchemy. The two propitious tinctures*

Demons and propitious times

In his treatise, *On the Letter Omega*, Zosimos attacks rival alchemists who have disparaged the book *On Furnaces*³ because of what it says concerning propitious tinctures.

³ In this passage Zosimos mentions both a book "on furnaces" and one "on furnaces and apparatus", presumably referring to the same treatise authored by an earlier alchemist, perhaps Maria the Jewess. See J. Festugière, *op. cit.*, I, 265, n. 1; Howard M. Jackson, *Zosimos of Panopolis: On the Letter Omega* (Missoula: Scholars Press, 1978), 42, n. 10; M. Mertens, *op. cit.*, 63, n. 12.

The propitious tinctures [*kairikai katabaphai* ⁴] have brought ridicule upon the book *On Furnaces*, lady. For many people, once they have acquired the favor from their personal demon [*idion daimonion*] to succeed with these tinctures, have ridiculed even the book *On Furnaces and Apparatus* as not being true. And no argument, however much proof it offers, convinces them that it is true; they do not admit it unless their personal demon [*idios daimon*] itself tells them so – when it is transformed in the course of the [changing] times [*kronoi*] of their fate and a maleficent one takes them over. And so, when their art and all their success [*eudaimonia*] are frustrated, and the same formulas [*rhēmata*], by chance turn out first one way and then the opposite, then reluctantly, with clear proofs from their fate, they recognize that there is some truth to it, even for those [formulas] they previously thought highly of. ⁵

Zosimos is writing to his “sister”, Theosebia, and warning her to avoid the methods of certain alchemists whose practices he finds objectionable. These alchemists depend on the assistance of a personal demon to achieve the propitious tinctures. When the times change, their demon becomes maleficent and their efforts meet with failure, even though they employ the same formulas that formerly occasioned success. Following this passage, Zosimos quotes Hermes who calls “such people mindless, only marchers swept along in the procession of fate” ⁶.

Zosimos’s description of the effect of demons and changing times upon the propitious tinctures has been interpreted in astrological terms. *Kairikos* has the general sense of ‘timely’ and can mean, as it does here, dependent on the propitious

⁴ The term *katabaphai*, meaning something like ‘deep-tinctures’ as opposed to the typical *baphai*, ‘tinctures’, is unusual. Mertens suggests that it refers to tinctures “‘dans la masse’ par opposition aux simples *baphai*, ‘teintures (superficielles)’” and provides references to other uses of the term in the Leyden Alchemical Papyrus (Mertens, *op. cit.*, p. 62, n. 9). However, in a fragment of another treatise attributed to Zosimos, the adepts of Agathodemon are said to use the terms *baphai* and *katabaphai* to refer to the tinctures of silver and gold respectively (*Alch. Gr.*, cit. n. 5, 207-208). In referring to propitious (*kairikai*) tinctures, Zosimos uses the word *katabaphai* only in *On the Letter Omega*. In *The Final Count*, he uses the term *baphai* (and often he uses *kairikai* substantively with only an implied referent), though he seems to mean the same process as in *Omega*. (In Chapter 11 of *The Final Count* [*Alch. Gr.*, 246] Zosimos refers the reader to the treatise *On the Letter Omega* for further details on achieving the *baphai*.) I translate both terms as ‘tinctures’.

⁵ *On the Letter Omega* (= *Omega*), 2. The text appears in M. Berthelot and C.E. Ruelle (eds), *Collection des anciens achimistes grecs* (Paris, 1888; repr. Osnabrück, 1967) (= *Alch. Gr.*), 228-235. Superior editions with translations and notes appear in Jackson (does not include the complete text) and, especially, Mertens. Jackson’s English text serves as the starting point for most of the translations of *Omega* in this article, with frequent alterations. I have also made use of Mertens’s French translation (typically, where Mertens and Jackson differ significantly I have followed Mertens), as well as that of Festugière (I, 263-273).

⁶ *Omega*, 4.

time [*kairos*]⁷. The notion that there are propitious times for succeeding in an enterprise belongs to the theory of *kataarchai*, an important branch of ancient astrology with origins in popular beliefs about lucky and unlucky days⁸. Festugière has suggested that the personal demons referred to by Zosimos belong to the class of demons that serve the stars and are attached to men at the moment of their birth, or at the outset of a certain enterprise⁹. Thus, depending on the time, the demon that determines the success of an alchemist's attempt to achieve the tincture may cease to be favorable and become maleficent. Howard Jackson elaborates on this, relating the "[changing] times" to the influence of the chronocrators, the particular planet or decan that rules over a particular period of time¹⁰. He suggests that the personal demon is conditioned by, or perhaps identical with, the chronocrator¹¹.

The idea that the planets ruled over terrestrial beings was current in Late Antiquity far beyond the bounds of astrological doctrine per se. In particular, according to a widespread belief the planetary gods operated in the earthly realm by means of terrestrial demons. For instance, Book XVI of the *Corpus Hermeticum* states that:

Around the sun are the eight spheres that depend from it: the sphere of the fixed stars, the six of the planets, and the one that surrounds the earth. From these spheres depend the demons and then, from the demons, humans.¹²

According to this treatise,

⁷ Festugière (I, 264, n. 10) and Julius Ruska (*Tabula Smaragdina: Ein Beitrag zur Geschichte der Hermetischen Literatur* [Heidelberg: Winter, 1926], 22-23), followed by H. M. Jackson (*op. cit.*, 1, 42, n. 9) and M. Mertens (*op. cit.*, 62, n. 9) agree that for Zosimos *kairikos* means dependent on the propitious time (*kairos*) and interpret this as a reference to astrologically favorable times. The astrologer Vettius Valens (quoting Nechepso-Petosiris) uses *kairikos* to mean: belonging to the *kairos* or chronocratory (Vett. Val. 289.37; H. G. Liddell, R. Scott, H.S. Jones, *A Greek English Lexicon*, 9th ed. [Oxford, 1948], 859).

⁸ See A. Bouché-Leclercq, *L'Astrologie grecque* (Paris, 1899), *passim*, esp. Ch. XIII, as well as p. 9, n. 2 for specific reference to *kairos* as "a fundamental concept of the theory of *kataarchai*". Cf. Franz Cumont, *L'Égypte des astrologues* (Brussels, 1937), 124.

⁹ Festugière, I, 265, n. 2.

¹⁰ The zodiac is divided into thirty-six decans of ten degrees. The decans entered astrology from Egyptian astral religion where they were thought of as divinities and associated with the idea that every division of time has a guardian "genius" and belongs to a particular god (the chronocrator). See A. Bouché-Leclercq, *op. cit.*, 219-220 and *passim*. On the planets as chronocrators, see *ibid.*, 491-506.

¹¹ Jackson, 42, nn. 11, 12.

¹² *Corpus Hermeticum* (= CH) XVI.17; Brian P. Copenhaver, *Hermetica* (New York: Cambridge University Press, 1992), 61.

the demons on duty at the exact moment of birth ... take possession of each of us as we come into being and receive a soul. From moment to moment they change places not staying in position but moving by rotation.¹³

Likewise, the Neoplatonist Proclus describes the demons as the attendants of the planetary gods and states that the gods use material demons in their productions on Earth¹⁴.

The demonic propitious tinctures

The recognition that such a conception of the stars acting via demons underlies the discussion in *On the Letter Omega* has led Howard Jackson to conclude that Zosimos endorsed "the observance of astrologically propitious occasions in effecting tinctures", as enjoined by the treatise *On Furnaces*¹⁵. Jackson interprets Zosimos's comments about his disagreement with the other alchemists as evidence that he observed propitious times, while his opponents, on the other hand, "swell-headed from their success, ... ridiculed these precautions as unnecessary"¹⁶. In fact, the situation was the opposite: it was Zosimos who disapproved of his opponents' dependence on propitious times. Jackson's conclusion involves the assumption that the treatise *On Furnaces* stipulated astrological measures, the value of which Zosimos's adversaries denied. At first inspection this interpretation perhaps appears sound. Zosimos writes that "the propitious tinctures have brought ridicule upon the book *On Furnaces*"¹⁷, and he describes other alchemists who mock the treatise, only to admit its truth as soon as the changing time causes them to fail in the propitious tinctures. From these facts, Jackson infers that the disputed contents of the treatise, *On Furnaces*, were instructions to observe propitious astrological times. However, other statements made by Zosimos in both *On the Letter Omega* and *The Final Count* contradict this interpretation. Zosimos believed that unfavorable times thwarted the work of the other alchemists, but the observance of propitious times was not the cause of conflict over *On Furnaces*. Passages at the end of *On the Letter Omega* (which Jackson omits in his translation) reveal that the instructions in *On Furnaces* that Zosimos's adversaries found unnecessary concerned technology not astrology¹⁸. The source of the confusion is the term *kairikai*. As will be shown, Zosimos used the name 'propitious tinctures' to describe products that could be

¹³ CH XVI.15; *Ibid.*, 60.

¹⁴ Proclus, *In Platonis Timaeum commentaria*, 3 vols, ed. by Ernest Diehl (Amsterdam: Hakkert, 1965), I, 110.22-111.14, 113.7-19.

¹⁵ Jackson, 1.

¹⁶ *Ibid.*

¹⁷ *Omega*, 2.

¹⁸ These passages are examined in detail below.

obtained by different techniques, not all of which depended on propitious times. His own method of achieving the tinctures combined a process of spiritual initiation, which enabled the alchemist to counteract and escape demonic and astrological influences, *both favorable and unfavorable*, with a technical praxis (probably derived from Maria the Jewess¹⁹) involving furnaces. It was the latter component, the details about the technology of furnaces, that elicited the jeers of Zosimos's adversaries. As *On the Letter Omega* makes clear, Zosimos rejected the method that depended on astrologically propitious times because it involved commerce with demons and other powers that he considered evil.

Jackson's claim that Zosimos advocated the observance of propitious times conflicts with statements Zosimos makes about the proper attitude man should take towards Fate and its gifts. We have seen how Zosimos understood the effects of changing times in terms of celestial agents using demons as their instruments. When the time is propitious, the demon is said to be beneficent and the tincture succeeds; when the time is not propitious, the demon is maleficent and the tincture fails. In these terms, to observe the propitious moment is to effect the tincture when one has a beneficent demon. If Zosimos advocated the observance of propitious times, one would expect him to be hostile not to demons in general, but only to maleficent ones. He would woo good demons. But this is not the attitude expressed by Zosimos, who discusses reliance on personal demons only with respect to the disreputable methods of his opponents. He links the personal demons to Fate, which he disdains. He commends Hermes and Zoroaster for having said that "the race of philosophers is above Fate because they neither rejoice in her good fortune [*eudaimonia*] ... nor are they thrown by the evils [*kakoi*] she sends, as they always lead an inner life [*enaulian agontes*], nor do they accept the good gifts [*kala dora*] that come from her, since they look to an end of evils"²⁰. Zosimos expands on this allegorically, describing how, in Hesiod, Prometheus teaches his brother Epimetheus "through philosophy to reject the gifts of Zeus, that is, of Fate"²¹. Here, Zosimos clearly states that one should reject *all* the gifts of Fate, including good fortune – that is to say, propitious times. It is hard to see how these statements can be reconciled with the claim that he advocated tinctures dependent

¹⁹ See above, n. 3.

²⁰ *Omega*, 5.

²¹ *Ibid.*, 6. The identification of Fate with Zeus had precedents, including the Hermetic *Asclepius*; see Jackson, 43, n. 22. By refusing even the good gifts of Fate, Zosimos in effect rejects the point of view represented by the Chaldaean Oracles, in which the command of the terrestrial demons is assigned to Zeus, "the dispenser of all goods and evils ... Whoever in his wisdom would conciliate these demons and know what works please them, would excel all others in understanding and noble deeds, bearing noble gifts from a noble [benefactor] and fleeing common things" (*Or.* 215; Ruth Majercik, *The Chaldaean Oracles* [New York: E.J. Brill, 1989], 133).

on personal demons and propitious times. In fact, Zosimos rejected such tinctures and instead recommended a kind that was obtained without the influence of such agencies.

The genuine and natural 'propitious' tinctures

Nowhere does Zosimos instruct his reader to observe propitious times in obtaining the so-called "propitious tinctures". This absence is conspicuous, since he provides numerous indications of how the tinctures are to be obtained. The instructions he gives to Theosebia in *The Final Count* are to meditate and receive the true God inside her, and then to perform certain apotropaic spells to repel the demons and their unwanted influence on the tinctures: "Sit calmly at home", he exhorts her:

and God who is everywhere, and not confined in a lowly place [*en topo elachisto*] like the demons, will come to you. And, being calm in body, calm also your passions, desire and pleasure and anger and grief and the twelve portions of death. In this way, taking control of yourself, you will summon the divine to you, and truly it will come, that which is everywhere and nowhere. And, without being told, offer sacrifices to them [the demons], not those that nourish and entice them, but rather the sacrifices that repel and destroy them, those of which Membres spoke to Solomon the king of Jerusalem, and especially those that Solomon himself wrote as the product of his own wisdom. So doing, you will obtain the genuine and natural propitious [tinctures].²²

Silence alone does not preclude the possibility that Zosimos's method involves the observance of propitious times as part of the procedure that follows divine initiation and the warding off of demons. The text obviously omits many details – it hardly provides sufficient information actually to produce the tincture – and, after all, they are called *propitious* tinctures. But the passages that precede these instructions indicate just the opposite. Here, Zosimos claims that, in the time of Hermes, "these tinctures were called natural ... but when they became the object of the jealousy of the [demons]²³ of the flesh, they became propitious and were

²² *The Final Count* (= FC), 8. The text is given in *Alch. Gr.*, 239-246. Festugière, I, 363-368, provides an emended version in an appendix. My English translations are based on Festugière's French translation (I, 275-281) with numerous departures by reference to his version of the Greek text. I have also availed myself of the English translations of certain passages in Garth Fowden, *The Egyptian Hermes* (New York: Cambridge University Press, 1986), 120-126.

²³ Festugière's interpolation is debatable. The text as it stands, "jealousy of the flesh" or "carnal jealousy", makes sufficient sense. "Jealousy of the flesh" may have associations with the

named such" ²⁴. It is the original "genuine and natural" tinctures that Zosimos advocates. He devotes a large part of *The Final Count* to an elaborate mytho-historical explanation of how the natural tinctures became propitious.

After announcing that "all the kingdom of Egypt depends on two arts: that of propitious ores and that of natural ores [*technai ton te kairikon kai ton physikon psammon*]" ²⁵, Zosimos describes the great secrecy in which these two arts have been kept, especially the former. While a few books exist about natural ores, no one has publicized the propitious ones. The art of natural ores has been kept secret because mining, striking coinage and other processes involving precious stones and metals were royal monopolies, and dissemination of such knowledge was illegal. More importantly, knowledge of the propitious ores was the object of jealousy by supernatural powers. Zosimos relates that there are two types of propitious tinctures. The first is for fabrics, and

the place-guardians [*kata topon ephoroi* – a type of supernatural power ²⁶] have given it to their priests. This is why they called them propitious, because they only worked according to propitious times by the will of these pretenders [*dokountes*], and, when they ceased to will it, they no longer worked ...

The other kind of propitious tinctures, the genuine and natural ones, Hermes inscribed on the steles ... These tinctures act naturally, but the terrestrial [*perigeioi*] [demons] are jealous of them. Nevertheless, if some

demons' desire for animal sacrifices. The association of jealousy and flesh in the Gnostic milieu is evidenced in the *Apocryphon of John*, where, in the enumeration of the various Powers' contributions to the soul of Adam, the power Jealousy is credited with the creation of the soul of Flesh (*sarx*) (see Ioan P. Couliano, *The Tree of Gnosis* [New York: HarperCollins, 1992], 101). As an interpretation, Festugière's rendering is basically right. What follows in the text makes it clear that this jealousy characterizes the *ephoroi*, supernatural beings whom Zosimos considers evil, though they are not necessarily demons.

²⁴ FC, 4.

²⁵ *Ibid.*, 1. The propitious ores presumably are those that are produced by the propitious tinctures. As we shall soon see, there is a type of propitious tincture that is natural, but it should not be confused with the art of natural ores as distinguished from the art of propitious ores. The art of natural ores may refer to methods of extracting and refining metals from mines, as opposed to creating them by alchemical techniques. In FC, 2, Zosimos identifies Theophilus's description of "all the gold mines of the country" as an example of a work on one of these two arts. Since he goes on to say (FC, 3) that no one has published any books on the propitious tinctures, it follows that Theophilus's work concerns the art of natural ores. Thus mining seems to be a component of the art of natural ores. But along side Theophilus Zosimos mentions "the treatise on furnaces of Maria", indicating, by the same logic, that this too concerns the art of natural ores. This is problematic if Maria's treatise is to be identified with the *On Furnaces* mentioned in *Omega*, 2, which bears on the matter of propitious tinctures (cf. n. 3. above).

²⁶ The nature of the *ephoroi* is discussed at length below.

one, having been initiated, repels them, he shall obtain the sought-after result.

So the guardians [*ephoroi*], long ago repelled by the great men of that time, resolved to lay hold of the natural [tinctures] in our place, so that they might no longer be driven away by men, but rather receive their prayers, and be invoked by them, and regularly nourished by their sacrifices ... They hid all the natural processes which act by themselves [*ta physika kai automata*], not only because they were jealous of the men, but because they were anxious for their sustenance, that they not be flogged and driven away to die of hunger on account of no longer receiving sacrifices. This is what they did. They hid the natural [tincture] and introduced in its place their own unnatural [tincture], and they handed these processes over to their priests, and if the people of the village neglected the sacrifices, they prevented them from succeeding in that unnatural tincture. ... These place-[guardians] flatter you [Zosimos addresses Theosebia] because they are hungry not only for sacrifices, but also for your soul.²⁷

Zosimos initially distinguishes between a type of propitious tincture that is for fabrics and another type whose material is not specified. The dyeing of fabric was an important aspect of ancient alchemy: the "four noble arts" of the alchemists were the tinctures of gold, silver, precious stones and fabrics²⁸. If the first type of propitious tincture was for fabrics, the second type was likely for precious metals and/or stones. Zosimos says little about the tinctures of fabrics, except that they have a demonic origin. It is the propitious tinctures of the second type that interest him. These he further divides into two types: the original, "genuine and natural" tinctures and the unnatural tinctures that were instituted by the evil place-guardians. The relationship between the natural and the unnatural types of propitious tincture occupies Zosimos for the remainder of the treatise.

It should be noted that Zosimos explicitly explains why the tinctures of fabric are called propitious: because "they only worked according to the propitious times [*kata kairous*] by the will of the Pretenders". Zosimos does not directly state that these propitious times are of an astrological nature. He says only that the favorableness of the time is determined by the will of the evil powers called guardians [*ephoroi*] and pretenders [*dokountes*]. However, in light of the connection that we have seen to exist between demonic agents and the influence of celestial powers, such an astrological subtext may be implicit. (Later in this article, I shall argue that this is the case.) The important point for the present discussion is that, whatever the nature of these propitious times, Zosimos has no intention of observing them.

According to Zosimos, the propitious tinctures were originally "genuine and natural". "Genuine" indicates that they were not invented by the evil Pretenders, "natural" that their operation does not depend on the will of these powers. They

²⁷ FC, 6-7.

²⁸ Festugière, I, 275, n. 7.

"act by themselves"; they are not propitious. The jealous Guardians "hid all the natural processes ... and introduced in [their] place their own unnatural tincture" which only works according to their will. It is only these unnatural tinctures introduced by the evil Guardians that are literally propitious. But, since the natural tinctures accomplish the same goal as the unnatural ones, they seem to have been called by the same name, *kairikai*. When Zosimos writes that the natural tinctures "became propitious" when "they became the object of the jealousy of the [demons] of the flesh" ²⁹, he means that the unnatural propitious tinctures were substituted for the natural tinctures. Zosimos advocates the original tinctures that "act naturally and automatically" [*ta physika kai automata*] and do not depend on propitious times. These can still be obtained, but with difficulty. Because the "terrestrial [demons] are jealous of them", it is necessary for the alchemist to be initiated so that he can repel the demons and "obtain the sought after result". Before the interference of the evil powers, perhaps the natural tinctures could be produced without special precautions. But now it is necessary to take counter-measures, and for this reason Zosimos instructs Theosebia to meditate and learn the apotropaic rites of King Solomon ³⁰.

This analysis of the text of *The Final Count* reveals that the defining principle of Zosimo's method of obtaining the "propitious tinctures" is that it does *not* involve the observance of propitious times. On the contrary, Zosimos calls for elaborate measures to avoid their influence. Confusion arises because Zosimos continues to call these processes "propitious tinctures". But the "genuine and natural propitious tinctures" are not propitious at all, and Zosimos's myth provides an historical explanation of the circumstances that gave rise to this confusing terminology ³¹.

The failure to recognize that, for Zosimos, the term *kairikai* sometimes designated tinctures that were obtained without dependence on propitious times calls into question W. Gundel's treatment of the role of astrology in ancient alchemy.

²⁹ FC, 4.

³⁰ A similar belief in the need to negate the pernicious influence of terrestrial demons is found in the Chaldaean Oracles in the context of performing theurgic operations. See R. Majercik, *op. cit.*, 14, 175-176; cf. Hans Lewy, *Chaldaean Oracles and Theurgy: Mysticism, Magic and Platonism in the Later Roman Empire* (Paris: Études Augustiniennes, 1978), 269.

³¹ Regarding Zosimos's attitude towards the observance of propitious times, another fragment attributed to Zosimos should be mentioned. In one of the *Thirty-Five Chapters by Zosimos to Eusebia* (*Alch. Gr.*, 156-158), Zosimos refers to an unnamed authority regarding the need to perform a certain process (extracting the "spirit of the flower") at the correct *kairos*, which in this case is the summertime, because it is "by the sun that all is accomplished". The *Chapters to Eusebia* were compiled long after Zosimos's time, and it is uncertain to what extent they contain authentic extracts from Zosimos as opposed to later additions. (See Festugière, I, 243; Mertens, liv-lx.) I believe that Zosimos's rejection of propitious times in *Omega* and FC is unambiguous.

Gundel takes Zosimos's mention in *The Final Count* of the writings on the *kairikai*, which the Egyptians engraved in hieroglyphs and the Jews hid in their tombs³², as evidence that ancient alchemists observed astrologically favorable times in their operations. This interpretation is based on the literal sense of the term *kairikai* but fails to take into account that Zosimos advocated a type of 'propitious tincture' that acted naturally, without dependence on astral powers. It is thus possible, and in my opinion likely, that the propitious tinctures supposedly described in the hieroglyphs and the Jewish tombs, like those treated in *On Furnaces*, were of the "genuine and natural" type. Gundel's oversight is significant because the testimony of Zosimos is the only direct evidence that he adduces in support of the claim that "considerable importance was given ... to the determination of correct times in order to attain the goal of alchemy ... according to astrological prescriptions"³³.

A dispute about technology

So far, we have seen that Zosimos's method of obtaining the propitious tinctures required spiritual initiation, or knowledge of God through meditation, as a precondition and employed apotropaic rites to ward off evil powers who otherwise would interfere with the process. But what of the procedure itself? While we are missing the parts of *On the Letter Omega* and *The Final Count* that probably contained detailed instructions, the extant texts reveal the general character of the process. At the conclusion of the first book of *The Final Count*, Zosimos writes that the natural tinctures can be obtained by means of numerous apparatus, such as small furnaces, glass vessels, large and small crucibles and variously regulated fires³⁴. For further details he refers the reader to *On the Letter Omega*. In the form that this work comes down to us, such details are not to be found³⁵. But the surviving parts of the treatise make one fact about the genuine and natural tinctures clear: they depend on knowledge of furnaces based on diagrams. This, not the observance of propitious times, was the bone of contention between Zosimos and the other alchemists.

At the end of *On the Letter Omega*, after relating a Gnostic myth about the imprisonment of man by Fate, Zosimos returns to the demonic alchemists, whom

³² FC, 5.

³³ W. Gundel, "Alchimie", in *Reallexikon für Antike und Christentum* (Stuttgart: Hiersemann, 1950ff.), 1, col. 239-260; quotation at col. 256.

³⁴ FC, 9.

³⁵ Book VII of *Authentic Memoirs*, By Zosimos on Apparatus and Furnaces, which does contain some technical information and refers to the *katabaphos*, may be a fragment of the original *Omega*. See Mertens, 23ff., 185.

he rebuked at the beginning of the treatise ³⁶. In admonishing “all those who succeed in the propitious tincture [who] speak of nothing except their own art and mock the great book *On Furnaces*”, he no longer refers to changing times and personal demons. Rather, he attacks the other alchemists for believing that their method is the *only* method. He defends the efficacy of the procedures contained in the book *On Furnaces* by arguing that everywhere in human affairs there is diversity. A single art is made diverse because of the diverse abilities and customs of men, and different practitioners have different aptitudes and succeed by different means. “One sees this similarly in every art”, he writes, “People practice the same art using different instruments and processes, and they differ in their intelligence and success” ³⁷. This is most evident in the art of medicine ³⁸, and as a metaphor Zosimos introduces the case of a man who has broken a bone. First, he might try the therapy of a “bone-setting priest” [*hiereus ostodetes*] who, “acting through his piety, rejoins the bone in such a manner that one almost hears the grinding of the [pieces of] bones rejoining each other”. But if he cannot find a bone-setting priest he need not fear of dying. He has recourse to “the doctors [*iatroi*] who possess books illustrated [by figures] with full lines, cross-hatched lines and ones of every sort” ³⁹; by following the book, the man is bandaged with a dressing, and he carries on his life having regained his health; and he is certainly not left to die because he cannot find a bone-setting priest”. But, Zosimos continues, “these men [the other alchemists] die of hunger because they do not deem it worthwhile to study and implement the plan of the ossature of the furnaces” ⁴⁰.

Zosimos compares the alchemists who only recognize the efficacy of their own method of accomplishing the propitious tinctures to a man who would die needlessly by refusing to be cured by a doctor whose therapy differs from that of the bone-setting priests. By speaking of the “diagrams of the ossature of the furnaces” Zosimos draws a specific parallel between the efficacy of books with diagrams in

³⁶ Jackson ends his translation just before these passages, remarking that “the rest of the text is of a strictly technical nature or peripheral to the present purpose” (p. 7), a statement with which I must disagree. Most of these passages contain no technical information, and Zosimos’s comments, though wrapped in a somewhat obscure analogy, are of great significance in illuminating the nature of the controversy that is the main concern of the treatise.

³⁷ *Omega*, 17-19.

³⁸ The manuscript reads “*hieratike*”. Mertens follows Ruska’s suggestion that it would be emended to ‘*iatrike*’, since the sense of the passage requires a term which designates both sacred and secular medical practitioners; see Mertens, 114, n. 105. Festugière (I, 273) retains “*hieratike*”, “l’Art sacré”.

³⁹ Here, I follow Mertens’s French translation of Zosimos’s obscure description of the nature of these drawings.

⁴⁰ *Omega*, 18.

alchemy and in medicine ⁴¹. According to Zosimos, the other alchemists refuse to study the diagrams in the book *On Furnaces* ⁴², which they mock. Having temporarily succeeded in the tincture without such measures, they ridicule alchemists like Zosimos and the author of *On Furnaces*, who prescribe complicated procedures that seem unnecessary. But, as we have seen, their own method, depending on formulas and demons, is unreliable. When the times change and they fail, Zosimos says, they admit there is truth to the book, only to deny it again as soon as their beneficent demon returns ⁴³.

The picture that has emerged of Zosimos's views on the propitious tinctures can now be summarized. In *On the Letter Omega*, Zosimos defends his method of obtaining the alchemical products called "propitious tinctures" against other alchemists who deny its efficacy. Zosimos does not entirely deny the efficacy of his opponents' method, which depends on formulas and demonic assistance, but disparages it because it is at the mercy of the changing times of Fate. Zosimos dislikes this method not only because it is unreliable, but also because he believes "philosophical" men are above Fate and should reject its gifts. The argument between Zosimos and the other alchemists over the book *On Furnaces* concerns the usefulness of its diagrams. In *The Final Count*, Zosimos describes how the tinctures came to depend on the will of evil powers and acquired the name "propitious". He rejects the methods that were instituted by the evil powers as a means of coercing men into offering them worship and, instead, advocates the method of obtaining the "genuine and natural" tinctures that existed before the introduction of the demonic propitious tinctures. This can only be accomplished after the interference of the evil powers has been counteracted by means of apotropaic formulas performed by an alchemist who has undergone initiation.

Did other alchemists forecast propitious times?

The interpretation of the term *kairikai baphai* as indicating tinctures dependent on the propitious time still stands but with important qualifications. According to Zosimos, the tinctures known as *kairikai baphai* can be achieved by various methods, and the method he advocates *does not* depend on propitious times. On

⁴¹ This is pointed out by Festugière, I, 273, n. 6. The word translated as "ossature" is *ostodetikos*, a nonce word (see Mertens, 114, n. 111), which is used figuratively to describe the 'skeleton' of furnaces as depicted in a diagram.

⁴² There is additional evidence that *On Furnaces* may have contained diagrams. In the treatise *By Zosimos, On Apparatus and Furnaces (Mémoires authentiques, VII.1)*, which is likely a fragment of the original *On the Letter Omega* (see Mertens, 185), he mentions a book by Maria which contains *diagraphé* (which can mean either diagrams or descriptions) of furnaces pertinent to the *katabaphai*. See Mertens, 23, 186, nn. 1-2.

⁴³ *Omega*, 2-3.

the other hand, he believes that the method practiced by his opponents *does*. The question remains, however, whether these alchemists themselves believed that their tinctures were dependent on the propitious time, and whether they consequently practiced astrological techniques to determine favorable times. It may be that, though Zosimos understood the astrological contingency of their method, they did not. Zosimos writes that they have,

no understanding of Fate herself, who conducts them justly. Instead they insult the instruction she gives through corporeal experience, and imagine nothing beyond the good fortune she grants.⁴⁴

Likewise, the manner in which Zosimos describes their frustration when the time becomes unfavorable – “and so when their art and all their success are frustrated, and the same formulas, by chance turn out first one way and then the opposite ...”⁴⁵ – suggests that these alchemists are operating blindly. They do not *predict* when the time will be favorable or unfavorable by means of astrological knowledge. They only belatedly discover that the time has ceased to be propitious when their technique fails. If Zosimos’s description is fair (he may have exaggerated the ignorance of his enemies) these alchemists did not practice the observance of propitious times, though Zosimos claimed that their technique was dependent on such times. But even if they did not practice pro-active astrological measures, this does not mean that they did not share Zosimos’s belief that celestial causes were operative. They may have recognized that they were producing *propitious* tinctures, and – one can speculate – they may have referred to astral influences *post facto* to explain their failures.

That someone gave these tinctures the name *kairikai* may indicate that there were alchemists who considered the influence of the propitious time to be paramount. However, this supposition encompasses a wide range of possible practices, from the most rudimentary acknowledgement of the planetary rulers of the days and hours (requiring no technical astrological knowledge) to the sophisticated calculations of elections computed by professional astrologers. Zosimos’s testimony that there were tinctures known as *kairikai* suggests that some alchemists observed propitious moments. *How* they might have done so cannot be determined without more evidence.

Although there is no direct evidence (so far as I have been able to determine) that other ancient alchemists advocated “propitious tinctures”, it seems unlikely to me that Zosimos himself gave these tinctures the name *kairikai*. If the term were of his own invention, why would he make so great an effort to explain away its literal sense in *The Final Count*? Zosimos’s reference to the genuine and natural

⁴⁴ *Ibid.*, 4.

⁴⁵ *Ibid.*, 2.

tinctures as a kind of “propitious tincture”, even though he has explained that they are not really propitious, suggests that he was working with a terminology not of his own devising. The appellation *kairikai baphai* appears to have been an established term for alchemical products that achieved a characteristic result. Zosimos wanted to obtain this result but he did not approve of the means employed by other alchemists and advocated an alternative method. His discussion of the propitious tinctures in *On the Letter Omega* and *The Final Count* reveals that his alternative method was motivated by more than the desire to find a more effective technique. He rejected the propitious tinctures, in the form they were produced by other alchemists, because they conflicted with his belief that one should not depend in any way on Fate.

2. *Reconciling alchemy and Gnostic anti-cosmism.*
The rejection of Fate and the mythology of alchemy

Zosimos’s views about the propitious tinctures were rooted in philosophico-religious principles. He did not appeal to Gnostic and Hermetic sources merely to justify opinions that arose outside these traditions. Rather, the doctrines expressed in these sources fundamentally shaped his ideas about alchemy. That Zosimos was influenced by Gnostic and Hermetic teachings has been long established. He refers to works from the *Hermetica* in both *On the Letter Omega* and *The Final Count* ⁴⁶, and the former treatise also contains a myth of Gnostic origin and refers to Nikotheos, known to be the author of a lost Gnostic apocalypse ⁴⁷. In this section, I argue that Zosimos’s advocacy of a “genuine and natural” method of obtaining the “propitious” tinctures, and his deployment of a mythological narrative to support his claims, arose from the desire to purge alchemy of any association with demonic and celestial powers and bring it into harmony with a Gnostic world-view. First, I reexamine *On the Letter Omega*, in which Zosimos draws on an existing Gnostic myth describing the imprisonment of man in the material world, in order to show that he held Gnostic views about Fate and the cosmos. Then, I return to *The Final Count* and demonstrate that it contains a parallel myth about alchemy, in which the evil cosmic powers described in *On the Letter Omega* are shown to be the corruptors of the propitious tinctures.

⁴⁶ In *FC*, Zosimos shows his familiarity with *CH I (Poimandres)* and *CH IV*. In *Omega*, he refers to two lost Hermetic treatises, *On Natures* and *On the Inner Life* (or, *On Immateriality*; for the problems of determining the correct title, see Mertens, 73, n. 34); see Festugière, I, 263 and *passim*. These references to philosophical Hermeticism are in addition to Zosimos’s familiarity with practical alchemical works attributed to Hermes.

⁴⁷ On the identity of Nikotheos, see Mertens, 55-57, n. 4; cf. Jackson, 40, n. 4. Mertens’s excellent notes are a helpful guide to the many correspondences between *On the Letter Omega* and Gnosticism.

Against Fate

In *On the Letter Omega*, Zosimos's lengthy digression into Gnostic mythology and the teachings of Hermes and other sages is occasioned by his polemic against the demonic alchemists, discussed earlier. In order to refute these "mindless" alchemists, he sets out to demonstrate that the "spiritual man" is above Fate. As we have seen, Zosimos thinks that the tinctures of the other alchemists are subject to Fate because they depend on demons subject to celestial powers. Such astral fatalism was found in many Late Antique religious and philosophical systems, which frequently claimed to free their initiates from Fate's rule. The most extreme claims of this sort were made by certain schools of Gnosticism, which were characterized by emphatic anti-cosmism (the belief that the cosmos and its creator are evil) and exceptionally bitter denunciations of Fate's tyrannic rule. Although many of the beliefs that shaped Zosimos's treatment of the propitious tinctures – including a relatively pessimistic view of the material world – belonged to the common currency of Late Antique thought, his world-view, as revealed in *On the Letter Omega* and *The Final Count*, is best described as Gnostic because of its whole-heartedly negative appraisal of the cosmos and its gods. Zosimos frequently quotes Hermetic treatises to support these beliefs, but, while the opinions that he quotes are compatible with Gnostic anti-cosmism, this cannot be said of Hermetism in general.

In *On the Letter Omega*, 8-14, Zosimos discusses the mystical names of the first man and the circumstances of his creation in order to demonstrate mankind's twofold nature. Because of the separate origin of the inner "man of light" and the outer elemental body, only the latter is subject to Fate. The inner man is above Fate and seeks to escape from imprisonment in the material realm. Zosimos describes how the original man of spirit (*anthropos ho pneumatikos*), called Phos, was clothed in the material Adam by powers acting at the instigation of Fate in an attempt to make him their slave⁴⁸. Jesus Christ comes "now and to the end of the world" to teach men to rid themselves of their material Adam "who is blind and who is jealous of the man of spirit and light"⁴⁹.

Although Zosimos's myth of Phos-Adam does not contain explicit references to celestial powers acting as agents of Fate, other Gnostic texts to which it is related do. In Gnostic treatises, such as *Apocryphon of John*, *On the Origin of the World*, and *Hypostasis of the Archons*, man's elemental body is formed by the evil demiurge and the Archons (Rulers) who govern the world and are associated with the seven planets. The myth in *On the Letter Omega* originates in this branch of Gnosticism. Zosimos likely borrowed his account of Phos-Adam from his Gnostic source

⁴⁸ *Omega*, 11.

⁴⁹ *Ibid.*, 13.

Nikotheos⁵⁰, and the myth itself has been specifically linked with the *Apocryphon of John*⁵¹. This treatise, which contains the basic elements of the Phos-Adam myth, describes how the monstrous demiurge, Yaltabaoth, creates twelve authorities "each of them unto its own aeon", i.e. the twelve zodiacal signs⁵². Among these are "seven kings – each corresponding to the firmaments of heaven", that is to say the seven planetary gods⁵³. It is difficult to follow precisely the delirious profusion of subsidiary powers enumerated in the *Apocryphon of John*, but they include three hundred and sixty-five angels (in another version, three hundred and sixty⁵⁴) and "the septet of the week"⁵⁵. Yaltabaoth "has a meeting with his Powers. They generate Fate and chain down heavenly gods, angels, demons and men to measures, moments and times, so that all of them should be tied with bonds by [Fate] who rules all things; what a pernicious and deadly plan!"⁵⁶. While the scheme of the *Apocryphon of John* is not entirely coherent, the astrological dimension of the Archons who imprison man in Fate is evident. This comparison (which has been drawn from two versions of the *Apocryphon of John*) is not meant to suggest that every detail of the *Apocryphon of John* may be read into the work of Zosimos. Rather, it serves to illustrate an anti-astrological conception of the cosmos whose basic outline can be found in numerous texts from a Gnostic milieu with which Zosimos was familiar. Zosimos's Phos-Adam myth does not identify the creators of man's material body beyond stating that they acted at the instigation of Fate. But the other versions of the myth, which have come down to us through Gnostic sources, specify that the material Adam was formed by the Archons who are associated with the planets. This evidence strongly supports the identification of the unnamed powers in Zosimos's myth with the Gnostic Archons⁵⁷.

⁵⁰ See Mertens, 55-57, n. 4.

⁵¹ Jean Doresse (*Secret Books of the Egyptian Gnostics* [New York: Viking Press, 1960], 252) goes so far as to suggest that the lost *Revelation of Nikotheos* may have been the source of the *Apocryphon of John*. On the parallels between Zosimos's myth and the *Apocryphon of John*, see Mertens, 96, n. 65 and her running commentary.

⁵² Mss. BG and NHC III; Bentley Layton, *The Gnostic Scriptures* (New York: Doubleday & Co., 1987), 36, n. i. On the association of the twelve aeons with the zodiac and fate in Gnostic mythology, see Gedaliahu Stroumsa, *Another Seed: Studies in Gnostic Mythology* (Leiden: E.J. Brill, 1984), 95.

⁵³ *Apocryphon of John* (= AJ) 11.4; James M. Robinson (ed.), *The Nag Hammadi Library in English* (New York: HarperCollins, 1978), 111. In the Gnostic treatise, *Pistis Sophia* (= PS), the aeons are identified with the twelve zodiacal signs, in which the planetary Archons reside; PS III.140; Carl Schmidt (ed.), *Pistis Sophia*, translation and notes by Violet MacDermot (Leiden: E. J. Brill, 1978), 363 ff.

⁵⁴ Mss. BG and NHC III; B. Layton, *op. cit.*, 36, n. i.

⁵⁵ AJ 11.34; Robinson, *op. cit.*, 111.

⁵⁶ Quoted in I.P. Couliano, *op. cit.*, 103-104.

⁵⁷ This was already recognized by Richard Reitzenstein (*Poimandres: Studien zur Griechisch-Ägyptischen und Frühchristlichen Literatur* [Leipzig: Teubner, 1904]) and recent studies have concurred. See Mertens, 97, n. 68; Jackson, 50, n. 53.

Similar views of the relationship between Fate and man's dual nature are found in the *Hermetica*. In *CH I (Poimandres)*, which Zosimos knew⁵⁸, Poimandres reveals to Hermes Trismegistus that the "craftsman ... crafted seven governors; they encompass the sensible world in circles, and their government is called Fate..."⁵⁹.

Mankind is twofold – in the body mortal but immortal in the essential man. Even though he is immortal and has authority over all things, mankind is affected by mortality because he is subject to fate; Although man is above the cosmic framework, he became a slave within it⁶⁰.

In *On the Letter Omega*, Zosimos expresses a similar view that the spiritual man, in contrast to the physical man, is above fate:

But Hermes and Zoroaster say that the race of philosophers⁶¹ is above Fate because they neither rejoice in her good fortune, for they are master over pleasures, nor are they thrown by the evils she sends, as they always lead an inner life, nor do they accept the gifts that come from her, since they look to an end of evils.⁶²

As already noted, the conception of Fate acting through the planets and demonic servants was widespread in Late Antiquity, and many philosophico-religious systems claimed to liberate their initiates from Fate. Zosimos adhered to an extreme version of this doctrine as evidenced by his views regarding the propitious tinctures. While many of his contemporaries believed that rituals aimed at cosmic powers helped the wise man to transcend the material world, Zosimos believed that in order to escape from the prison of matter and attain salvation one must refuse *all* intercourse with Fate, which acts through astral agents. The unconditional character of Zosimos's rejection of Fate is evident in chapter seven of *On the Letter Omega*, where he contrasts the remedies against Fate attributed to Hermes and Zoroaster.

Now Zoroaster boastfully affirms that by the knowledge of all thing above [*ton panton ano*] and by the magic of corporeal speech one averts all the evils of Fate, both those of individual and of universal application. Hermes, however, in his book *On the Inner Life*, also condemns *mageia*, saying that

⁵⁸ See above, n. 46.

⁵⁹ *CH I.9*; B.P. Copenhaver, *op. cit.*, 2.

⁶⁰ *CH I.15*; *ibid.*, 3.

⁶¹ Zosimos's reference to the "race" (*genos*) of philosophers to indicate spiritual men suggests the Gnostic doctrine that the portion of mankind possessed of spirit constitutes an elite race descended from a different lineage than the rest of mankind. See G. Stroumsa, *op. cit.*, 73-80, 100.

⁶² *Omega*, 5.

the spiritual man, who has come to know himself, does not rectify anything through the use of *mageia*, not even if it is considered a good thing, or do violence to Necessity, but rather he leaves her [Necessity] as she is by nature and decree. He must proceed through that one search to understand himself, and, when he has come to know God, he must hold fast to the ineffable triad and leave Fate to work what she will upon the clay that belongs to her, that is, the body.⁶³

Although both Hermes and Zoroaster scorn Fate, they advocate different methods to free oneself from its evils. Zoroaster claims that one can do so by knowledge of things above – most likely, the movements of the heavens – and magical formulas. By these means one averts both Fate's individual and universal effects, a reference to the two classes of events influenced by the stars according to traditional astrology. Calling Zoroaster boastful, Zosimos repudiates this path in favor of that of Hermes⁶⁴. He counsels the spiritual man not to attempt to influence the course of Fate in the physical world, but to overcome Fate by turning inward and knowing God. Zosimos' s ultimate goal is spiritual salvation, and, while the manipulation of Fate by astrological knowledge and magical formulas may bring material rewards, it cannot in his opinion free the spiritual man from the prison of matter. For Zosimos this can only be achieved through *gnosis*, which requires a turning away from the material world that is inconsistent with the practice of *mageia*⁶⁵. His description of the *mageia* of boastful Zoroaster helps to explain his rejection of the demonic alchemy of his 'mindless' adversaries. While Zoroaster's *magi* may be superior to the demonic alchemists, in that they at least understand Fate enough to *try* to overcome it, Zosimos rejects their methods for the same reason⁶⁶. Like *magi*, the demonic alchemists use formulas and try to

⁶³ *Ibid.*, 7.

⁶⁴ I mean, of course, what Zosimos considered to be Hermes's teachings. Others viewed Hermetism as advocating methods similar to those that Zosimos attributed to Zoroaster. For instance, Iamblichus writes that Hermes and Bitys (a personage also referred to by Zosimos, in reference to the secret name of the first man) recommend "hieratic theurgy" to transcend Fate, depending on nothing other than "observation of the propitious moment [*kairos*]" (*On the Mysteries*, 8.4; Édouard Des Places, *Jamblique: les mystères d'Égypte* [Paris: Les Belles Lettres, 1966]). The Hermetic treatise, *On the Inner Life*, to which Zosimos refers is not extant.

⁶⁵ *Pistis Sophia*, a Gnostic treatise with a highly developed anti-astrological polemic, attacks magic on similar grounds. *Mageia*, which transgressing angels are said to have given to man, works by men calling upon the evil archons in the twelve aeons (i.e. the zodiac). When Jesus Christ confounds the Archons by interfering with the regular revolution of Fate and the sphere over which the archons rule, this magic ceases to operate; PS I.15, 18; Schmidt, 25-27.

⁶⁶ It is evident that Zosimos does not mean to identify the demonic alchemists with the practitioners of Zoroaster's *mageia*. He approvingly cites Zoroaster, alongside Hermes, to show that 'philosophers', in contrast to these alchemists, are above fate (*Omega*, 5).

manipulate a process which depends on Fate. The spiritual man, on the other hand, utterly renounces the realm of Fate and does not attempt to operate within it ⁶⁷.

As we have seen in *The Final Count*, Zosimos instead pursues a "genuine and natural" alchemy that functions independently of Fate and the will of demons. In order to achieve this pure alchemy he permits certain rites ("sacrifices") that involve formulas. However, these are "not those that nourish and entice [the demons] but rather the sacrifices that repel and destroy them" ⁶⁸. These formulas do not attempt to manipulate Fate; they only keep Fate's agents from interfering with a process that is above Fate. In order to obtain these tinctures the alchemist must first have come to know God and his own true self by inner reflection – he must have practiced the method advocated by Hermes in opposition to the magic of Zoroaster. Zosimos's instructions for obtaining the propitious tinctures in the *Final Count* are consistent with the principles he sets forth in *On the Letter Omega* as grounds for rejecting the methods of the demonic alchemists. As we shall now see, Zosimos's mythical account of the history of the propitious tinctures exhibits the traits of a Gnostic world-view much like that of the Phos-Adam myth.

A Gnostic myth about alchemy

Indeed, I wish to argue that, in the *Final Count*, Zosimos created an original Gnostic myth about the propitious tinctures. In order to demonstrate the Gnostic character of the myth, first, I examine the beings called *ephoroi* and argue that the powers who introduce the unnatural tinctures correspond to the Gnostic Archons. Then, I compare the structure of Zosimos's story about the propitious tinctures to Gnostic myths about the origin of man and argue that the latter inspired the former.

In *The Final Count*, Zosimos calls the powers that hide the genuine and natural tinctures *ephoroi*, which means guardians or overseers ⁶⁹. From context one can infer that Zosimos is referring to a class of beings, demons or gods, who control the propitious tinctures by their will, and who have given knowledge of these

⁶⁷ Jackson (p. 44, n. 25) argues that Zosimos shares Zoroaster's positive evaluation of *mageia*. This argument is at odds with Zosimos's description of Zoroaster's claim as boastful and with the opinions expressed throughout *Omega* and *FC*; I suspect that it derives from Jackson's misinterpretation of Zosimos's views on the propitious tinctures. Believing that Zosimos practiced the observance of propitious times, Jackson assumed that Zosimos would endorse Zoroaster's astral magic. Mertens's reading of this passage is similar to mine, and she convincingly argues against Jackson's assessment (Mertens, 74, n. 35; 81, n. 44).

⁶⁸ *FC*, 8.

⁶⁹ For the following discussion, the reader may wish to refer back to the passage from *FC* quoted earlier, corresponding to n. 27.

tinctures to their priests⁷⁰. But exactly who are these beings? Two other authors, Proclus and Cosmas of Jerusalem, use *ephoroi* to refer to the planetary deities. This identification suits the role of the *ephoroi* in Zosimos's writings, who perform functions corresponding to those of the planetary deities in Gnostic sources.

In his commentary on Plato's *Timaeus*, the Neoplatonist Proclus frequently refers to the gods as *theoi ephoroi*. They are *ephoroi* in the sense that they preside over different aspects of the world and human existence. Proclus's *theoi ephoroi* include gods such as Neptune and Athena, who are the *ephoroi*, or guardians, of generation and intellectual life respectively⁷¹; but he uses the term most frequently to refer to the planetary gods, who are understood in astrological terms to preside over lower beings, such as divine and demonic souls, animals, plants and stones⁷². In describing the gods as *ephoroi*, Proclus places them atop a cosmic hierarchy of beings who fall under their governance according to their specific attributes. He states that demons are the attendants and auxiliaries of the planetary guardians, and he refers to the gods' "use of material demons in their productions about the earth"⁷³. Souls "remain always suspended from the gods to whom they are allied", and consequently each soul is "of a certain kind, such for instance as Martial, or Jovian, or Lunar"⁷⁴. Proclus studied in Alexandria in the first half of the fifth century and was deeply influenced by his predecessor Iamblichus, whose thought drew from many of the same intellectual currents as his contemporary Zosimos⁷⁵.

An extract from Cosmas of Jerusalem also calls the planetary gods *ephoroi*. This occurs in a description of the teaching of the *magi*, Zoroaster and Ostanès, which is heavily astrological, involving not only the planets/*ephoroi*, but also the zodiac and the thirty-six decans. According to Cosmas, the seven *ephoroi* are the source of *apotelesmatica* (astrological prognostications). He describes a hierarchy of powers descending from the celestial to the terrestrial realms that terminates with the demons who rule over human beings⁷⁶. Cosmas lived in the eighth century but the text in question is based on a Hellenistic source⁷⁷. He also wrote on alchemy and quoted from the works of Zosimos⁷⁸.

⁷⁰ Cf. Walter Scott, *Hermetica*, with introduction, addenda and indices by A. S. Ferguson (Oxford: Oxford University Press, 1936), 138.

⁷¹ Proclus, *op. cit.*, I, 173.

⁷² *Ibid.*, I, 110.22-111.14.

⁷³ *Ibid.*, I, 113.7-19; English quotation from Thomas Taylor, translator, *Proclus' Commentary on the Timaeus of Plato*, vols XV and XVI of the Thomas Taylor Series (Frome: The Prometheus Trust, 1998), 110. Cf. Proclus, I, 139-140.

⁷⁴ *Ibid.*, I, 111; English quotation from Th. Taylor, *op. cit.*, 108.

⁷⁵ Iamblichus and Zosimos are compared by G. Fowden, *op. cit.*, 153 and *passim*.

⁷⁶ Joseph Bidez and Franz Cumont, *Les mages hellénisés*, 2 vols (Paris, 1938), I, 175-178; II, 271-275.

⁷⁷ *Ibid.*, 176.

⁷⁸ *Alch. Gr.*, 443. Works of Cosmas sometimes appear adjacent to those of Zosimos in the Greek alchemical corpus.

As authors who use the term *ephoros* in a sense that generally fits the context of *The Final Count*, Proclus and Cosmas provide a likely identification: the *ephoroi* are the planetary gods. Zosimos's belief that the *ephoroi* are evil is consistent with his hostility towards astral-fatalism and with the Gnostic cosmology evidenced by *On the Letter Omega*. Indeed, in the Phos-Adam myth, we saw that the malevolent powers who create the material Adam are probably the Archons, associated with the planetary gods.

How well does this identification agree with the text of *The Final Count*? Zosimos twice states that the *ephoroi* are *kata topon*: they are "guardians with respect to place" ⁷⁹. Festugière takes *topos* to refer to geographical location and translates this phrase as "les démons qui surveillent chaque lieu". He identifies the *kata topon ephoroi* with the local Egyptian deities, whom Zosimos considers demons hungry for sacrifices, and he equates them with the terrestrial spirits (*pneumata perigeia kai merika*) described by Proclus in his commentary on the *Cratylus* ⁸⁰. But *topos* is also a commonly used term in Greek astrology designating the twelve divisions of the zodiac known as the mundane houses ⁸¹. Thus *kata topon ephoroi* could refer to the planetary gods, seen (like the *ephoroi* in Cosmas and the Archons in the *Pistis Sophia*) as residing in the zodiac. But at one point, while describing the powers who are jealous of the tinctures, Zosimos says that beings who are *perigeioi* (near the earth) are jealous of the tinctures and need to be repelled. While this may indicate that the *ephoroi* are terrestrial, not celestial, powers, other interpretations are possible. For instance, because the celestial rulers act on Earth through terrestrial demons as intermediaries, Zosimos may refer now to the terrestrial demons, now to the celestial rulers, all the while describing the same action which is being performed by the celestial powers via the terrestrial demons. Accordingly, the *perigeioi* demons and the *ephoroi* are different beings, and the latter may be equated with the planetary Archons. Another possibility is that the *ephoroi* include both celestial and terrestrial powers. In this case, *kata topon ephoroi* might mean guardians with respect to the different regions of the cosmos. In the *Apocryphon of John*, the Archons include both the seven planetary rulers and five who reside "in the depth of the abyss", meaning the sublunar realm ⁸². Likewise, Proclus counts the Earth as an *ephoros* alongside the planetary gods ⁸³. Proclus also refers to *ephoroi* who preside over different climates and serve as tutelary deities of cities; some but not all of these are planetary gods.

⁷⁹ FC, 6, 7. See above for full quotation.

⁸⁰ Festugière, I, 278-279, nn. 2, 4.

⁸¹ Bouché-Leclercq, *op. cit.*, 280-288.

⁸² AJ 11.6; Robinson, 111.

⁸³ Proclus, I, 110.29.

The evidence is ambiguous. *Ephoroi* may refer to the planetary gods or to local terrestrial powers, perhaps demons. In either case, however, there is strong evidence that Zosimos has in mind a hierarchy of powers ruling over earthly events that originates in the heavens. This is a Gnostic cosmology in that the highest cosmic powers are considered evil. Even if the *ephoroi* are terrestrial intermediaries and not the planetary Archons, according to Zosimos the introduction of the unnatural propitious tinctures originated at the level of the celestial powers. Just as the personal demons are subject to their astral superiors in *On the Letter Omega*, so too are the terrestrial demons described in *The Final Count*.

Zosimos describes the tincture instituted by the *ephoroi* as "the presumptuous doctrine [*nomizomene doxa*] of the Aion". Festugière, recognizing that Zosimos is describing evil powers, makes an interpolation and translates "la prétendue doctrine des démons du siècle". In Late Antique religious speculation Aion (Eternity) was an important, near-transcendent deity. In the Chaldaean system, for instance, Aion is a supreme being located below the Great Father and above the planetary gods⁸⁴. Festugière's interpolation and translation appear to be based on the assumption that Zosimos would not attribute the bogus tinctures to such a magnificent deity. According to the Chaldaean Oracles, Aion is the ruler of the astral gods and serves many of the functions of the Cosmic Soul – above all, imparting circular motion to the celestial spheres⁸⁵. In some oracles, Aion is identical to the god Chronos and the cosmos is conceived of as existing in Aion. According to *Corpus Hermeticum*, Book XI, "Aion makes the cosmos" and "holds all this together, either through necessity or providence or nature or whatever else anyone believes or will believe"⁸⁶. In Cosmas of Jerusalem's description of the doctrine of the *magi*, *Aidion* (the Eternal) is described as the highest god of all, from which all the other powers (the zodiac, the planetary *ephoroi*, heroes, demons, etc.) depend⁸⁷. For Neoplatonists, Chaldaeans and others, these attributes make Aion a great divinity. But from the point of view of Gnostic anti-cosmism Aion would be seen as the chief of the evil Archons. Having witnessed Zosimos's rejection of Fate in terms of a Gnostic conception of the cosmic gods in *On the Letter Omega*, it is anything but surprising to find Zosimos ascribing the demonic doctrine of the propitious tinctures to Aion, the supreme ruler of Fate⁸⁸. Thus Festugière's interpolation/in-

⁸⁴ Or. 49; R. Majercik, *op. cit.*, 69; cf. H. Lewy, *op. cit.*, 100, and Sarah Iles Johnston, *Hekate Soteria: A Study of Hekate's Role in the Chaldaean Oracles and Related Literature* (Atlanta: Scholars Press, 1990), 106.

⁸⁵ Lewy, 403, n. 12; Johnston, 107, n. 46.

⁸⁶ Copenhagen, 37-38.

⁸⁷ Bidez-Cumont, I, 175-178; II, 271-275.

⁸⁸ Recall that, in his allegorical interpretation of Hesiod (*Omega* 6), Zosimos equates Zeus with Fate. In his study of Gnosticism, Hans Jonas writes of Zosimos's allegory: "... to identify the

terpretation is unnecessary. Zosimos's attribution of the unnatural tinctures to Aion demonstrates that they ultimately derive from the celestial rulers of the cosmos. The terrestrial demons are merely the instruments by which the Archons interact with earth-bound men.

Other characteristics of the evil powers in *The Final Count* suggest a correspondence to the Gnostic Archons. Zosimos describes the *ephoroi* as jealous and pretenders, both fundamental attributes of the Archons in Gnostic mythology. In Gnostic biblical exegesis, the nature of the Chief Archon, identified with the God of the Bible, is exemplified by his claim "I am a jealous God and" – erroneously – "there is no other god besides me" ⁸⁹. When the Archons see the first man, they are jealous of him because he contains divine light and is superior to them ⁹⁰. Zosimos's reference to the *ephoroi* as "*dokountes*", meaning pretenders, or beings who claim to be something they are not, also calls to mind the Archons of classical Gnosticism. In his boastful declaration the inferior demiurge pretends to be the highest God. All of the Archons in the aeons of the material cosmos imitate (pathetically) the divine aeons of the transcendent Wholeness. The figure of the "Counterfeit Demon" (*antimimos daimon*) in the Phos-Adam myth, also called "the Jealous One", expresses the same notion ⁹¹.

Most importantly, the structure of Zosimos's story about the natural and unnatural tinctures resembles Gnostic myth, as exemplified in Gnostic exegeses of Genesis. For the sake of comparison, I shall use the *Apocryphon of John*, which is representative of the genre, and which specifically has been linked, via the lost *Apocalypse of Nikotheos*, to Zosimos's Phos-Adam myth ⁹².

First, as we have just seen, the plot in *The Final Count* involves evil powers (either the planetary Archons or their agents) who are jealous of a possession of man's, the "genuine and natural" tinctures. In the *Apocryphon of John*, the Archons are jealous of man's inner spirit. In Zosimos's myth, jealousy drives the *ephoroi* to hide the genuine tinctures from men and introduce their own "unnatural" tincture,

Jupiter exsuperantissimus of imperial religion with the heimarmene [Fate] is not really to misjudge him ... The point is that the gnostic revaluation of the cosmos as such (for which 'heimarmene' had come to stand as the repulsive symbol) brought down along with it its highest divinity, and it is precisely his cosmic power which now makes Zeus an object of contempt" (Hans Jonas, *The Gnostic Religion* [Boston: Beacon Press, 1958], 97). Likewise, Zosimos's estimation of the god Aion in *The Final Count*.

⁸⁹ This episode appears in such treatises as *On the Origin of the World*, *Hypostasis of the Archons*, *Apocryphon of John* and in Irenaeus's account of the Ophites. See Couliano, 96.

⁹⁰ Variations of this basic theme occur in numerous Gnostic accounts. See *Ibid.*, 99-115.

⁹¹ This is noted by Mertens (p. 105, n. 89), on which basis she concludes that "le démon contrefacteur de notre texte [*On the Letter Omega*] est bien ressenti comme une émanation du monde des archontes". Cf. Stroumsa, 142-143.

⁹² See above, n. 51.

“the presumptuous doctrine of the Aion” – which, as we know from *On the Letter Omega*, differs from the “genuine” tinctures by being subject to Fate. In the *Apocryphon of John*, the Archons try to hide from man knowledge of his divine spirit. To this end they introduce into man their own “counterfeit spirit” (*antimon pneuma*), which causes man to become forgetful and binds him to the world of matter and Fate.

Both the counterfeit spirit and the unnatural tinctures are tricks that subject man to the Archons/*ephoroi*, instead of the true God. Zosimos recommends the following remedy:

Sit calmly at home, and God, who is everywhere ... will come to you. And being calm in body, calm also your passions, desire and pleasure and anger and grief and the twelve portions of death. In this way, taking control of yourself, you will summon the divine to you, and truly it will come, that which is everywhere and nowhere ... So doing, you will obtain the genuine and natural propitious tinctures.⁹³

In the *Apocryphon of John*, after revealing the truth about man’s divine nature and his imprisonment in the material cosmos, the savior teaches that those who have been “cast down into forgetfulness” by the counterfeit spirit can be saved if they gain self-knowledge and receive the Spirit of life⁹⁴:

Those on whom the Spirit of life will descend ... will be saved and become perfect ... Then they have no other care than the incorruption alone, to which they direct their attention from here on, without anger or fear or jealousy or desire or greed of anything ... Such then are worthy of the imperishable, eternal life and the calling. For they endure everything ... that they may finish the good fight and inherit eternal life.⁹⁵

In the *Apocryphon of John*, spiritual salvation requires that one overcome the oppressive cosmic powers through knowledge of the secret history of man and the world (including the evil origin of the counterfeit spirit) and communion with the true divinity by a practice of inner contemplation and purification. According to Zosimos’s myth about the propitious tinctures, such understanding and initiation are necessary not only for salvation, but also for the accomplishment of the genuine and natural tinctures.

These parallels between the myth of the tinctures in *The Final Count* and the story of man’s creation in the *Apocryphon of John* indicate that Zosimos has

⁹³ FC, 8.

⁹⁴ AJ, 26-27; Robinson, 119-120.

⁹⁵ AJ, 25.23ff.; *ibid.*, 119.

constructed a myth according to the Gnostic method of inverse exegesis⁹⁶. That Zosimos was familiar with this genre of Gnostic mythology is proven by the presence of the Phos-Adam myth in *On the Letter Omega*. In *The Final Count*, instead of reinterpreting Biblical history, he has reinterpreted an alchemical doctrine, the propitious tinctures. In particular, he may have been inspired by a legend that told how the art of alchemy was imparted to men by fallen angels⁹⁷. Zosimos's rigorous, Gnostic rejection of all cosmic powers prejudiced him against knowledge that came from such a tainted source. In relating the legend to Theosebia, he describes the knowledge given to man by the fallen angels as evil and of "no utility to the soul"⁹⁸. The story in *The Final Count* may be seen as an attempt to read the legend of the fallen angels through Gnostic lenses and to find a mytho-historical basis for a spiritually acceptable alchemical practice⁹⁹. In his myth of the propitious tinctures Zosimos repudiates the alchemy that comes from the cosmic rulers and stakes claim to an alternative alchemy derived from a pure source.

The Phos-Adam myth, which Zosimos imported from outside alchemical tradition, bears only indirectly on the question of the propitious tinctures, as an illustration of why Fate must be scorned. In the *Final Count*, Zosimos incorporates the history of the propitious tinctures into the very narrative of Gnostic mythology. The same cosmic powers who deceive man concerning his divine origin also conceal the genuine and natural tinctures. Zosimos was confronted with an alchemical practice whose success was dependent on Fate and required interaction with Fate's agents: demons and celestial powers. But he believed that spiritual men are above Fate, and that consequently one must reject *all* benefits that derive from Fate. The manipulation of Fate by observing propitious times or controlling demons with magical formulas was unacceptable to him. He therefore sought an alternative, spiritually acceptable method of accomplishing these tinctures, which he found in books such as *On Furnaces*. He justified this method by appealing to

⁹⁶ Gnostic interpretation of Biblical history proceeds from the principle that the God of Genesis is an inferior power, leading to an "inverse exegesis". See Couliano, 121ff. Cf. Jonas, 91-92, who writes of Gnostic allegory: "Instead of taking over the value system of the traditional myth, it proves the deeper 'knowledge' by reversing the roles of good and evil, sublime and base, blest and accursed, found in the original".

⁹⁷ Zosimos discusses this legend in a letter to Theosebia preserved in Book XI of the *Imouth*. The legend also appears in the alchemical text *Isis to Horus*. See Stroumsa, 139-143; Festugière, I, 255-260. Cf. Moshe Idel, "The Origin of Alchemy According to Zosimos and a Hebrew Parallel", *Revue des études juives*, 145 (1986): 117-124; Michele Mertens, "Une scène d'initiation alchimique: La 'Lettre d'Isis à Horus'", *Revue de l'histoire des religions*, 205 (1988): 3-24.

⁹⁸ Festugière, 256.

⁹⁹ In this regard, it is significant that the Gnostic Archons sometimes correspond to the fallen angels of Jewish mythology; see Stroumsa, 35ff., 139-143, esp. 141.

a mythical history based on Gnostic models. This history proved that Zosimos's method was the genuine and natural method, which had been hidden by evil cosmic powers. The other method was introduced by the evil powers as a means of imprisoning man in the world of matter: the *ephoroi* are "hungry not only for sacrifices but for your soul" ¹⁰⁰, warns Zosimos, cautioning Theosebia about the unnatural propitious tinctures. The use of the apparatus of Gnostic mythology to explain the chemical product known as propitious tinctures illustrates the profound influence of philosophico-religious beliefs on Zosimos's alchemical practice. Having incorporated alchemy into the framework of a Gnostic religious system, he had to purge it of elements dependent on demons and celestial powers. In this light, the emphasis on the technology of furnaces and apparatus that characterizes Zosimos's alchemical practice may be seen as the result (at least in part) of his religious beliefs: the search for a method that did not depend on the unreliable agencies of demons and celestial powers encouraged him to focus on more technical approaches.

Coda.

Alchemy as Gnostic theurgy

This article has examined how Zosimos reconciled the practice of alchemy with Gnostic religious principles. But a more basic question remains: why did Zosimos practice alchemy at all? Zosimos held religious principles that declared matter evil and despised material wealth. Traditional alchemy was concerned with the manipulation of matter to create, or imitate, precious stones and metals. What drove Zosimos to conform alchemy to his religious vision rather than simply to reject it? Zosimos did not attempt to justify alchemy's traditional materialist goals so that it might be practiced for its own sake; rather, he made alchemy an integral part of a program aimed at spiritual salvation. But it is difficult to define precisely what role alchemy played in this pursuit. One approach to answering this question lies in the symbolic correspondences between alchemical work and the process of spiritual salvation. Both processes, for example, are conceived in terms of purifying matter and liberating *pneuma* (spirit). This study of Zosimos's treatment of the propitious tinctures suggests a different type of answer, one that does not explain the spiritual significance of alchemical practice, but that points to a possible motivation for turning to alchemy as a physical praxis supplementing mystical contemplation. What follows is a brief sketch of an hypothesis that may merit further research.

¹⁰⁰ *Omega*, 7.

This study of Zosimos began when I was struck by apparent correspondences between the distinction between good and bad alchemy made by Zosimos, and the distinction between good and bad magic made by Neoplatonist writers on theurgy. While I eventually came to the conclusion that Zosimos held views contrary to those of the advocates of theurgy (as evidenced by his negative appraisal of Zoroaster's *mageia*) I think it is possible that both parties were motivated by a similar impulse. As historians of Late Antique philosophy have noted, many Neoplatonists after Plotinus were attracted to aspects of religious ritual; and some of them – most notably Zosimos's contemporary, Iamblichus – attempted to make a place for certain rites within a Neoplatonist philosophical framework. For Plotinus, mystical union with the One was attained entirely by contemplation. This is an extremely arduous path, and theurgy's appeal was, in part, that it offered the practitioner assistance through intermediate powers. This is especially true of what is often distinguished as 'lower theurgy' in the work of Iamblichus. Lower theurgy operates in the realm of *sympatheia*, the material universe, by means of practical rites that appeal to the cosmic gods and subsidiary powers. It does not directly concern the highest levels of mystical union but nonetheless helps the theurgist on his way to those lofty heights that are his ultimate goal ¹⁰¹.

Perhaps Zosimos also sought a physical praxis that bridged the distance between man and an increasingly remote high God. Although Zosimos approvingly quoted the treatise, *On the Inner Life*, in which Hermes, like Plotinus, says that transcendence is attained only by an internal spiritual process ¹⁰², he seems to have believed that alchemical work assisted the adept in achieving spiritual purification. After instructing Theosebia to turn inward and receive the true God and to perform the apotropaic sacrifices of Solomon, Zosimos tells her:

So doing you shall obtain the genuine and natural propitious tinctures. Do this until you have achieved the perfection of your soul. When you realize that you have been rendered perfect, having obtained the natural tinctures, spit on matter and, hastening to Poimenandres [*sic*] and receiving the baptism in the crater, hasten up to rejoin your race. ¹⁰³

This passage suggests that a preliminary level of spiritual preparation is required in order to achieve the genuine and natural propitious tinctures, which in turn help

¹⁰¹ See, *inter alia*, Andrew Smith, *Porphyry's Place in the Neoplatonic Tradition: A Study in Post-Plotinian Neoplatonism* (The Hague: Martinus Nijhoff, 1974), 90ff.; Brian P. Copenhaver, "Iamblichus, Synesius and the Chaldaean Oracles in Marsilio Ficino's *De Vita Libri Tres* ...", in James Hankins *et al.* (eds), *Supplementum Festivum: Studies in Honor of Paul Oskar Kristeller* (Binghamton, 1987; Medieval & Renaissance Texts & Studies), 448-449; Fowden, 126-153.

¹⁰² *Omega*, 7.

¹⁰³ *FC*, 8-9.

the adept to attain the final level of spiritual perfection. Once this stage is reached, alchemy seems to have served its purpose and may be cast aside. As we have seen, Zosimos did not share the Platonists' belief in the goodness of the celestial gods and the material cosmos. His Gnostic stance thus rendered theurgical rituals that manipulated and depended on cosmic powers, such as demons and celestial divinities, unacceptable. In his reformed alchemy, Zosimos may have found an acceptable praxis that fulfilled an initiatory function similar to the lower theurgy of Neoplatonist mystics.

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