

Received: 15th May 2011

Accepted: 31st May 2011

ASTROLOGICAL IMPLICATIONS IN THE ‘LOT ORACLE’ PGM 50***DORIAN GIESELER GREENBAUM**
University of Wales, Trinity St David**& FRANZISKA NAETHER**
Ägyptologisches Institut/Ägyptisches Museum -Georg Steindorff-, Universität Leipzig**ABSTRACT**

In previous editions of the magical papyri, *PGM 50* has been considered as a lot oracle. In this article we propose a reinterpretation of the text as a source for astrology rather than for lot oracles. This reinterpretation is based on *PGM 50*'s astrological vocabulary. We provide a new translation based on this evidence. We further discover parallels to the second-century C.E. astrologer Vettius Valens in the *verso* of the text, which emend the original text as given by Wessely and Preisendanz.

KEY WORDS: GREEK MAGICAL POPYRI, *PGM*, ASTROLOGY, VETTIUS VALENS, LOT ORACLES; LOT OF FORTUNE, LOT OF DAEMON, *SORTES ASTRAMPYSCHI*, DECANS.

ASTROLOGISCHE IMPLIKATIONEN IN DEM ‚LOSORAKEL‘ PGM 50**ZUSAMMENFASSUNG**

In früheren Editionen der magischen Papyri wurde *PGM 50* als Losorakel angesehen. In diesem Artikel argumentieren wir jedoch, den Text eher als einen Vertreter der Astrologie denn als ein Losorakel aufzufassen. Diese Neuinterpretation beruht auf dem astrologischen Fachvokabular, das in *PGM 50* Anwendung findet. Neben einer Neuübersetzung, basierend auf diesen Erkenntnissen, war es möglich, auf dem *Verso* des Pergaments Parallelen zum Werk von Vettius Valens (2. Jh. n. Chr.) zu identifizieren. Dadurch kann die Erstedition von Wessely und die Textausgabe bei Preisendanz emendiert werden.

SCHLÜSSELWÖRTER: GRIECHISCHE MAGISCHE POPYRI, *PGM*, ASTROLOGIE, VETTIUS VALENS, LOSORAKEL, LOS DER FORTUNA, LOS DES DAEMONS, *SORTES ASTRAMPYSCHI*, DEKANE.

We are honoured to contribute to a Festschrift for José Calvo Martínez, whose work on ancient western magic spans more than twenty years and is an inspiration

* We thank Aurelio Pérez Jiménez for inviting us to contribute to this Festschrift, and Micah Ross for introducing us. We also thank Heinz-Josef Thissen and Stephan Heilen for reading over our submission and making valuable suggestions. Abbreviations of papyrological works are cited after J. F. OATES, R. S. BAGNALL, S. J. CLACKSON, A. A. O'BRIEN, J. D. SOSIN, T. G. WILFONG and K. A. WÖRPER, *Checklist of Greek, Latin, Demotic and Coptic Papyri, Ostraca and Tablets*, <http://scriptorium.lib.duke.edu/papyrus/texts/clist.html>, May 2011.

for those studying this complicated subject. Since among his areas of interest are the Greek Magical Papyri, we think it is appropriate to examine one of these texts in his honour. We hope he will enjoy our investigation, translation and commentary on this short but challenging text.

The Magical Papyri (*Papyri Graecae et Demoticae Magicae*, *PGM* and *PDM*) are an eclectic collection of prayers, hymns, rituals, spells, charms and other genres dating from roughly the second century B.C.E. to the sixth century C.E.¹. The so-called Magical Papyrus no. 50, written in Greek on parchment and dating to the sixth century C.E., appears in Preisendanz’s original critical edition of the Greek Magical Papyri² as well as in Hans Dieter Betz’s *The Greek Magical Papyri in Translation*, where it was translated by Roy D. Kotansky³. The papyrus is from the Nationalbibliothek in Vienna, where it bears the inventory number 8033 (= *P. Rain.*; no. AN 527 and *Stud. Pal.* XX 293, both edited by Carl Wessely)⁴. Its exact provenance in Egypt is unknown. We use the phrase ‘so-called’ for two reasons. First, it is not on papyrus but on parchment; and secondly, as shall be seen, we believe the papyrus is not typical of the magical papyri contained in the collection. *PGM* 50 is very different from the routine spells of the *PGM* corpus.

We begin with a presentation of the Greek text, our translation and its context in other Greek Magical Papyri, as well as to lot oracles. We shall then provide a glossary of astrological terms in the text, and give commentary on the *recto* and *verso*, including comparisons with other astrological texts and techniques, as well as with lot oracles.

The Greek Text of *PGM* 50

Here is the text copied as in Preisendanz⁵:

¹ For their history, see Betz’s introduction in H. D. BETZ, ed., *The Greek Magical Papyri in Translation, including the Demotic Spells*, Chicago/London, 1992² (1986), repr. 1996, pp. xli–liii.

² K. PREISENDANZ, ed., *Papyri Graecae Magicae. Die griechischen Zauberpapyri*, 2nd ed., 2 vols, Stuttgart, 1973–1974, here vol. 2, p. 182, Trismegistos Identification Number TM 64915 (see www.trismegistos.org). Note that Preisendanz does not translate the text, in variance from his usual practice. (The text is also not translated in J. CALVO MARTÍNEZ and D. SÁNCHEZ ROMERO, intro., trans. and annot., *Textos de Magia en Papiros Griegos*, Madrid, 1987, p. 364.)

³ BETZ, *GMP*, p. 283. Our translation below considerably differs from his.

⁴ See *ibid.*, p. xxiv. See also C. WESSELY, “Griechische Abtheilung”, in J. R. VON KARABACEK, ed., *Papyrus Erzherzog Rainer. Führer durch die Ausstellung. Mit 20 Tafeln und 90 Textbildern*, Vienna, 1894, p. 124, no. 527 (description only.). In this volume, the text had been assigned to the 3rd century C.E. See also C. WESSELY, *Studien zur Palaeographie und Papyruskunde*, repr. Amsterdam, 1965–1969, here vol. XX, p. 140 (no. 293).

⁵ PREISENDANZ, *PGM*, vol. 2, p. 182.

Recto

1 εκ...τα[—]
 2 καὶ οἱ [κύ]ριοι α[ὐ]τῶν πρὸς [τῶν κλή-]
 3 ρων Τύχης ἢ Δαίμονος πί[πτοντες]
 4 εἰς τὸν περὶ φαρμακε[ί]ας, [αὐτοὶ κύ-]
 5 ριοι τοῦ κλήρου ὄντες τὸ [αὐ]τὸ ποιήσου-
 6 σι, Τύχης ἢ Δαίμονος καλῶς πιπτόν-
 7 των. καὶ εἰς τὸν κλήρον τόνδε Π[τα]ρχ[ν]ού[μεος]
 8 ὁ περὶ φαρμακείας πίπτων τάδε ὅμοια
 9 ἐνεργήσει. τὰ δὲ προκείμενα ἔσται[.]α [].

Verso

1]σ[—] [—]
 2 [—] τοῦ Δαίμονος. ἐάν ποτε
 3 [—τ]ύχη τοῦ ἰδίου τόπου ἢ καὶ
 4σα [—]κ.. ὑπὸ κακοποιῶν
 5 μαρτυροῦ[ντ]ος φυγαδείας, σημαίνει ἢ
 6 [—] ἢ ἀσημονοῦντας, ἐάν μὲν
 7 οὔν ἀγαθοποιὸς ὑπάρχων, κακοποιὸς
 8 ὑπὸ ἀγαθοποιῶν ἀλλοτρι[.....]

Recto

1 from...the[--]
 2 and their lords from the
 3 Lots of Fortune and Daemon falling
 4 in the (lot?) concerning the use of potions, the same being the lords
 5 of the lot, cause the same [result]
 6 when either Fortune or Daemon falls well.
 7 And if Ptarchnoumeos[?], the one concerning potions,
 8 falls in the lot here, he will execute similar things.
 9 The topics under discussion will be ...

Verso

1 ...
 2 ... of [*the lot of?*] Daemon. If ever

- 3 ... it [*the lot or lord of the lot?*] happens to be <...>⁶ its own place or even
 4 being witnessed by malefics
 5 it signifies exiles or
 6 --- [or]⁷ those who disgrace themselves, if,
 7 then, it is a benefic, [but a] malefic
 8 by benefics by others[?]

There is no doubt about the difficulty in translating the text, due both to its brevity and textual uncertainty as well as its lacunae. Kotansky admits that ‘Very little sense can be made from this scrappy fragment. The text seems to deal with responses to a type of knucklebone or dice oracle⁸.’ Presumably the appearance of the word κλήρος, ‘lot’, in the text, led him to this supposition; Preisendanz, as well, wonders if it is an ‘Anweisung für Würfelorakel?’⁹ However, a closer examination of the papyrus, both *recto* and *verso*, reveals a quantity of astrological terms which seem not to have been noticed by either Preisendanz or Kotansky. In the corpus of the Magical Papyri, there are at least twenty segments which contain astrological material, including this text¹⁰. The genres include rituals based on the time of an astrological *katarchē* (a chart cast for a propitious time), the astrological *dodecaoros*, an initiation using planetary gods and astrological ritual (suggesting *katarchē*), astrological magic, finding a personal daimon with astrology, and horoscopes (astrological charts). So it would not be all that unusual for *PGM 50* to have a significant astrological component. On the other hand, the *recto*, at least, does not read like a standard astrological interpretation, so it is possible that it combines astrological with lot-casting techniques.

***PGM 50* and its relation to lot oracles**

There are several reasons why scholars tended to interpret *PGM 50* as a lot oracle. First, the corpus of the *PGM* contains some texts which use different kinds of sortition to obtain answers to various questions of daily life by a highly formulated, often

⁶ See below, p. 499, for the reason for this insertion.

⁷ Wessely’s handwritten transcription in *Stud. Pal.* 20 (293) shows only an *eta* here, so we think it is not the conjunction η̄ (and see below, commentary on the *verso*).

⁸ BETZ, *GMP*, p. 283.

⁹ PREISENDANZ, *PGM*, vol. 2, p. 182.

¹⁰ They include *PGM* III.275-281, III.282-409, IV.170-176, IV.835-849, IV.1637-1695, IV.2967-3006, VII.505-528, XIII.1-343, XIII.343-646, XIII.646-734, XIII.775-785, XIII.1029-1041, XIV.~58-61 (*PDM*), XIV.93-114 (*PDM*) (Greek in *PGM* XIVa.1-11), XXXVI.211-30, XXXVIII.1-26, L.1-18 (our text), LXII.52-75 (4 horoscopes), CX.1-12, *PDM* Suppl.168-184.

pseudepigraphic text of higher *decorum*. Such text-based divinatory techniques are called sortimancy, kleromancy and bibliomancy. Among these are, e.g., the complex *Sortes Astrampsychi*¹¹, some papyri involving predictions from the sayings of Homer (the *Homeromanteion* or *Homer Oracle*¹²), and *PGM* 24a using 29 palm leaves with letters for predictions provided by the help of the goddess Isis. There are also spells such as *PGM* 7, 423-428 to enchant dice to win and *PGM* 62, 47-51 to test if a person is still alive by the use of dice¹³.

Secondly, some scholars might have been reminded of famous oracular phenomena such as the Pythia in Delphi and the Sybils described by historiographers like Pausanias or Plutarch. Both tell of quite simple methods of sortition and their presence in daily life in Roman Imperial times. Plutarch, especially, speaks in his *De Pythiae oraculis* (Plut. Mor. 408C) about a downfall of the oracle by rather ‘profane’ questions of individual petitioners, e.g. if one ought to marry, to travel, or to make a loan. He also found fault with cities and institutions asking about the outcome of harvests, the increase of herds, and the health of the public¹⁴. Apart from famous examples, the majority of questions in oracular centres such as Delphi, Dodona and Siwa must have been questions of daily life. Though not in all cases, the inspired medium had to answer in hexameters. As Amandry has pointed out, it seems plausible that for many such questions which required a binary answer (a ‘Yes’ or a ‘No’) or a reduction out of a certain amount (such as a person’s name out of a set of candidates, e.g. for a municipal or priestly position), even in Delphi beans and other tools of sortition were applied from early times onward¹⁵.

11 *PGM* 26, see now F. NAETHER, *Die Sortes Astrampsychi. Problemlösungsstrategien durch Orakel im römischen Ägypten, Orientalische Religionen in der Antike*, 3, Tübingen, 2010. The text is R. STEWART, ed., *Sortes Astrampsychi vol. II. Ecdosis altera*, Bibliotheca Scriptorum Graecorum et Romanorum Teubneriana, Munich, 2001.

12 *PGM* 7, 1-148 (answers by verses from Homer’s works), P. Oxy. 56, 3831 (rules for using the *Homeromanteion*, hemerology, beginning of answers), Suppl. Mag. 2, 77 (answers). Other papyri containing verses of Homer’s *Iliad* or *Odyssey* used for divinatory purposes are *PGM* 4, 469-74; 820-34; 2145-50 (with the ancient title ‘divine assistance from three Homeric verses’), *PGM* 17b; *PGM* 22a and *PGM* 23. M. Meyer and R. Smith cite a medical handbook in Coptic with spells against several diseases by the help of Homer’s epics (no. 43a, l. 41-44; P. Mich. inv. 136). See M. MEYER and R. SMITH, eds., *Ancient Christian Magic: Coptic Texts of Ritual Power*, San Francisco, 1994.

13 See *ad locum* and NAETHER, 2010, pp. 345-346 with bibliography.

14 Greek text of the questions in Plut. Mor. 408D: εἰ γαμητέον, εἰ πλευστέον, εἰ δανειστέον, περὶ ὄνῃς ἀνδραπόδου, περὶ ἐργασίας; φορᾶς καρπῶν πέρι καὶ βοτᾶν ἐπιγονῆς καὶ σωμάτων ὑγείας. (PLUTARCH, *Moralia*, vol. 3, ed. W. Sieveking, Leipzig, 1929, repr. 1972.)

15 See (with caution) P. AMANDRY, *La mantique apollinienne à Delphes. Essai sur le fonctionnement de l’oracle*, Paris, 1950.

The examples in the *PGM* and the beans of Delphi are examples of sortimancy executed at temples by professional literate personnel. However, especially from Asia Minor, a certain kind of ‘do it yourself’ oracle for a literate clientele without a mantic intermediate is attested. Several Greek inscriptions are evidence of divination by *astragaloï* (knucklebones). After a number of throws, the petitioner could look up his/her answer in a stele with the texts. The *astragaloï*, a little table and the inscription would have been provided by the local communities. These ‘do it yourself’ oracles were found in the middle of urban areas such as the market place (*agora*) or close to the *naoi* of gods, sacred areas and temple enclosures¹⁶. A historiographic description of the Greek *astragalos* oracles can be found in Pausanias’ passage on the small sanctuary of Heracles in Boura which is often cited in literature on oracles¹⁷.

With such examples in mind, *PGM 50* seems to contain a very fragmentary explanation of the handling of a lot oracle. To obtain an answer to a question, so the text implies, a certain type of dice, *astragalos* or other tool for receiving a ‘lucky number’ (or in our case, a luck-bringing divinity) would have been rolled. In many known lot oracles, divinities stand as patrons for the outcome of an oracular session or have been written on multiangular dies. Petitioners were asked to pray, sometimes even to fast and to hold nightwatches for the day of the actual questioning of the oracle. Additionally, hemerologies restricted the days on which inquiries were allowed¹⁸.

PGM 50, however, should no longer be considered as a source for lot oracles. The next sections of this article will provide an explanation and proof of how and why *termini technici* in the text should be understood differently.

Astrological Terminology in *PGM 50*

It will be helpful to list the words with astrological significance in the text, along with their standard astrological meanings¹⁹.

Recto

πίπτω, v. ‘fall down’²⁰: A common term used of the positions in which planets or lots ‘fall’ in a chart. It is interesting that the same term is used for the casting of

16 The main monograph on these texts is J. NOLLÉ, *Kleinasiatische Losorakel. Astragal- und Alphabetchresmologien der hochkaiserzeitlichen Orakelrenaissance*, *Vestigia*, 57, Munich, 2007.

17 Paus., VII 25.10. (PAUSANIAS, *Graeciae descriptio*, ed. M. H. ROCHA-PEREIRA, Leipzig, 1973-1981, vol. II, Book 7.)

18 On these, see F. NAETHER and M. ROSS, “Interlude: A Series containing a Hemerology with Lengths of Daylight”, *EVO*, 31 (2008), 52-91.

19 It should be mentioned that these terms have parallel expressions in Egyptian language, namely in Demotic.

20 The first meaning in LSJ.

lots, which ‘fall’ in a certain pattern²¹. The use of the verb *πίπτω* is common in Greek astrological texts such as that of Vettius Valens; it is also found in Paul of Alexandria, Olympiodorus, Hephaestio and others.

κύριος, n. ‘lord’: Commonly used for the ruler of a zodiacal sign, and thus the ruler of a planet in that sign, such as Jupiter being the ruler of the Sun in Pisces (Jupiter is the house ruler of Pisces). It can also be used in other, more complex, techniques for finding an overall ruler of a certain position in a chart.

κλήρος Τύχης, n. ‘Lot of Fortune’: A special position in a chart, found by taking the arc between the Sun and the Moon and projecting it from the Ascendant; in one direction if the chart is a daytime chart, but in the other if it is a nighttime chart²². It is by far the most employed and important lot in astrology. The Lot of Fortune is used to assess both the fortune and the bodily health of the native.

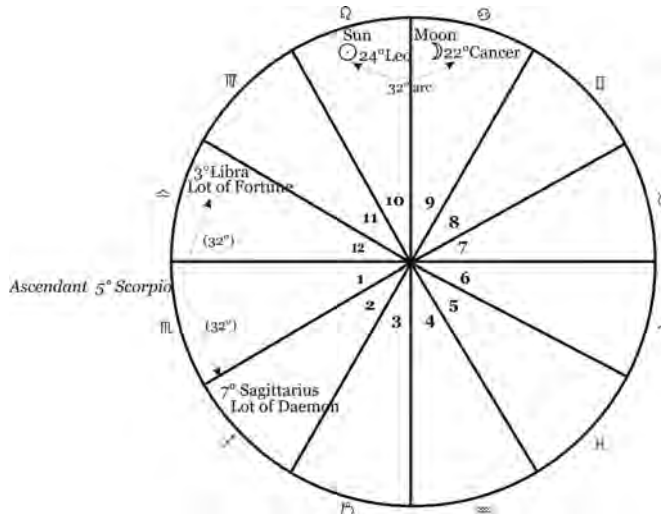


Figure 1. The Lots of Fortune and Daemon in a Daytime Chart

κλήρος Δαίμονος, n. ‘Lot of Daemon’: The Lot of Daemon is the inverse of the Lot of Fortune, so it forms a mirror image from the Ascendant with the Lot of For-

²¹ See LSJ s.v. *πίπτω*.

²² It is not germane to get into the arcana of the calculation of the lot here, but see (with caution) A. BOUCHÉ-LECLERCQ, *L'astrologie grecque*, Paris, 1899, pp. 288-299. See also D. G. GREENBAUM, “Calculating the Lots of Fortune and Daemon in Hellenistic Astrology”, *Culture and Cosmos*, 11 (2007), 163-187; EADEM, “The Lots of Fortune and Daemon in Extant Charts from Antiquity (First Century BCE to Seventh Century CE)”, *MHNH*, 8 (2008) 173-190; and EADEM, “The Daimon in Hellenistic Astrology: Origins and Influence”, Ph.D. Thesis, Warburg Institute, University of London, 2009, pp. 184-185.

tune. Where Fortune is concerned with body, Daemon is concerned with mind and soul. Where Fortune is associated with the Moon, Daemon is associated with the Sun. The Lot of Daemon is the secondmost frequently calculated lot in extant charts from antiquity²³.

ἐνεργέω, v., ‘make efficacious or effective; execute, operate, work’: Another frequently-used word in describing the astrological effects of a planet or aspect.

Verso

ἴδιος τόπος, adj. + n., ‘own place’: Used of planets or lots, when they fall in a place where they have rulership (e.g. the Moon in Cancer) or another form of ownership.

ἀγαθοποιός, n., ‘benefic’: Ubiquitous in astrology as a reference to a benefic planet, i.e. Venus or Jupiter (who are called the lesser and greater benefics). A benefic planet bestows good things on the native who has it well-placed in her chart.

κακοποιός, n., ‘malefic’: As ubiquitous as ‘benefic’, but identifying a malefic planet, i.e. Mars or Saturn (the lesser and greater malefics). It, of course, bestows misfortune rather than good on the native.

Commentary on the *Recto*

Fortune and Daimon

The most prominent reference on the *recto*, in our view, is the mention of the Lots of Fortune and Daemon. As we noted in the glossary above, these are the most important and most-employed lots in Greco-Roman astrology. The fact that they are called Fortune and Daemon is also significant; in the Greco-Roman era and in Late Antiquity, Fortune and Daimon are often mentioned together because they are viewed as opposite sides of the same coin. Cults of Fortune and Daimon become well-known in Alexandria starting in around the second century B.C.E., and Tyche and Daimon as a pair, linked to their Egyptian counterparts, are prevalent in Roman Egypt²⁴. We see both Tyche and Daimon in the *Tabula Cebetis*, which was popular

²³ Though by late antiquity over 100 astrological lots were known (see, e.g., the lists in OLYMPIODORUS, *Eis ton Paulon <Heliodorou>. Heliodori, ut dicitur, in Paulum Alexandrinum Commentarium*, ed. E. BOER, Leipzig, 1962, pp. 46-61), only about a dozen are mentioned with any frequency (the lots of Fortune, Daemon, marriage, parents, siblings, etc.; see e.g. the lists in DOROTHEUS OF SIDON, *Carmen Astrologicum*, ed. D. PINGREE, Leipzig, 1976, I 9, 13, 14, 19, 26; II 3, 6, 10, 11, 12; IV 1; also PAULUS ALEXANDRINUS, *Elementa Apotelesmatica*, ed. E. BOER, Leipzig, 1958, chapter 23). Few of these appear with any regularity in extant charts except for Fortune and Daemon. In a study of extant charts from antiquity which use the lots of Fortune and Daemon, the ratio of employment of Fortune to Daemon is about 3:1. See GREENBAUM, 2008, p. 175.

²⁴ P. M. FRASER, *Ptolemaic Alexandria*, Oxford, 1972, here vol. 1, pp. 209-11. See also the discussions of Fortune and Daemon in GREENBAUM, 2007, pp. 164-168; and G. SFAMENI GASPARRO, “*Daimôn* and

in the second century C.E.²⁵

Tyche and Daimon may be identified in the Egyptian *termini* (shn(e)) and š(3)y²⁶. They occur together e.g. in the refrain of the Demotic wisdom text of Papyrus Insinger where they could roughly be translated as ‘chance’ and ‘fate’ which are both sent by the god²⁷.

These cultural combinations occur in astrology as well. In the astrological chart, there is a Good Fortune and Bad Fortune place, which are opposite to a Good Daemon and Bad Daemon place²⁸.

We have already mentioned the Lots of Daemon and Fortune. In as-

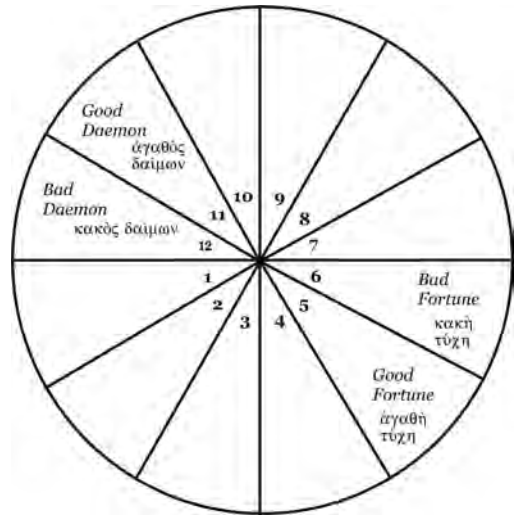


Figure 2. The Daemon and Fortune Places in the Astrological Chart

Tuchê in the Hellenistic Religious Experience”, in P. BILDE, T. ENGBERG-PEDERSEN, L. HANNESTAD and J. ZAHLE, eds., *Conventional Values of the Hellenistic Greeks*, Aarhus, 1997, pp. 67-109.

²⁵ See J. T. FITZGERALD and L. M. WHITE, trans., *The Tabula of Cebes*, Chico, CA, 1983.

²⁶ For Shai, see the monographic study by J. QUAEGBEUR, *Le dieu égyptien Shai dans la religion et l'onomastique*, OLA, 2, Leuven, 1975. The names of Shai und Shepshit are written on a die from Roman Egypt; see M. MINAS-NERPPEL, “A Demotic Inscribed Icosahedron from Dakhleh Oasis”, *JEA*, 93 (2007), 140-141, who interprets their appearance as a pair parallel to their Greek counterparts Agathos Daimon und Agathe Tyche.

²⁷ See H.-J. THISSEN, “Annotationes Demoticae, 1. Zum Refrain des P. Insinger”, *Enchoria*, 28 (2002-3), 98-102 and the arguments against this interpretation by J. F. QUACK, *Einführung in die altägyptische Literaturgeschichte III. Die demotische und gräko-ägyptische Literatur, Einführungen und Quellentexte zur Ägyptologie*, 3, Münster, 2009², 116. Shn(e) is chance in the sense of ‘something that happens’, a chance event. In this it is closely parallel to the Greek τύχη. Š(3)y is ‘that which has been decreed/determined’, and parallels the idea of fate as a decree. For more on this topic see GREENBAUM, 2009, chapter 2, pp. 83-85 and, esp. for P. Insinger, p. 82, n. 200.

²⁸ Interestingly, the fifth and eleventh places in Demotic astrological charts were called (t3) špšy(t) and p3 šy respectively. See W. SPIEGELBERG, “Die ägyptischen Namen und Zeichen der Tierkreisbilder in demotischer Schrift”, *ZÄS*, 48 (1910), 146-151; H. THOMPSON, “Demotic Horoscopes”, *PSBA*, 34 (1912), 227-233; O. NEUGEBAUER, “Demotic Horoscopes”, *JAOS*, 63 (1943), 115-127; G. R. HUGHES, “An Astrologer’s Handbook in Demotic Egyptian”, in L. H. Lesko, ed., *Egyptological Studies in Honor of Richard A. Parker*, Hanover, NH, 1986, pp. 53-69; and QUAEGBEUR, 1975, p. 171 and n. 2 with references. For more on Shai and Shepshit in the context of astrology, see GREENBAUM, 2009, chapter 2.

trology, the Lot of Fortune is called the Moon’s lot, and the Lot of Daemon, the Sun’s²⁹. Fortune rules over the body, Daimon over the mind. In astrological texts, particularly that of Vettius Valens, delineations of the two lots are separate yet intertwined, and sometimes one lot can substitute for the other. Therefore it is not unusual to see both lots mentioned in this text, nor is it odd that they can bring about similar results. Good placement of the lots and their lords could indeed make a good outcome for the administration of a potion (φαρμακεία)³⁰.

Poisoning and Exile

In Preisendanz’s *apparatus criticus*, he notes, for φαρμακε[ί]ας in *recto* line 4 (and 8), to see *PGM* XXVI 20; and for φυγαδείας in *verso* line 15 to see *PGM* XXVI 15³¹. These cite a portion of the *Sortes Astrampsychi*, questions 91 and 86 respectively³²: εἰ πεφαρμάκωμα; (‘Have I been poisoned?’³³) and εἰ φυγαδεύσομαι; (‘Will I be exiled?’). Question 91 provides answers if a bad potion might been given to the petitioner without his/her awareness³⁴. This matter reflects the fear already expressed by Plato (*Laws* 11, 933 B)³⁵. His definition of φαρμακεία contains malevolent potion-making and evil sorcery *in toto*. Therefore, in his ideal republic, such actions ought to be banned. From the *PGM* and *PDM*, we know many examples of spells e.g. to separate couples, make people fall in love with each other, magically bind them together, curse or poison them by the use of φαρμακεία. This social reality is reflected by question 91 of the *Sortes Astrampsychi*³⁶ as well as by the singular example of a Greek marriage contract in which the wife promises not to use φάρμακα against her future husband³⁷.

²⁹ ANTIOCHUS OF ATHENS AP. RHETORIUS, “Thesauroi”, in F. BOLL and F. CUMONT, eds., *CCAGI*, Brussels, 1898, p. 160.12-16; Paulus Alexandrinus, *Introduction*, chapter 23, ed. BOER, p. 49.12-13, 17-22; Olympiodorus, *Commentary on Paulus*, chapter 22, ed. BOER, p. 42.11-12, 17-20.

³⁰ KOTANSKY, in BETZ, *PGM*, p. 283, translates ‘sorcery’, but clearly this is a reference to a potion, e.g. for medical purposes.

³¹ PREISENDANZ, *PGM*, vol. 2, p. 182.

³² This fragment is P. Oxy. XII 1477, a papyrus containing questions 46, 48, 50, 52-55, 79-92 of the oracle book’s *ecdosis altera* as edited by R. A. STEWART, 2001.

³³ See NAETHER, 2010, pp. 225-227.

³⁴ The word φαρμακεία in the sense of ‘potions’ refers to liquids without regard to their possible benevolent or malevolent nature. It also includes medical substances for healing, i.e. a ‘remedy’.

³⁵ In PLATO, *Opera*, vol. 5, ed. J. BURNET, Oxford, 1907, repr. 1967.

³⁶ It should be mentioned here that P. Oxy. LXVII 4581 which bears more questions than the *ecdosis altera* in Stewart, 2001, has an answer (f2) which must belong to a question if one was poisoned by his girlfriend and an answer (f1) if one’s wife has consulted a professional magician.

³⁷ U. YIFTACH-FIRANKO, *Marriage and Marital Arrangements. A History of the Greek Marriage*

Commonly, spells are attested like the Christian Coptic example of a petitioner pleading to God not to be harmed by *φαρμακεία*³⁸. In *PGM VIII* 1–63, a spell for success in a business with the misleading title ‘Binding love spell of Astrampsoukos (= Astrampsychos)’ mentions the god Hermes (Thoth) as inventor of potions and that the individual for whom this spell is recited should be protected everywhere and for the span of his/her lifetime from several harms, among them *φαρμακεία*³⁹.

As for exile, this example falls into a group of questions primarily for slaves who have run away from their owner or plan to do so. Besides an upper class professional urban élite which consulted the *Sortes Astrampsychi*, these questions could have been asked by slaves only⁴⁰. It would be worth examining these two phenomena, poisoning and exile, further in the Egyptian literature, especially the wisdom texts such as the *Teachings of Onchsheshonqi* and Papyrus Insinger⁴¹.

But both exile and poisoning are also common concerns in astrology texts, and are certainly not unique to themes represented in lot oracles. Examples in astrological texts show that the Lots of Fortune and Daemon, if badly placed and/or aspected, can bring about exile or the similar concept of banishment. The 2nd century C.E. astrologer Antiochus of Athens reports that ‘The Sun looking upon the Lot of Fortune and having his housemaster under the beams makes those who are banished⁴²’. In Rhetorius’s (fl. early 7th century C.E.) *Compendium on Astrology*, we find the following:

But if in these circumstances another of the malefics beholds the eighth place from the Hour-marker or the Lot of Fortune or the lord of the eighth place, it shows the figure with banishment and violent death. And if the Lot of Fortune and its lord happen to be well [placed], but the Lot of Daemon and its lord happen to be badly [placed] and beheld by malefics, they result in banishment for the nativity...⁴³.

Documents in Egypt. 4th century BCE – 4th century CE, Munich, 2003, pp. 193–194: ‘Nor shall I prepare love charms (*φάρμακα*) for you, or put harmful poisons (*φίλτρα κακοποιά*) into your beverages or in your food [...]’ (TM 78828).

³⁸ P. Berl. inv. 8313 edited by A. ERMAN, “Ein koptischer Zauberer”, *ZÄS*, 33 (1895), p. 46 (TM 98044).

³⁹ Greek passages: *φαρμάκων <εὐρετὰ>; διάσωσόν με πάντοτε εἰς τὸν αἰῶνα ἀπὸ φαρμάκων*.

⁴⁰ See NAETHER, 2010, pp. 266–270 and 276–278.

⁴¹ Recent German translations with further bibliography may be found in F. HOFFMANN and J. F. QUACK, *Anthologie der demotischen Literatur, Einführungen und Quellentexte zur Ägyptologie*, 4, Berlin, 2007.

⁴² Antiochus of Athens ap. Rhetorius, “Thesauri”, chapter 48, p. 161.20–21: “Ἥλιος ἐπιβλέπων τὸν κλῆρον τῆς τύχης καὶ τὸν οἰκοδεσπότην ἔχων ὑπὸ τὰς ἀνγὰς ἐκπτώτους ποιεῖ.

⁴³ Rhetorius, *Compendium astrologicum secundum epitomen in cod. Paris. gr. 2425 servatam*, eds D. PINGREE and S. HEILEN, Berlin/New York, forthcoming, chapter 54, draft p. 39.13–18 ≈ *CCAG VIII/4*, p. 121.5–10:

The Lot of Fortune and its lord averse from the Sun make those who are banished...⁴⁴.

Vettius Valens, the 2nd century C.E. author of the *Anthologies*, gives an example of a nativity which came to grief because of affliction of the Lots of Fortune and Daemon:

For the lords of the triplicity⁴⁵ are on centrepins and marking the hour, and in the same also the Lots [of Fortune], Daemon and Basis, and the exaltation [of the nativity]. But Ares, the lord of these, having fallen astray⁴⁶ and not witnessing the place⁴⁷ produced the opposite effects, both exile and violent death⁴⁸.

Poisoning can also be associated with either the Lot of Fortune or the astrological place of the Evil Daemon (the 12th). Vettius Valens provides two examples:

Saturn, Mercury, Mars and Venus [in the 11th place from the Lot of Fortune] [mean] those wronged by poisonings or females, and those who are accused⁴⁹.

If Venus is badly placed with Mars in the place of the Evil Daemon ... because of Mercury witnessing them ... they are seduced by friends, slaves and enemies, and become involved in seditions and poisonings⁵⁰.

εἰ δὲ τούτων οὕτως κειμένων <ἄλλος τῶν κακοποιῶν θεωρήσει> τὸν ὄγδοον τόπον τοῦ ὠροσκοποῦ ἢ τοῦ κληῖρου τῆς τύχης ἢ τὸν κύριον τοῦ ὄγδου τόπου, μετὰ τῆς ἐκπτώσεως καὶ βιοθανασίας δηλοῖ τὸ σχῆμα. εἰ δὲ ὁ κληῖρος τῆς τύχης καὶ ὁ κύριος αὐτοῦ καλῶς τύχωσιν, ὁ δὲ κληῖρος τοῦ δαίμονος καὶ ὁ κύριος αὐτοῦ κακῶς τύχωσι καὶ ὑπὸ κακοποιῶν θεωρηθῶσιν, ἐκπτώσιν τελοῦσι τῇ γενέσει....

44 Ibid., draft p. 40.18-19 = CCAG VIII/4, p. 121.34-122.1: ὁ κληῖρος τῆς τύχης καὶ ὁ κύριος αὐτοῦ ἀπόστροφοὶ τοῦ Ἡλίου ἐκπτώτους ποιούσι....

45 In this case, the Sun and Jupiter are the triplicity lords of fire.

46 ἐκπαράπιπτο; a variation on παραπίπτο, which means the planet is in a cadent place (the 3rd, 6th, 9th or 12th), or the 2nd or 8th places (these placements are considered unfortunate). Mars falls in the 3rd place in this chart. Rhetorius (CCAG VIII/4, pp. 124.22; 204.15, 18, 21; CCAG VIII/1, p. 240.12) is the only other astrologer to use this term in this way.

47 ‘Not witnessing the place’ is enclosed by *crucis* in the critical edition (see the following note for the Greek); this is because Mars in Gemini *is* aspecting the Sun, Moon, Jupiter and lots in Aries by sextile (‘witness’ is an aspect word in Greek astrology).

48 VETTIIUS VALENS, *Anthologiarum libri novem*, ed. D. PINGREE, Leipzig, 1986, II, 27.6-7, p. 89.20-23 = O. NEUGEBAUER and H. B. VAN HOESEN, *Greek Horoscopes*, Philadelphia, 1959, repr. 1987, p. 91 (No. L 78): ἐπίκεντροι γὰρ καὶ ὠροσκοποῦντες οἱ κύριοι τοῦ τριγώνου εὐρέθησαν, καὶ εἰς τὸ αὐτὸ καὶ ὁ κληῖρος καὶ ὁ δαίμων καὶ ἡ βᾶσις καὶ τὸ ὕψωμα ἐξέπεσεν. ὁ δὲ τούτων κύριος Ἄρης ἐκπαρπεσῶν καὶ ἡμαρτύρητος τῷ τόπῳ ἔναντία καὶ φυγαδεῖαν καὶ βιοθανασίαν ἐποίησεν.

49 Ibid., II, 21.6, p. 79.9-10: Κρόνος, Ἑρμῆς, Ἄρης, Ἀφροδίτη διὰ φαρμακεῶν ἢ θηλυκῶν προσώπων ἀδικουμένους καὶ ἐν αἰτίας γινομένους.

50 Ibid., II, 38.41-42, p. 112.9-10, 15, 18-19: ὅσοις δ’ ἂν συμβῆ κεῖσθαι τὴν Ἀφροδίτην κακῶς καὶ Ἄρεα κακοδαίμονοντα ... διὰ δὲ τὸν Ἑρμῆν αὐτοῖς μαρτυρεῖν ... ὑποφθοραὶ τε ὑπὸ φίλων καὶ δούλων καὶ ἐχθρῶν καὶ στάσεις γίνονται καὶ φαρμακεῖαι.

Regarding the first example of poisoning, there is an interesting connection between women and poisoning (or sorcery?), of which another example can be found in the eighth century C.E. text of the astrologer Theophilus of Edessa, who mentions potions made by women to bewitch someone (chapter 44)⁵¹.

The first decan of Leo?

We must also investigate the textually corrupt word 'Π...ρχ..ού.....' in *recto* line 7. Preisendanz proposes, building on a suggestion of K. F. W. Schmidt⁵², that 'Ptarchnoumeos' (which he constructs from the 'Π...ρχ..ού.....' of the parchment⁵³) is a corruption of Χαρχνούμυς, the first decan of Leo in Hephaestio, *Apotelesmatika* I, 1.89⁵⁴. (The 'p' which begins the word would be the Egyptian definite article masculinum p3, 'the'). This would be the first attestation of Χαρχνούμυς with an article⁵⁵. In his unpublished Habilitationsschrift on the Egyptian decans, Joachim Friedrich Quack rejects the reading of 'Ptarchnoumeos' due to its questionable emendation from a few letter traces, due to the p at the beginning and due to the circular argument of the appearance of a decan's name. He concludes that a relation to decans is probable because of decans attested in lot oracles such as the *Tabula Aristobuli*. But alongside our argumentation of PGM 50 as an astrological text rather than a lot oracle, this conclusion should be modified⁵⁶.

⁵¹ Theophilus of Edessa, *De rebus praesertim bellicis*, chapter 44 (= CCAG XI/1, pp. 204-266, 270=271).

⁵² K. PREISENDANZ, "Review of 'Wilhelm Gundel, Dekane und Dekansterbilder'", *GGA*, 201 (1939), p. 140. This reference thanks to the work of W. M. BRASHEAR, "The Greek Magical Papyri: an Introduction and Survey; Annotated Bibliography (1928-1994)", in W. HAASE, ed., *ANRW*, Berlin/New York, 1995, pp. 3380-3684, here p. 3555.

⁵³ Wessely's handwritten copy in *Stud. Pal.* 20, 293 has 'π..ρχ.ουβ'.

⁵⁴ Hephaestio, *Apotelesmaticorum libri tres*, ed. D. PINGREE, 2 vols, Leipzig, 1973, here vol. 1, p. 13.20: Οἱ δὲ δεκανοὶ αὐτοῦ τρεῖς Χαρχνούμυς ὁ πρῶτος. This decan corresponds to the Egyptian hry (hpd (n)) knm.t, a decan known in every group and family of decans catalogued by O. NEUGEBAUER and R. A. PARKER, *Egyptian Astronomical Texts. (1. The Early Decans. 2. The Ramesside Star Clocks. 3. Decans, Planets, Constellations and Zodiacs)*, Providence, 1960-1969, here vol. III, p. 160, s.v. no. 4; see also pp. 169-171 for more on Hephaestio's list).

⁵⁵ Other attestations without an article are NEUGEBAUER and PARKER, *EAT*, III, p. 160, 4; C. DE WIT, *Le rôle et le sens du lion dans l'Égypte ancienne*, Leiden, 1951, p. 391; J. F. QUACK, "Dekane und Gliedervergottung. Altägyptische Traditionen im Apokryphon Johannis", *JbAC*, 38 (1995), p. 115; *PGM* V, l. 78-79; C. BONNER, *Studies in Magical Amulets, chiefly Graeco-Egyptian*, Ann Arbor, 1950, no. 55*; H. JUNKER, *Die Onurislegende*, Vienna, 1917, p. 43. We are grateful to Heinz-Josef Thissen for helping us with the attestations.

⁵⁶ See J. F. QUACK, *Beiträge zu den ägyptischen Dekanen und ihrer Rezeption in der griechisch-römischen Welt*, Habilitationsschrift, Freie Universität Berlin, 2003, chapter 2.1.12.

If, in spite of these difficulties, some form of Χαρχούμυς were still involved, Hephaestio of Thebes, a fourth-fifth century C.E. astrologer, provides the following meaning for it. He says that the first decan of Leo signifies that one is ‘accompanied and heard by crowds and will be sharp and not to be despised, doing good for his subjects, and will protect and acquire many things, but open to censure because of a woman’; such a person will be ‘long-lived, have a youthful, ruddy face, large eyes, a good nose, slender legs, will have pain in his feet, and he will be flatulent’⁵⁷. It is not clear how such a description would have an impact on the outcome of a lot concerning a potion, but the part about protection and doing good for one’s subjects might be relevant. Perhaps the decans were a part of the dice or lots thrown for the divination.

Unfortunately, none of the published dice or lots bear names of decans⁵⁸ but most commonly have numbers or names of gods on their surfaces. However, the structure of lot oracle corpora might be organized after the number of decans in decades. The *Sortes Astrampsychi* with their answers arranged in decades and the demotic oracle of P. Vienna D inv. 12006⁵⁹ do fit in this picture. Evelyn Burkhardt has pointed out the same for medieval Jewish sources⁶⁰.

The arrangement of oracular answers in decades and the casting of ten ‘lucky numbers’ for making an inquiry might be an Egyptian phenomenon as explained by the decans which were apportioned into 10° segments in the sky. Oracle texts from the Latin West such as the *Sortes Sangallenses* or the *Sortes XII Patriarcharum* bear answers arranged in dodecads. Could this stand as an indication of an Egyptian origin of the lot oracles with decades?

As mentioned above, answers in lot oracle corpora are often under the patronage of divine entities: pagan gods and their holy animals, the Christian God and saints, famous kings and queens or celestial bodies such as the twelve signs of the zodiac

⁵⁷ Heph., I, 1.89-91, p. 13.21-14.1: ὁ γεννώμενος οὖν ἐπὶ τοῦ πρώτου ὑπὸ ὄχλων δορυφορεῖται καὶ ἀκουσθήσεται καὶ ἔσται ὄξυς καὶ ἀκαταφρόνητος, εὐεργετῶν τοὺς ὑποτασσομένους καὶ πολλοὺς σκεπάσει καὶ κτήσεται, εὐεπίπογος δὲ διὰ γυναῖκα. τὰ δὲ σημεῖα αὐτοῦ·εὐμήκης τὴν ἡλικίαν, τὸ πρόσωπον ὠραῖος, ἐρυθρός, οἱ ὀφθαλμοὶ μεγάλοι, εὐρινος, αἱ κνήμαι λεπταί, πόνος ἔσται περὶ τὸν πόδα καὶ ἐμπνευμάτωσις αὐτῷ ἔσται.

⁵⁸ See NAETHER, 2010, pp. 320-322.

⁵⁹ Edited by M. A. STADLER, *Isis, das göttliche Kind und die Weltordnung. Neue religiöse Texte aus dem Fayum nach dem Papyrus Wien D. 12006 recto*, MPER, 28, Vienna, 2004.

⁶⁰ See E. BURKHARDT, “Hebräische Losbuchhandschriften. Zur Typologie einer jüdischen Divinationsmethode”, in K. HERRMANN, M. SCHLÜTER and G. VELTRI, eds., *Jewish Studies Between the Disciplines – Judaistik zwischen den Disziplinen. Papers in Honor of Peter Schäfer on the Occasion of his 60th Birthday*, Leiden/Boston, 2003, pp. 95-148 and NAETHER, 2010, p. 343-344.

and decans in their personification as Egyptian divinities⁶¹.

The most prominent example of a lot oracle on the basis of decans is the *Tabula Aristobuli*. In this text, the Egyptian decans, sometimes in later forms of their ancient names, are patrons of the oracular answers. The system of the oracle is less complex than the one of the *Sortes Astrampsychi*. After consulting a hemerology on whether a day is suitable for divination, the actual day of inquiry was assigned to a number. This number was subtracted from another number, e.g. the day when something relevant to the matter in question happened. For the case of healing from a disease, the number of the inquiry day would be subtracted from the number of the day when the disease broke out. The result was divided by 36, the number of decans, until a remainder was found. This remainder had to be looked up in a catalogue of numbers between 1 and 35. The hermeneutics of answers could be positive (ζωή or ἀγαθά), negative (μέσα or εἰς μακρόν) or lethal (θάνατος or ἐναντία)⁶². It must be mentioned that the *Tabula Aristobuli* is known only from medieval sources⁶³. Despite their traces of ancient elements such as the decan’s names⁶⁴, we cannot prove this type of lot oracle was used in antiquity as is. The strong focus on healing and survival from diseases is found especially in later texts.

Last but not least, decans appear in other divinatory texts. While the Egyptian ‘calendar of lucky and unlucky days’ from the New Kingdom mentions only one decan’s name⁶⁵, they influence the health of several regions of the body⁶⁶ and have impact on the weather. An example of an artefact nearly completely restored by recent underwater finds is the so-called ‘Naos of Decades’. The inscription contains weather prognostics by constellations of stars and decans⁶⁷.

⁶¹ See also BURKHARDT, 2003, pp. 107-109.

⁶² See W. GUNDEL, *Dekane und Dekansterbilder: Ein Beitrag zur Geschichte der Sternbilder der Kulturvölker*, Glückstadt/Hamburg, 1936, p. 314; J. F. QUACK, 2003, chapter 2.2.12.

⁶³ Codex Palatin. lat. 1367 fol. 149^{vo}. ff.–152 (in GUNDEL, 1936, pp. 406-408). Another text using decans to determine the course of illness in a lot oracle is Codex Neapol. Gr. II C 33, fol. 312r (in GUNDEL, 1936, pp. 70, 406; = CCAG IV, p. 56, fol. 311 [end]).

⁶⁴ See J. F. QUACK, 2003, chapter 2.1.4. He has proven that the names are nearly completely deprived of their astrological context and treated just as reminiscences of their ancient nomenclature.

⁶⁵ See *ibid.*, chapter 1.2.3.17.

⁶⁶ See J. F. QUACK, 2003, chapter 2.2.9. Decans are also found in iatromathematical texts such as *The Sacred Book of the Decans* (see C.-E. RUELLE, “Le Livre Sacré sur les Décans”, *RPh*, 32 (1908) 247-277). Nechepso and Petosiris, pseudepigraphical authors on astrology, also mention decans in astrological medicine (Nechepso and Petosiris, *Fragmenta magica*, in *Philologus*, Suppl. Bd. 6, pt. 1, ed. E. RIESS, Göttingen, 1892, p. 379 (= Firm., IV, 22.2).

⁶⁷ See A.-S. VON BOMHARD, *The Naos of the Decades: From the Observation of the Sky to Mythology*

With this said, decans are obviously present in ancient divinatory techniques such as lot oracles and likewise in texts with astrological content. Unfortunately, the identification of the traces in line 7 *recto* of PGM 50 must remain open to debate. Maybe the addition of a personal name or a title of a professional diviner could be the right suggestion for this lacuna. A rather farfetched, though not unparalleled suggestion would be the restoration Π[τα]ρχ[υ]ουβ for the god Ptah-Khnum⁶⁸.

Commentary on the *Verso*

In considering the *verso* of the papyrus, it may be, as Preisendanz suggests⁶⁹, that the *verso* is not a continuation of the *recto* but is an entirely separate text. It reads, in fact, even more like an astrological text than the *recto*. It contains the typical descriptions of interpretation based on planets and lots in relationship to each other.

In researching texts which talk about exile and being disgraced, especially in conjunction with the Lot of Daemon, we found a passage in Vettius Valens that is extremely similar to the *verso* of PGM 50. It reads:

But if in any way it [i.e. the lord of the Lot of Daemon] is averse from its own place [i.e. having no relationship or aspect to the place/sign where the lot falls] or otherwise declining [i.e., in a cadent place], witnessed by malefics, it signifies fugitives and those who disgrace themselves in a foreign land. And if it is together with a benefic, or witnessed by benefics...⁷⁰.

Compare the two texts:

Valens:

ἐὰν δέ πως [sc. ὁ κύριος τοῦ δαίμονος]
ἀπόστροφος τύχη ἰδίου τόπου ἢ καὶ
ἄλλως ἀποκεκλικῶς, ὑπὸ κακοποιῶν
μαρτυρούμενος, φυγάδας σημαίνει καὶ
ἐπὶ ξένης ἀσχημονοῦντας.
καὶ ἐὰν μὲν ἀγαθοποιῶ συνυπάρχη
ἢ ὑπὸ ἀγαθοποιῶν μαρτυρηθῇ

PGM 50v:

2 [—] τοῦ Δαίμονος. ἐὰν ποτε
3 [—τ]ύχη τοῦ ἰδίου τόπου ἢ καὶ
4 ...σα* [—]κ.. ὑπὸ κακοποιῶν
5 μαρτυροῦ[ν]τος φυγαδείας, σημαίνει ἢ
6 [—] ἢ ἀσχημονοῦντας, ...
7 οὖν ἀγαθοποιὸς ὑπάρχων, κακοποιὸς
8 ὑπὸ ἀγαθοποιῶν ἀλλοτρι

* See below in the emended *verso*; we have separated the σα of the transcriptions into two words, of which σ ends the first and α begins the second (as in Valens' text).

and *Astrology*, Oxford, 2008. Daryn Lehoux calls such methods ‘astrometeorology’; see D. LEHOUX, *Astronomy, Weather, and Calendars in the Ancient World: Parapegmata and Related Texts in Classical and Near Eastern Societies*, Cambridge/New York, 2007, pp. 123-127 and pp. 35-39.

⁶⁸ Egyptian Pth-Ḥnm. This would fit the line traces and average line length according to Wessely's transcript in *Stud. Pal.* XX 293. Ptah-Khnum is attested twice; see C. LEITZ, ed., *Lexikon der ägyptischen Götter und Götterbezeichnungen*, vol. 3, OLA 112; Leuven/Paris/Dudley, MA 2002, p. 175.

⁶⁹ PREISENDANZ, *PGM*, p. 182.

⁷⁰ Vett. Val., II, 20.5, p. 78.3-4, 7-9: ... τὸν κύριον τοῦ δαίμονος ... ἐὰν δέ πως ἀπόστροφος τύχη ἰδίου τόπου ἢ καὶ ἄλλως ἀποκεκλικῶς, ὑπὸ κακοποιῶν μαρτυρούμενος, φυγάδας σημαίνει καὶ ἐπὶ ξένης ἀσχημονοῦντας.

It seems more than coincidental that this text should use the same (or almost the same) words and phrases – ‘τὸν κύριον τοῦ δαίμονος’ (the lord of the [Lot of] Daemon), ‘ἰδίου τόπου’ (own place), ‘ὑπὸ κακοποιῶν μαρτυρούμενος’ (witnessed by malefics), ‘φυγάδας’ (fugitives) and ‘ἀσχημονοῦντας’ (those disgracing themselves) as those on the *verso* of *PGM* 50. We suggest, therefore, that the *verso* is likely a (close) paraphrase of this Valens passage. It is even possible to fit more of the Valens text into the *verso*⁷¹:

Verso

- 1]σ[—] [—]
- 2 [ὁ κύριος] τοῦ Δαίμονος. ἐάν ποτε
- 3 [ἀπόστροφος τ]ύχη τοῦ ἰδίου τόπου ἢ καὶ
- 4 [ἄλλω]ς ἀ[ποκεκλι]κ[ώ]ς⁷² ὑπὸ κακοποιῶν
- 5 μαρτυρού[μεν]ος φυγαδείας, σημαίνει ἢ
- 6 [ἐπὶ ξέν]η<ς> ἀσχημονοῦντας. [ἐάν μὲν]
- 7 οὖν ἀγαθοποιὸς ὑπάρχων, κακοποιὸς <δὲ>
- 8 ὑπὸ ἀγαθοποιῶν ἀλλοτρι<ωθέντων>⁷³

Translation:

- 1 ...
- 2 [the lord] [of the lot] of Daemon. If ever
- 3 it happens to be [averse] from its own place or even
- 4 [otherwise falling amiss], witnessed by malefics
- 5 it signifies exiles or
- 6 those who are disgraced [in a foreign land] ...
- 7 And so if it is actually benefic, <but> malefic
- 8 because of estranged benefics...⁷⁴

⁷¹ We have consulted Wessely’s handwritten transcription in Stud. Pal. XX 293, which differs slightly from the printed transcription in PREISENDANZ, *PGM*.

⁷² Kroll’s suggested emendation of an ἦ following ἀποκεκλικώς (see Val. ed. KROLL, p. 81 ad line 24; Val. ed. PINGREE, p. 78 ad line 8) cannot be sustained in light of the parchment text because the parchment presents, at that spot, an illegible section in the amount of only two letters. Thanks to Stephan Heilen for pointing this out.

⁷³ The phrase ‘ἀλλοτριωθέντων τῶν ἀγαθοποιῶν’ occurs in Heph. III, 47.68 (ed. PINGREE, p. 325.25-26; also in Epit. I, 50.18 and II, 2, 23.55); this is a chapter on runaway slaves. (Thanks to Stephan Heilen for alerting us to this text.) But Hephastio does not mention a benefic becoming malefic because of this.

⁷⁴ Lines 7 and 8 do not match as well as lines 1-6, but there are still some similarities. One difference is μαρτυρέω in Valens and ἀλλοτρι[όω?] in *PGM* 50v. The Valens text is more coherent, and the translation we offer of *PGM* 50v.7-8 is tentative. In Valens, the last sentence of this chapter (II, 20.7) talks about those with a similar astrological configuration not inheriting from their own families,

Given the *verso*'s parallel with Vettius Valens, it is intriguing to consider the possibility that the scribe who wrote *PGM 50* (both *recto* and *verso*) and Valens may both be drawing on a common, now lost, source⁷⁵. The *recto*'s concern with the lots of Fortune and Daemon would also form a portion of this source.

Conclusion

We hope to have presented evidence showing that *PGM 50* is an astrological text by genre and not primarily comparable to the majority of texts assigned to the collection of magical papyri. In any case, such assignments have changed during decades of scholarship: For instance, Betz and his collaborators who provided an English translation of the Graeco-Egyptian texts omitted ticket oracles and the *Sortes Astrampsychi* because their ritual context and sociohistoric background seem to be different than the one of prayers, curses and spells. Speaking of the *Sortes Astrampsychi*, it would be worth examining their position in the nearly twenty medieval manuscripts. Without going in detail, it is remarkable that they are often grouped together with astrological texts on the single codices⁷⁶. It is our hope that editions of new material, especially from Narmuthis, and re-interpretations of texts, will lead to further information on late antique (and beyond) Egyptian astrology and divination and their position in the history of science.

BIBLIOGRAPHY

PRIMARY SOURCES:

- ANTIOCHUS OF ATHENS AP. RHETORIUS,
 - “Thesaurοi”, in FRANZ BOLL and FRANZ CUMONT, eds., *CCAG I*, Brussels, 1898, pp. 140-166.
- BETZ, HANS DIETER, ed.,
 - *The Greek Magical Papyri in Translation, including the Demotic Spells*, Chicago/London, 1992² (1986), repr. 1996.
- BOMHARD, ANNE-SOPHIE VON,
 - *The Naos of the Decades: From the Observation of the Sky to Mythology and Astrology*, Oxford, 2008.
- BONNER, CAMPBELL,
 - *Studies in Magical Amulets, chiefly Graeco-Egyptian*, Ann Arbor, 1950.
- CALVO MARTÍNEZ, JOSÉ and DOLORES SÁNCHEZ ROMERO, intro., trans. and annot.,
 - *Textos de Magia en Papiros Griegos*, Madrid, 1987.
- CUMONT, FRANZ ET AL.,
 - *Catalogus Codicum Astrologorum Graecorum*, 12 vols, Brussels, 1898-1953.

but from ‘strangers’ (ὅπὸ δὲ ἀλλοτριῶν κληρονομοῦνται). Perhaps that is the right interpretation of ἀλλοτρι.

⁷⁵ We thank Stephan Heilen for suggesting this possibility.

⁷⁶ See NAETHER, 2010, pp. 79-80.

502 DORIAN G. GREENBAUM & FRANZISKA NAETHER, “Astrological Implications in the ...”

DOROTHEUS OF SIDON,

- *Carmen Astrologicum*, ed. David Pingree, Leipzig, 1976.

ERMAN, ADOLF,

- “Ein koptischer Zauberer”, *ZÄS*, 33 (1895) 43-46.

FITZGERALD, JOHN T. and L. MICHAEL WHITE, trans.,

- *The Tabula of Cebe*, Chico, CA, 1983.

HEPHAESTIO,

- *Apotelesmaticorum libri tres*, ed. David Pingree, 2 vols, Leipzig, 1973.

HOFFMANN, FRIEDHELM and JOACHIM FRIEDRICH QUACK,

- *Anthologie der demotischen Literatur, Einführungen und Quellentexte zur Ägyptologie*, 4, Berlin, 2007.

HUGHES, GEORGE R.,

- “An Astrologer’s Handbook in Demotic Egyptian”, in LEONARD H. LESKO, ed., *Egyptological Studies in Honor of Richard A. Parker*, Hanover, NH, 1986, pp. 53-69.

MEYER, MARVIN and RICHARD SMITH, eds.,

- *Ancient Christian Magic: Coptic Texts of Ritual Power*, San Francisco, 1994.

NECHEPSO and PETOSIRIS,

- *Fragmenta magica*, in *Philologus*, Suppl. Bd. 6, pt. 1, ed. E. RIESS, Göttingen, 1892.

NEUGEBAUER, O. and RICHARD A. PARKER,

- *Egyptian Astronomical Texts. (1. The Early Decans. 2. The Ramesside Star Clocks. 3. Decans, Planets, Constellations and Zodiacs)*, Providence, 1960-1969.

NEUGEBAUER, OTTO,

- “Demotic Horoscopes”, *JAOS*, 63 (1943) 115-127.

OLYMPIODORUS,

- *Eis ton Paulon <Heliodorou>. Heliodori, ut dicitur, in Paulum Alexandrinum Commentarium*, ed. EMILIE BOER, Leipzig, 1962.

PAULUS ALEXANDRINUS,

- *Elementa Apotelesmatica*, ed. EMILIE BOER, Leipzig, 1958.

PAUSANIAS,

- *Graeciae descriptio*, ed. MARIA HELENA ROCHA-PEREIRA, Leipzig, 1973-1981.

PLATO,

- *Opera*, vol. 5, ed. JOHN BURNET, Oxford, 1907, repr. 1967.

PLUTARCH,

- *Moralia*, vol. 3, ed. WILHELM SIEVEKING, Leipzig, 1929, repr. 1972.

PREISENDANZ, KARL,

- ed., *Papyri Graecae Magicae. Die griechischen Zauberpapyri*, Stuttgart, 1973-1974.

QUACK, JOACHIM FRIEDRICH,

- *Einführung in die altägyptische Literaturgeschichte III. Die demotische und gräko-ägyptische Literatur, Einführungen und Quellentexte zur Ägyptologie*, 3, Münster, 2009².

RHETORIUS,

- *Compendium astrologicum secundum epitomen in cod. Paris. gr. 2425 servatam*, eds DAVID PINGREE and STEPHAN HEILEN, Berlin/New York, forthcoming.

RUELLE, C.-E.,

- "Le Livre Sacré sur les Décans", *RPh*, 32 (1908) 247-277.

STEWART, RANDALL, A.,

- *Sortes Astrampsychi vol. II., Ecdosis altera*, Bibliotheca Scriptorum Graecorum et Romanorum Teubneriana, Munich, 2001.

THEOPHILUS OF EDESSA,

- *De rebus praesertim bellicis* (= *CCAG XI/1*, pp. 204-266, 270-271).

THOMPSON, HERBERT,

- "Demotic Horoscopes", *PSBA*, 34 (1912), 227-233.

VETTIUS VALENS,

- *Anthologiarum libri*, ed. WILHELM KROLL, Berlin, 1908.
- *Anthologiarum libri novem*, ed. DAVID PINGREE, Leipzig, 1986.

WESSELY, CARL,

- "Griechische Abtheilung", in JOSEF RITTER VON KARABACEK, ed., *Papyrus Erzherzog Rainer. Führer durch die Ausstellung. Mit 20 Tafeln und 90 Textbildern*, Vienna, 1894.

WESSELY, CARL,

- *Studien zur Palaeographie und Papyruskunde*, repr. Amsterdam, 1965-1969.

SECONDARY SOURCES:

AMANDRY, PIERRE,

- *La mantique apollinienne à Delphes. Essai sur le fonctionnement de l'oracle*, Paris, 1950.

BOUCHÉ-LECLERCQ, AUGUSTE,

- *L'astrologie grecque*, Paris, 1899.

BRASHEAR, WILLIAM M.,

- "The Greek Magical Papyri: an Introduction and Survey; Annotated Bibliography (1928-1994)", in WOLFGANG HAASE, ed., *ANRW*, Berlin/New York, 1995, pp. 3380-3684.

BURKHARDT, EVELYN,

- "Hebräische Losbuchhandschriften. Zur Typologie einer jüdischen Divinationsmethode", in KLAUS HERRMANN, MARGARETE SCHLÜTER and GUISEPPE VELTRI, eds., *Jewish Studies Between the Disciplines – Judaistik zwischen den Disziplinen. Papers in Honor of Peter Schäfer on the Occasion of his 60th Birthday*, Leiden/Boston, 2003, pp. 95-148.

FRASER, P. M.,

- *Ptolemaic Alexandria*, Oxford, 1972.

GREENBAUM, DORIAN GIESELER,

- "Calculating the Lots of Fortune and Daemon in Hellenistic Astrology", *Culture and Cosmos*, 11 (2007), 163-187.
- "The Daimon in Hellenistic Astrology: Origins and Influence", Ph.D. Thesis, Warburg Institute, University of London, 2009.
- "The Lots of Fortune and Daemon in Extant Charts from Antiquity (First Century BCE to Seventh Century CE)", *MHNH*, 8 (2008) 173-190.

GUNDEL, WILHELM,

- *Dekane und Dekansternbilder: Ein Beitrag zur Geschichte der Sternbilder der Kulturvölker*, Glückstadt/Hamburg, 1936.

JUNKER, HERMANN,

- *Die Onurislegende*, Vienna, 1917.

LEHOUX, DARYN,

- *Astronomy, Weather, and Calendars in the Ancient World: Parapegmata and Related Texts in Classical and Near Eastern Societies*, Cambridge/New York, 2007.

LEITZ, CHRISTIAN, ed.,

- *Lexikon der ägyptischen Götter und Götterbezeichnungen*, vol. 3, *OLA* 112; Leuven/Paris/Dudley, MA 2002.

MINAS-NERPEL, MARTINA,

- "A Demotic Inscribed Icosahedron from Dakhleh Oasis", *JEA*, 93 (2007) 137-148.

NAETHER, FRANZISKA,

- *Die Sortes Astrampsychi. Problemlösungsstrategien durch Orakel im römischen Ägypten, Orientalische Religionen in der Antike*, 3, Tübingen, 2010.

NAETHER, FRANZISKA and MICAH ROSS,

- "Interlude: A Series containing a Hemerology with Lengths of Daylight", *EVO*, 31 (2008) 52-91.

NEUGEBAUER, OTTO and HENRY BARTLETT VAN HOESEN,

- *Greek Horoscopes*, Philadelphia, 1959, repr. 1987.

NOLLÉ, JOHANNES,

- *Kleinasiatische Losorakel. Astragal- und Alphabetchresmologien der hochkaiserzeitlichen Orakelrenaissance*, *Vestigia*, 57, Munich, 2007.

OATES, JOHN F., ROGER S. BAGNALL, SARAH J. CLACKSON, ALEXANDRA A. O'BRIEN, JOSHUA D. SOSIN, TERRY G. WILFONG and KLAAS A. WORP,

- *Checklist of Greek, Latin, Demotic and Coptic Papyri, Ostraca and Tablets*, <http://scriptorium.lib.duke.edu/papyrus/texts/clist.html>, May 2011.

PREISENDANZ, KARL,

- "Review of 'Wilhelm Gundel, Dekane und Dekansterbilder'", *GGA*, 201 (1939) 129-149.

QUACK, JOACHIM FRIEDRICH,

- *Beiträge zu den ägyptischen Dekanen und ihrer Rezeption in der griechisch-römischen Welt*, Habilitationsschrift, Freie Universität Berlin, 2003.
- "Dekane und Gliedervergottung. Altägyptische Traditionen im Apokryphon Johannis", *JbAC*, 38 (1995), 97-122.

QUAEGEBEUR, JAN,

- *Le dieu égyptien Shai dans la religion et l'onomastique*, *OLA*, 2, Leuven, 1975.

SFAMENI GASPARRO, GIULIA,

- "Daimôn and Tuchê in the Hellenistic Religious Experience", in PER BILDE, TROELS ENGBERG-PEDERSEN, LISE HANNESTAD and JAN ZAHLE, eds., *Conventional Values of the Hellenistic Greeks*, Aarhus, 1997, pp. 67-109.

SPIEGELBERG, WILHELM,

- "Die ägyptischen Namen und Zeichen der Tierkreisbilder in demotischer Schrift", *ZÄS*, 48 (1910) 146-151.

STADLER, MARTIN ANDREAS,

- *Isis, das göttliche Kind und die Weltordnung. Neue religiöse Texte aus dem Fayum nach dem Papyrus Wien D. 12006 recto*, *MPER*, 28, Vienna, 2004.

THISSEN, HEINZ-JOSEF,

- “Annotationes Demoticae, 1. Zum Refrain des P. Insinger”, *Enchoria*, 28 (2002-2003), 98-102.

WIT, CONSTANT DE,

- *Le rôle et le sens du lion dans l'Égypte ancienne*, Leiden, 1951.

YIFTACH-FIRANKO, URI,

- *Marriage and Marital Arrangements. A History of the Greek Marriage Documents in Egypt. 4th century BCE – 4th century CE*, Munich, 2003.



Figure 3: P. Vindob. inv. G 02311 recto and verso (= PGM 50).
Photographs courtesy of the Österreichische Nationalbibliothek, Vienna