# P.Duk.inv. 729, Magical Formulae 

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FROM The collection at Duke University I publish here a fragmentary opisthographic papyrus with magical formulae in a script of IIP or IIIP. ${ }^{1}$ The $\hat{\imath}$ side has three recipes: for a love-potion to be given to a woman, for a spell to make a man mute before a woman and thus hateful to her, for another to bring a woman to a man through the use perhaps of inscribed magical charaktêes. There follow, on the $\leftrightarrow$ side, directions for an entreaty of the Sun, which would have filled that side and continued on another leaf. Words in the fragmentary parts of the entreaty suggest that it could be used as a charm to win favor.

The papyrus, I assume, is a leaf from a codex. The height of the leaf as we have it is 0.133 . Preserved top and bottom margins are 0.014 and 0.021 respectively, thus in the ratio of 2:3 that E. G. Turner considers typical of codex leaves; ${ }^{2}$ presumably then the original height is preserved, at least ap-

[^0]proximately. The height of the text-block of the papyrus, made up of 27 lines on each side, is 0.107 . Letters are lost at the right on the $\downarrow$ side, at the left on the $\leftrightarrow$ side; the average width of the block may be reconstructed with fair certainty as ca 0.094 . To the left of the text on the $\imath$ side is a preserved margin of 0.010 ; presumably the same stood at the right; therefore the original width of the leaf was at least ca 0.114 . The format would have been rather small and squarish, H. $0.133 \times \mathrm{min}$. W. 0.114, much like that of Turner's Group 10 (Typology 22). There is no kollêsis, but this is not surprising in a leaf of a codex of such small size. If the leaf is in fact from a codex, the codex may well have consisted of a collection of magical formulae.

Features of script worth noting are $i$ and the singly-dotted $\dot{v}$ and the abbreviations $\mu \nu \rho \imath] \kappa c$ no doubt for $\mu \nu \rho$ íк( $\omega$ ) $\sigma(\mathrm{ov})$ (18) and $\varepsilon \tau \varepsilon \kappa^{-}$for $\check{\varepsilon} \tau \varepsilon \kappa(\varepsilon v)(23)$. Where the left-hand parts of lines are preserved (on the $\hat{\imath}$ side), we see that the recipes are separated with paragraphoi; the second, the third, and possibly the first recipes beginning in ekthesis. Occasionally there is an upper bar over a few letters of a magical word. The right-hand ends of lines on the $\leftrightarrow$ side are not very evenly aligned.

Except in $\varepsilon i \varsigma, \pi \varepsilon i v$, and $\pi o t \varepsilon \hat{\imath}, \varepsilon \iota$ is spelled u .


[^1]

]. $\varepsilon \kappa \alpha \_$
]. $\omega$ $\pi \mathrm{ot}] \eta \mathrm{co}^{-}$ ]. $0 \alpha$
] $\tau \eta v$ ].cool $\omega$

1 ecthesis here less than in 13 and $19 \quad 2 \kappa[$ : vertical at edge of break at right $8 \lambda[$ : diagonal rising into break at right $10 \mathrm{o}[$ : loop opening into break at right 11 .[: vertical at edge of break at right $14 \lambda[$ or $\chi[\quad \gamma[$ : vertical at edge of break at right $17 \alpha[$ or $\omega[\quad 18 \alpha$ or $\omega \quad 20$.[: lower tip of diagonal rising into break $23 \Delta[$ [: upper tip of diagonal descending into break at right and below 37].: vertical split by break 40 y or $\omega$

Text:




ővo-]

$\left.\alpha \zeta \alpha \rho \alpha o \imath \alpha \beta \alpha \lambda \eta\left[{ }^{[a 2}\right]\right] \alpha \rho \mu \alpha \rho^{\prime} \imath^{\prime} \delta \alpha^{v} \varphi \vee v^{v} v \imath \alpha[-\quad$ cas $]$
$\zeta \alpha \theta \varepsilon \omega 0 v \mathrm{~A} \beta \rho \alpha \sigma \alpha \xi \dot{\varepsilon \varepsilon \varepsilon}{ }^{v} \eta \eta^{v} 111{ }^{v}$ oooooo [${ }^{[v}$ vvvvvv]
 $\dot{\alpha} \pi \mathrm{o} \rho-]$


[ő̌v $\varphi$ к $\alpha i$ (?)]

$12 \omega \varsigma \tau \varepsilon \sigma \sigma[\alpha \rho \alpha ́ \kappa ı \varsigma . \quad \dot{v} \quad a \quad c] \quad a \quad\left[\begin{array}{lll}t & t\end{array}\right]$
[-]

 Meг̀̀ ]
 $\gamma \rho \alpha ́ \psi o v]$




$$
\delta(\varepsilon) \hat{\imath}(v \alpha) . »]
$$

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    19 K\alpha\tau\alphá\delta\varepsilon\sigma\mu[о\varsigma ] <o\imathn̂\varsigma \tau\alphà TO[-ca5 <̈\alpha-]
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 vó $\mu$ ov


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    Поє\varepsilonî \tau\alphá[v\tau\alpha. \Lambda\alpha\beta\grave{vv \tau\alphá}\beta\lambda\alphav] к\alpha\sigma\iota\tau\varepsilonрív[\etav \varepsiloṅ\gamma\chi\alphá}-
    \rho\alpha\xiov \tau[ov̀\varsigma \chi\alpha\rho\alphaк\tau\etaŋ\rho\alpha\varsigma к\alphai``]<Фı\lambdaí\tau\omega \mu\varepsilon [\tauòv \delta(\varepsilon)\hat{\imath}(v\alpha),öv ह̈-]
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                                    \pi\alphá]]\sigma\eta \pi\varepsilon\rhoı\pi\tau[\omegá\sigmaı.» 'E\piì (\delta\grave{cे?) \tau\etàv]}]
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        \alphai\gammav-]
    \pi\tau\imath\sigma\tau\grave{ \kappa[\alpha\tau\grave{\alpha}\tauov̂ \mu\varepsilon\gamma\alphá\lambda}\lambdaov 0\varepsilonov̂.] * * * * [* * * ]
    IAI * * * [ * * * * * *] * [\Phi\\lambdaí\tau\omega \mu\varepsilon]
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        к\alphaì \pi\rhoò\varsigma \pi\alpha人\sigma\alphav
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                \muov, o
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    [\Sigma\alpha\tau\rho\alpha\pi\varepsilon]\rhoк\mu\eta\varphi\mp@subsup{\varphi}{}{v}}\textrm{A}\varphi0,\pi\alpha\hat{\imath}\mathrm{ ó < }\rho\chiо́\mu\varepsilonvo\varsigma \pi\alphaî\varsigma к\alphaì \lambda\eta'\gamma\omegav \pi\rho\varepsilon\sigma
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                                    \alphai0\varepsiloń-
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                                    \chiiov
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    [-a5-]. \alpha\varepsilon\eta\'ov\omega \pi\rho[к\mu\eta\mu Bıov Bı\betaıov] Bıov Bı\betaıo[v]
    [Bıov Bi\grave{\beta}]\imathov к\alphaì \tauò к\rhov\pi\tauò[v oैvo\mu\alpha\alpha"6]\alphav\alpha\tau\imath
    [-ca5- \lambda]\alpha\mu\pi\rhoóç, i\lambda\alpha\rhoós .[-cu 11-] \pioó\eta\sigmao(v)
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    [a4} عỉ]s tòv \alphaî̀vv\alpha [_ca 13-]. Mí0\rho\alpha \sigmaov-
    [\mu\alpha\rho\tau\alpha] \mu\alpha\rho\beta}\alpha~\alpha\dot{\rho}\beta\alpha\mp@code{[-ca 12-}]\eta\varphi\omega
    [ca5 ]? \alphai\hat{i}vvi [-ca12"] \&̀ к\alphai
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$54\left[-\quad{ }_{c a 2}\right]$. $̧$ ó $\alpha i \hat{\omega} v(?)$







Translation:
( $\hat{\imath}$ ) (1-13) A drink tested by many. Taking (masc.) one vine leaf in the left hand with two fingers, place it in the right hand and write on the leaf with myrrh ink the names below-for indeed they are unutterable. The name is that of Aphrodite: "AZandÔ IaZa[ca 5 ]AZAraoiabalêt ${ }^{[\text {an } 2]}$ ]armarida Phnouni ai Zatheôou Abrasax eee ÊÊ III OOOOO [YYYYYY] ÔÔÔÔÔÔÔ. Let so-and-so (fem.) love me, so-and-so (masc.), with a divine and unutterable and inexhaustible love. Be subject to me, (to) so-and-so (masc.). At once (twice), quickly (twice)." Dissolve the leaf in unmixed wine and ... and give (it to her) to drink ... up to four times.
(13-18) Spell for making mute. Taking Ombrius' moisture, put it into a jug and put a tadpole (?) into Ombrius' moisture, covered. After 40 days you will find in the jug a toad (?), taking the blood of which, write onto (its) skin (the name of) her whom you want to hate (him). Then write also on the tablet (the name of) him whom you want to be made mute: "... AbRAK BRABA ... AbRABA ... Make so-and-so (masc.) mute before so-and-so (fem.)."
(19-27) Binding spell. ... to drive by means of charaktêres (?), whether she (?) approves or not. It does all. Taking a tin tablet, inscribe on it the charaktêres (?) and: "Let so-and-so (fem.), whom so-and-so bore, love me, so-and-so (masc.), whom so-and-so bore, even in any circumstance." On the tablet write also: "I bind so-and-so (fem.) down in Egyptian by the great god (?) (CharaktÊres) Iai (Charaktêres.) Let so-and-so (fem.) love me, so-and-so (masc.), because of these charakteres (?)."
$(\leftrightarrow)(28-$ end $)$ Hymn (?) of intercession to Helius. Indeed it does all things - in regard to law and lawcourt and passions of magistrates and in regard to any need-that you want to succeed by intercession.

It is：＂Hail，you who rise out of material space，star EKMÊPH SATRA－ PERKMÊPH，APHTH，child（？）who begin a child and end an old man， who sit upon the lotus，for whom heaven has become a dancing－ floor，who are above the Cherubim．Hail，Abrasax，called the heavenly sire Elôeu．You are the great Arouêr．You are the great god called Hephaestus in Memphis．You are the unborn element born in the eternal，through whom（comes）light，through whom also dark（？），through whom life and death，from the narrows（？）into ．．．＂

1－12：A love－potion to be made from a leaf inscribed with the secret names of Aphrodite that is then dissolved in wine and given to a woman．Tested，its title claims；a recipe for a divination spell，at PGM III 424－466，has another such
 Manetho＂（439）．The leaf here is be put into the right hand and then inscribed，presumably with the left；the specification of the hand to be used figures elsewhere in the magical texts：at PGM XXXVI 257 the left hand is to pick up，from a triple cross－ roads，a potsherd，or at XII 191 to smear the body with oil prior to divination；in another divination spell，at I 262－347，in summoning the god one holds a staff in the left hand and in－ scribed leaves in the right，but to dismiss him one transfers the objects to the other hand．

3：New in this sense is $\kappa \alpha \theta 0 \pi \sigma \gamma \rho \alpha ́ \varphi \varepsilon ⿺ 辶$ ，which in its few previ－ ous attestions has meant＂describe＂or＂append a signature to＂： LSJ s．v．

6：Many of the elements in the secret name are unique here， and except where there are blank spaces on the papyrus it is not clear how it should be articulated．The letters $\varphi$ vov figure in $\Phi$ vovкєv $\tau \alpha \beta \alpha \omega \theta$ ，a regular member of the $М \alpha \sigma \kappa \varepsilon \lambda \lambda \omega$ M $\alpha \sigma \kappa \varepsilon \lambda \lambda_{\mathrm{I}}$ logos，which is discussed at ZPE 100 （1994）328－329． They also appear at SupplMag 44．1，whose editors interpret them as $\varphi v o v\langle v\rangle$ ，an Egyptian definite article $p(h)$－plus $\overline{\mathrm{N}} \overline{\mathrm{O}} \overline{\mathrm{N}}$ ＂abyss＂；cf．also PGM LXII 77 pvoov $\varphi \varepsilon ⿺ 𠃊 o v \omega, ~ V I I ~ 401 ~ \varphi v o v \beta \varepsilon-~$ $v \varepsilon \varepsilon ı$ ．Is the blank space in $\varphi v^{2} v^{v} v i \alpha[$ a mistake？We might have expected $\varphi \vee o v v^{v} 1 \alpha$ ，for we find the independent vocable $1 \alpha \iota$ at XII 466，perhaps also in 26 below．Z $\alpha \theta \varepsilon \omega o v$ invites comparison with $371 \zeta \alpha \theta \alpha \iota \omega v$（Preisendanz：$\zeta \alpha \theta$ Ai $\omega$ v？）．

7：$\varepsilon \varepsilon \varepsilon \eta \eta$ is a mistake for $\alpha \varepsilon \varepsilon \eta \eta \eta$ ，the intention no doubt be－ ing for the vowels to be written in a conventional form，with
one $\alpha$ ，two $\varepsilon$＇s，three $\eta$＇s，etc．，as at SupplMag 3.2 and elsewhere． For such use of vowels in magical texts see F．Dornseiff，Das Alphabet in Mystik und Magie（Berlin 1925）35－60，esp． 58.

8－9：Greek erotic spells call love divine（PGM X 7，XV 3； SupplMag $48 \mathrm{~J}-\mathrm{K}$ 13），inexhaustible（42．52），or both（45．48－49）， but apparently only here（and infra 50？）＂secret＂or＂unutter－ able．＂

10：Write，that is，$\eta \neq \eta \eta \eta \delta \eta$ ，$\tau \alpha \chi \grave{v} \tau \alpha \chi v ́$ ，a common phrase at the ends of commands in aggressive magic of Roman Imperial date，a survivor，evidently，of early Eastern practices，for it is found in Akkadian and Phoenician spells of the seventh century B．C．：see Th．Gaster，＂The Magical Inscription from Arslan Tash，＂FNES 6 （1944）186－188．The abbreviation of the Greek is found at PGM XII 143，396，etc．：see my＂Notes from Carthage，＂ZPE 111 （1996）115－123，at 119．（R．Daniel has adduced a single $\eta \check{\delta} \delta \eta$ also at the end of a request in a papyrus document of 254 B．C．：＂P．Lond．VII 1973 ［＝SB III 7263］，＂ ZPE 61 ［1985］125－126．）

11：غ̇к $\kappa$ ］v́ $\sigma[\alpha \varsigma]$ ？Swallowing of magical writings：F．Pradel， Griechische und süditalienische Gebete，Beschwörungen und Rezepte des Mittelalters（ $=$ RGVV 3.3 ［Giessen 1907］）128－129，commentary on SupplMag 75．3．In the lacuna at the right must have stood directions that the dosage could be repeated．

12：$\tau \varepsilon \sigma \sigma[\alpha \rho \alpha \kappa о \vee \tau \alpha ́ \kappa ı \varsigma$ is not to be ruled out．
13－18：$\mu \nu \rho \iota к \eta$ б́бıov，a＂muting spell＂to make a man silent to a woman and therefore hated by her．The noun，attested only here，comes from the verb $\mu \nu \rho ı \kappa o ́ \omega$＂make mute＂（commentary on SupplMag 55 D－G 1），which itself has occurred only in magi－

 be mute before a man or a man before a woman＂；SupplMag 55 D－G 1－2，7， 17 иирíкобоv（for－$\omega \sigma$ ov）（ $\alpha$ v̉兀òv）Xıұоعı〈v〉．．． кん兀є́vav七ı＇Epuíov，＂make Chichoïs mute ．．．before Hermias＂；${ }^{4}$

[^2]and no doubt at $95 \leftrightarrow 4$ ] $\mu \nu \rho ı к[$. The writer of PGM XIII 638 $\mu \nu \rho \imath\{\kappa\} \dot{\omega} \tau \alpha \tau \varepsilon$ may well have been influenced by such a root. A Latin example of a muting spell: DTAud 139. We may think too of Papageno.

13-14: $\lambda \alpha \beta \omega \hat{\nu}$ is so common at the beginning of magical recipes (cf. line 1) as to be virtually certain here and in 21. "(Zeus) Ombrius' moisture" here, if correctly restored, is an elevated expression comparable to PGM IV 225 Gíviov (hapax)
 тоя, VII 224, VIII 72 v̋ $\delta \omega \rho$ ő$\mu \beta \rho \iota \mu$ ov, and SupplMag 90 D 3 vo $\delta \alpha \tau \iota$ óp[. Lines $14-16$ suggest that something was to be put into (?) the water and that after (?) forty days a creature was to be found there that had blood and skin and a name that was masculine or neuter. My restorations, "tadpole" and "toad," are only exempli gratia, as is the covering for the vessel (for the creature must not jump out), and in fact I have supplied $\varphi p$ v̂vov "toad" rather than $\beta \dot{\alpha} \tau \rho \alpha \chi o v$ "frog" only because it fits the available space slightly better. According to Dr. Clarke (see n.1), the maturing tadpole, an "occasional eater," could well survive for forty days in rainwater, and almost always it is the male frog or toad that sings to its desired female. In SupplMag 55, referred to above, which includes the wish 5-7 "let Hermias hate Chichoïs," both muted and hater are to be affected. I have therefore assumed two operations here: the woman's name to be inscribed on the toad's skin, then the man's on an $\grave{ } \lambda \alpha \sigma \mu \alpha$; even if this latter is previously unmentioned, the restoration in 17, with its definite article, seems inescapable. May we speculate that as toad is to human swain, uncroaking toad is to silenced swain who is to be scorned? This silencing seems to be the purpose of inscribing the man's name on the tablet, along with his "croaks": $\alpha \beta \rho \alpha \kappa \beta \rho \alpha \beta \alpha[$ c. 6 - $] / \alpha \beta \rho \alpha \beta \alpha$ [-] (cf. Ar. Ran. 209ff. $\beta \rho \varepsilon \kappa \varepsilon \kappa \varepsilon \kappa \varepsilon ̀ \xi ~ к о \alpha ́ \xi, ~ e t c.) . ~$

As for the tadpole that the recipe calls for, if indeed the restoration is correct, not only does the sex go unspecified but it is hardly likely that the operant could have been expected to distinguish male from female in this early stage of growth. This
ellenistica (Bologna 2002) 62-69, at 66-67, where I propose that $\tau 0 v o-$ may be the remnant of a lexical note calling for a name.
is to say that it is not to be assumed that the adult into which it grew would be a singing male, or that the point of the drawing of the blood to inscribe its skin was necessarily chiefly to kill this particular animal and thus to silence it: the "magic" must have lain elsewhere.

Pliny tells us ( $H \mathcal{N} 32.50$ ), in any case, that authorities try to outvie one another in relating marvels of the toad; indeed, although I have no parallel for the magical use of a toad nurtured in rainwater, frogs and toads are used in many operations of ancient magic (see e.g. M. Wellmann, "Frosche," RE 8 [1912] 113-119.) ${ }^{5}$ In a "muting spell," the toad may be particularly appropriate, for Pliny goes on to say that if a toad is brought into an assembly of people, they fall silent. In addition, there is a recurrent story about silence supernaturally imposed on batrachia themselves: Aelian, for example, reports (NA 3.37) that the people of Seriphus claim that Perseus, tired from his struggle with Medusa and unable to sleep because of the frogs' croaking, called on his father Zeus to silence them; from then on, frogs, even if introduced onto the island from elsewhere, were never again heard there. Others say that the hero was Heracles (Ant. Car. 4). Common to both legends, in either case, was Zeus as divine father - conceivably also in the later tradition that Martin Luther called on God (the Father?) to curse the frogs that were distracting him from his work on translating the Bible: to this day frogs croak not in the Schanzgraben at Wittenberg (H. Bächthold-Stäubli, "Frosch," HDA III 124-142, at 130). If this is the pattern, relevant may be the use of the liquid of Zeus himself, which would work on the principle of analogical magic: just as Zeus through his water mutes the toad, so too shall the toad's blood and skin mute the man to be hated.
 $\gamma \rho \alpha] \psi o v$ instead.
${ }^{5}$ A German superstition about the toad (H. Bächtold-Stäubli, "Kröte," HDA V 608-635, at 614), even if it does not involve silencing the person to be hated, may be relevant: if a witch wants to draw a man away from his wife, she puts a dead toad under his threshold; as long as it is there the man will hate his wife and love the witch.

19-26: For a katadesmos (curse tablet) to bring a woman to a man. Of lead katadesmoi we have abundant examples, from the late sixth or early fifth century B.G. through late antiquity. Introduction: $\dagger \mathrm{K}$. Preisendanz, "Fluchtafel (Defixio)," $R A C 8$ (1972) 1-24, and D. Ogden, "Binding Spells: Curse Tablets and Voodoo Dolls in the Greek and Roman Worlds," in V. Flint, R. Gordon, G. Luck, and D. Ogden (eds.), Witchcraft and Magic in Europe. Ancient Greece and Rome (London 1999) 1-90; bibliography: Preisendanz, op.cit., and my "A Survey of Greek Defixiones not included in the Special Corpora," GRBS 26 (1985) 151-197, and "New Greek Curse Tablets (1985-2000)," GRBS 41 (2000) 5-46 (also available at http://www.duke.edu/ web/classics/grbs/indices.html).

20: "Whether she chooses or not:" cf. PGM IV 2251-2252,
 $\theta$ ह́д 1 s in a coercive hymn to the lunar goddesses, but I have not found a similar expression in an erotic spell.

21: Tin for such black magic is rarer than lead: we do find instructions at PGM IV 2213-2217 for inscribing a tin tablet غ̇лі̀ $\dot{\alpha} \rho \mu \alpha \tau о \rho \alpha \kappa \tau \omega ิ v " c h a r i o t-c r a s h e r s " ~ a d d . l e x.), ~ a t ~ V I I ~ 417-422 ~$ for a ко́тохо૬, and at 459-466 for an erotic spell; see also Ph. I.
 イ $\alpha o \gamma \rho \alpha \varphi{ }^{\prime} \alpha$ 8 (1925) 302-346, at 305-306. Normally, the use of tin is protective, as at SupplMag 94.36-39 (against strangury), where the editors give examples.

22-23: Lineage through the mother in magical texts: my "CIL VIII 19525(B). 2 QPVVLVA $=q($ uem $) ~ p(e p e r i t) ~ v u l v a, " ~ P h i l o l o-~$ gus 120 (1976) 127-132, J. B. Curbera, "Maternal Lineage in Greek Magical Texts," in D. Jordan, H. Montgomery, and E.Thomassen (eds.), The World of Ancient Magic (Bergen 1999) 195-204.
 leled in magical texts, but the restoration seems inevitable. 'E $\pi i$
 no more than a suggestion, and it may be objected that if the same tablet is referred to, repetition of $\tau \dot{\alpha} \beta \lambda \alpha \nu$ and the verb is otiose. Another possibility is that the words of 24-27 are to be inscribed on a second tablet, of a different metal, e.g. $\Lambda \alpha \beta \omega े \mathrm{v}]$ /
 «к.), etc.»

24: The first-person $\kappa \alpha \tau \alpha \delta \hat{\omega}$ is the verb par excellence of earlier curse tablets, particularly in Attic examples of IV": see my "Towards the Text of a Curse Tablet from the Kerameikos," in A.
 $\mu v \dot{\mu} \mu \eta v$ Adolf Wilhelm (1864-1950) (Athens 2004) 291-312, at 307-308. Here we have its apparently single instance in a later magical text.

24-25: In the papyrus formulae attention is given to the special languages in which divinities are addressed, e.g. in the instructions at PGM XIII 81-86 for the invocation of the

 кıбтí … iєpa兀ıбтí ..., "I invoke you, lord, in inscribed bird-talk '...', in hieroglyphics '...', in Hebrew '...', in Egyptian '...', in baboon-talk '...', in falcon-talk '...', in hieratic '...'’; later the operant is to say $\dot{\varepsilon} \pi\llcorner\kappa \alpha \lambda o v ̂ \mu \alpha i ́ ~ \sigma \varepsilon, ~ \tau o ̀ v ~ \tau \grave{\alpha} \pi \alpha ́ v \tau \alpha \alpha \varepsilon \rho เ \varepsilon ́ \chi o v \tau \alpha, \pi \alpha ́ \sigma \eta ़$
 things, in every tongue and every dialect." To this same god, who has an Egyptian name (153-154 tò $\delta$ è puбiкòv ővo $\mu \boldsymbol{\alpha}$ $\alpha i \gamma v \pi \tau \imath \sigma \tau i ́ \cdots)$, the Sun sings a hymn in "hieroglyphics" and
 charaktêres of 25-26 represent Egyptian? Charaktêres such as these are not uncommon in magical texts, but of their meaning, if any, there has been no general study, a need stressed long ago by A. D. Nock, "Greek Magical Papyri," 7EA 14 (1928) 211 235, at 235 (= Essays on Religion and the Ancient World [Oxford 1972] 176-194, at 194). Aëtius Med. (12.51) preserves a note by the physician Philagrius (III/IVp) that implies, if he is referring to charakteres of the type found in magical texts, that they were pronounceable: a drug under discussion is, they say (i.e. as one finds in recipe-books), more effective if while boiling it you spit once into the pot and once onto the ground. After this one finds, in such books, ỏvó $\mu \alpha \tau \alpha \beta \alpha \rho \beta \alpha \rho \iota \kappa \alpha ́$, written in a curious script ( $\pi \varepsilon \rho \rho^{\prime} \varepsilon \rho \gamma o v$ è $\chi o ́ v \tau \omega v ~ \tau \grave{\eta} v \gamma \rho \alpha \varphi \eta$ ŋ́). "It seemed to me superfluous and inappropriate to copy them out, for the drug prepared without the incantation ( $\dot{\varepsilon} \pi i \varphi \theta \varepsilon \gamma \xi 15)$ works as well as that prepared with it." We may think of a silver phylactery at Rome (G. Bevilacqua, "Iscrizioni greche magiche di Roma. Alcune espressioni cultuali," SEL 20 [2003] 115-131, at 119), whose text includes $\lambda \dot{\varepsilon} \gamma \varepsilon$ plus several charaktêres. One of the papyrus
recipes cited above, for an erotic spell written on a tin tablet, calls for the charaktêres (PGM VII 464-465)
to be inscribed; to the third, fourth, and fifth of these and to the two vowels followed by the last charaktêr may be compared the second, third, and fourth on the present papyrus and the vowels and charaktér beginning its line 26.

 $\chi$ Oovíov $\theta \varepsilon o v ิ \alpha \rho ı \omega \rho^{\prime} \varepsilon v \omega \rho^{\prime}$. Equally possible is e.g. $\kappa[\alpha \tau \grave{\alpha} \tau \hat{v} \mu$. $\theta$.$] .$

26-27: Restoration of the Greek only exempli gratia.
28-end: An appeal to the Sun. The supplement $\begin{gathered}\mu v o s \\ \text { at the }\end{gathered}$ beginning is only exempli gratia, for euxn "prayer" would equally suit; and $\varepsilon ่ v \tau v \chi i \alpha$, here translated "intercession," may mean no more than "encounter" or "audience." For such encounters or meetings with the Sun see S. Eitrem, "Die ov́बтобıs und der Lichtzauber in der Magie," SymbOsl 8 (1929) 49-53. The
 somewhat awkward, the result perhaps of a scribe's being distracted by the insertion of the examples in the $\pi \rho$ ós phrases.

31-32: Ек $\mu \eta \varphi$ as an independent vocable seems new here (a deformation of $\pi \varepsilon \rho \kappa \mu \eta \mu$ - line 41 below-without the Egyptian definite article?); we find similar letters in PGM O 2.24 $\zeta \alpha v \varepsilon \kappa \mu \eta \tau$, and the sequence forms part of $\sum \alpha \tau \rho \alpha \pi \varepsilon \rho \kappa \mu \eta \varphi$ just afterwards (32), which is itself well attested (XII 185, 917; F. Ll. Griffith and H. Thompson, The Demotic Magical Papyri of London and Leiden [Oxford 1921] 22 4; other examples: R. D. Kotansky, Greek Magical Amulets I [Opladen 1994] 48.2) and has attracted theories as to its meaning, possibly "house of darkness" or "lord of darkness" (Brashear 3596). Is A $\varphi \theta$ a deformation of $\Phi \theta \alpha$ ? If so, perhaps the three letters following it are part of the name: cf. PGM XIII 1056 П $\alpha \boldsymbol{1} \theta \cdot \Phi \theta \alpha$.

32-33: The Sun young when rising, old when setting: I 33-
 $\gamma \varepsilon ́ \rho \omega v)$. In Egyptian texts the Sun in his heavenly journey is called the child Kheper at daybreak, the man Re at noon, and the old man Atum at nightfall: J. Gw. Griffiths, "Solar Cycle," in D. B. Redford (ed.), Oxford Encyclopedia of Ancient Egypt II (Ox-
ford 2001) 476-480, at 477.
33-34: Heaven as a dancing-floor: PGM IV 1628, XII 183, LXXVII 12-13; cf. my "Two Papyri with Formulae for Divination," in P. Mirecki and M. Meyer (eds.), Magic and Ritual in the Ancient World (Leiden 2002) 25-36, at 33.

34: The expression "(seated) above the Cherubim," familiar from the Bible as a description of the god of Israel (e.g. in the doxologies at LXX Isa. 37.16 and Dan. 3.55), also appears in the magical papyri: at PGM VII 634 as an epithet of Menôphri (Th. Hopfner, "Orientalisch-religionsgeschichtliches aus den griechischen Zauberpapyri Ägyptens," ArchOr 3 [1931] 119155, 327-358, at 140: "der schöne Anlegeplatz" $=M n-n f r$ "Memphis"?) in an invocation of the Memphite Asclepius and at XIII $255(\sim 334)$ in an invocation of the Sun, in which the speaker claims that he himself sits above the Cherubim.
34-35: I have not seen this spelling, E $\lambda \omega \varepsilon v$, of the angelname; it is surely a variant on the $E \lambda \omega \alpha, E \lambda \omega \varepsilon(t)$, etc., in the magical texts: cf. PGM XXXVI 42 I $\alpha \omega \Sigma \alpha \beta \alpha \omega \theta$ A $\delta \omega v \alpha$ I $\operatorname{E\lambda } \omega \alpha \_$ $\mathrm{A} \beta \rho \alpha \sigma \alpha \xi$, which associates E. not only with Jewish celestials but, as here, with the familiar Abrasax, calling them all кv́pıo ö $\gamma \gamma \varepsilon \lambda$ ou. "Abrasax" seems also to be an appellation of the Sun in a doxology at VII 505-521.

39: The traces at the end of the line are incompatible with $\sigma \dot{v}$ î̀.

40: A recipe at PGM LVIII 1-14 for a ritual diabolê and DTAud 188 (Rome?, IVp?), itself based on this recipe, refer to the impiety of burning Osiris' $\pi \alpha \pi v \rho \omega \dot{v}$, which ordinarily should mean a papyrus patch (cf. $\mu \alpha ́ \rho \alpha \theta o v / \mu \alpha \rho \alpha \theta \dot{\omega} v$ "fennel/ fennel-patch," бíкvоя/бィкvю́v "cuсumber/cucumber-patch," etc.) and is so defined by LSJ, but J. Gw. Griffith (in my "Magia nilotica sulle rive del Tevere," MedAnt 7 [2004] 693710, at 694 n.3) urges per epistt. that on Egyptological grounds it is likelier there to mean "papyrus boat" (indeed Aquila, in his paraphrase of the story of Moses in the bulrushes, calls Moses' boat a $\pi \alpha \pi v \rho \varepsilon \omega \dot{v})$. The context is too fragmentary to tell us what the word means here: the Sun's heavenly boat?

41-42: $\pi \rho[\kappa \mu \eta \mu$ restored after SupplMag 44.3-4 $\pi \varepsilon \rho \kappa \mu \eta \mu$ Bıo Bıov Bı $\beta$ ıov, whose editors explain it as Egyptian for "house of darkness;" it may be related to the $-\pi \varepsilon] \rho \kappa \mu \eta \varphi$ of line 32. Bıov: PGM V 484, XIII 1058, XVI 63. Bı $\beta$ ıov: I 129-130, II 123,

XII 81, XIII 325, XIXa 2, DTAud 269.14. Both: SupplMag
44.3-4. Suggested meanings: Brashear 3585.

42: E.g. ôvouó ह́ $\sigma \tau \iota v{ }^{1}$.] $\alpha v \alpha \tau \iota$.
 etc., "just as you are resplendent, happy, so too make me resplendent, happy."

45-46: The reading ör $] \omega \varsigma$ (46) is not at all certain, but it suits
 45 , with I $\alpha \varepsilon \omega \beta$ - as subject, or оркi弓ш "I adjure you in the name of I $\alpha \varepsilon \omega \beta$-." The long palindrome here is frequent: Brashear 3587.

47-48: Mí $\theta_{\rho \alpha \rho}$ as an appellation of the Sun: PGM III 462
 Betz, The "Mithras Liturgy" (Tübingen 2003) 98-99.
$\Sigma o v /[\mu \alpha \rho \tau \alpha] \mu \alpha \rho \beta \alpha \chi \alpha \rho \beta \alpha$ : PGM IV $1805 \sigma 0 v \mu \alpha \rho \tau \alpha \cdot \mu \alpha \rho \beta \alpha$. $\kappa \alpha \rho \beta \alpha \cdot$, O 2.21 $\sigma 0 v \mu \alpha \rho \tau \alpha \mu \alpha \xi \alpha \kappa \alpha \rho \beta \alpha$ (cf. also XIXa $44 \zeta \varepsilon \rho$ $\mu \alpha \beta \varepsilon \chi \alpha \chi \alpha \rho$ ?) in "fetching" spells. $\Sigma o u \mu \alpha \rho \tau \alpha$ has been interpreted as "protector:" Brashear 3599.

49: Or $\alpha i \omega ̀ v ~ \imath .[$ or $\alpha i \omega v \imath$.[.
50: Restored after lines 8-9.
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## Jordan PLATE 1

P.Duk.inv. 729 へ

## Jordan PLATE 2

P.Duk.inv. $729 \leftrightarrow$


[^0]:    ${ }^{1}$ I thank John F. Oates and the Rare Book, Manuscript, and Special Collections Library of Duke University for permission to publish this text, Joachim Quack (Heidelberg) for general advice about the Egyptian vocables, and Barry T. Clarke (London) for information on the biology of Egyptian batrachia (lines 13-16); I am very grateful to Grace Ioannidou (Komotini) and Armand Leroi (London) for putting me in touch with Dr. Clarke.

    Special abbreviations: Brashear = W. M. Brashear, "The Greek Magical Papyri: an Introduction and Survey; Annotated Bibliography (1928-1994)," ANRW II. 18.5 (1995) 3380-3684; HDA $=\mathrm{H}$. Bächtold-Stäubli and E. Hoff-mann-Krayer (eds.), Handwörterbuch des deutschen Aberglaubens (Berlin 1927-42, repr. 1987); $P G M=\mathrm{K}$. Preisendanz, Papyri graecae magicae ${ }^{2}$ (Stuttgart 197374); SupplMag = R. W. Daniel and F. Maltomini, Supplementum Magicum (Opladen 1990-92). All measurements are in meters. In the transcription and text below, $*=$ charaktêr.
    ${ }^{2}$ E. G. Turner, The Typology of the Early Codex (Philadelphia 1977) 25.

    Greek, Roman, and Byzantine Studies 46 (2006) 159-173

[^1]:    ${ }^{3}$ Color photographs can be viewed at http://scriptorium.lib.duke.edu/ papyrus/records/729.html.

[^2]:    ${ }^{4}$ The text at SupplMag 55 D－G 17 has $\tau$ оvoцvpıкобov（for $-\omega \sigma$ ov），ac－ cording to the editors a new compound verb，＂make mute the volume of the voice，＂now recorded in LSJ Suppl＂．The compound may be doubted，how－ ever：see my＂Il testo greco di una gemma magica dall＇Afghanistan（？）nel Museo Pushkin，Mosca，＂in A．Mastrocinque（ed．），Gemme gnostiche e cultura

