

Diagnosics of Altered Mental States: from Euripides' *Bacchae* to Medieval Arabic Texts*

Donna Shalev

The stichomythic exchange between Kadmos and Agave at Euripides' *Bacchae* 1262-1300 (tr. Kovacs), in which father coaches his daughter to (re)cognition of whose head she holds in her hands, is a chillingly memorable script. The richly woven texture of this passage, whose strands we will explore, suggest its standing as a purple patch, yet at the same time it is at the epicentre of the dénouement of the action of Euripides' *Bacchae*. It is in fact one of a handful of passages from Greek drama deemed worthy by Goethe for translation.¹

- (1) Αγ. τί δ' οὐ καλῶς τῶνδ' ἢ τί λυπηρῶς ἔχει;
What part of this causes you disgrace or pain?
Κα. πρῶτον μὲν ἐς τόνδ' αἰθέρ' ὄμμα σὸν μέθες.
First turn your eye to the heavens.
Αγ. ἰδοῦ· τί μοι τόνδ' ἐξυπέιπας εἰσορᾶν;
(*looking up*) There! What did you mean that I should look at?
Κα. ἔθ' αὐτὸς ἢ σοι μεταβολὰς ἔχειν δοκεῖ;
Does it seem the same to you or altered?
Αγ. λαμπρότερος ἢ πρὶν καὶ διειπετέστερος.
It is brighter than before and clearer.
Κα. τὸ δὲ πτοηθὲν τόδ' ἔτι σῆ ψυχῆ πάρα;
Does your mind still feel giddy?
Αγ. οὐκ οἶδα τοῦπος τοῦτο. γίγνομαι δέ πως
I don't know what you mean. But I am coming somehow
ἐννοῦς, μετασταθεῖσα τῶν πάρος φρενῶν. 1270
to my senses and have abandoned my former frame of mind
Κα. κλύεις ἂν οὖν τι κάποκρίναι ἂν σαφῶς;
Will you hear me and answer truly?
Αγ. ὡς ἐκλέλησμάι γ' ἅ πάρος εἴπομεν, πάτερ.
Yes: I have forgotten what we said before, father.
Κα. ἐς ποῖον ἦλθες οἶκον ὑμεναίων μέτα;
To what household did you come at your marriage?
Αγ. Σπαρτῶ μ' ἔδωκας, ὡς λέγουσ', Ἐχίονι.
You married me to Echion, one of the Sown Men, they say.

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¹ Goethe translates a longer passage, from Kadmos' introductory *rhēsis* (v.14 of the Artemis Verlag edition of his collected works, 'Übertragungen', pp. 294-297). *Phaethon* is the only other extended Euripidean passage he translates.

Κα. τίς οὖν ἐν οἴκοις παῖς ἐγένετο σῶι πόσει;
Well, what son was born in that house to your husband?
 Αγ. Πειθεύς, ἐμῆ τε καὶ πατρὸς κοινωμία.
Pentheus, his father's son and mine.
 Κα. τίνος πρόσωπον δῆτ' ἐν ἀγκάλαις ἔχεις;
Whose head do you have in your hands then?
 Αγ. λέοντος, ὡς γ' ἔφασκον αἱ θηρώμεναι.
The hunters told me it is a lion's.
 Κα. σκέψαι νιν ὀρθῶς· βραχὺς ὁ μόχθος εἰσιδεῖν.
Look at it properly: the effort of doing so is slight.
 Αγ. ἔα, τί λεύσσω; τί φέρομαι τόδ' ἐν χεροῖν; 1280
Ah, what am I seeing? What is this that I carry in my hands?
 Κα. ἄθρησον αὐτὸ καὶ σαφέστερον μάθε.
Look at it, get surer knowledge.
 Αγ. ὀρῶ μέγιστον ἄλγος ἢ τάλαιν' ἐγώ.
Great woe is what I see, unhappy me!
 Κα. μῶν σοι λέοντα φαίνεται προσεικέναι;
Does it seem like a lion to you?
 Αγ. οὐκ, ἀλλὰ Πειθέως ἢ τάλαιν' ἔχω κάρα.
No: in my misery I hold Pentheus' head!
 Κα. ὦμωγμένον γε πρόσθεν ἢ σὲ γνωρίσαι.
Yes, it was mourned before you even recognized it.
 Αγ. τίς ἔκτανεν νιν; πῶς ἐμὰς ἦλθεν χέρας;
Who killed him? How did he come into my hands?
 Κα. δύστην' ἀλήθει', ὡς ἐν οὐ καιρῷ πάρει.
Unhappy truth, how untimely you have come!
 Αγ. λέγ', ὡς τὸ μέλλον καρδία πήδημ' ἔχει.
Speak: my heart leaps at what is to come!
 Κα. σύ νιν κατέκτας καὶ κασίγηται σέθεν.
You killed him, you and your sisters.
 Αγ. ποῦ δ' ὤλετ'; ἢ κατ' οἶκον; ἢ ποίοις τόποις; 1290
Where did he perish? At home, or where?
 Κα. οὔπερ πρὶν' Ἀκτέωνα διέλαχον κύνες.
In the place where Actaeon was torn apart by dogs.
 Αγ. τί δ' ἐς Κιθαιρῶν' ἦλθε δυσδαίμων ὄδε;
Why did the poor man come to Cithaeron?
 Κα. ἐκερτόμει θεὸν σὰς τε βακχείας μολῶν.
He meant to mock the god and his rites by going there.
 Αγ. ἡμεῖς δ' ἐκέισε τίνι τρόπῳ κατήραμεν;
But how did we get there?
 Κα. ἐμάνητε, πᾶσά τ' ἐξεβακχεύθη πόλις.
You were out of your wits, and the whole city was possessed by Bacchus.
 Αγ. Διόνυσος ἡμᾶς ὤλεσ', ἄρτι μανθάνω.
Dionysus has destroyed us: now I realize this.
 Κα. ὕβριν <γ'> ὕβρισθείς· θεὸν γὰρ οὐχ ἠγείσθῃ νιν
Yes, he had been deeply insulted: you did not consider him a god

Αγ. τὸ φίλτατον δὲ σῶμα ποῦ παιδός, πάτερ;

Where is the dear body of my son, father?

Κα. ἐγὼ μόλις τόδ' ἐξερευνήσας φέρω.

(pointing to stretcher) Here: I bring it after a difficult search.

Αγ. ἦ πᾶν ἐν ἄρθροις συγκεκλιμένον καλῶς; 1300

Has it been properly fitted together, limb with limb?

This passage is not a recognition scene in the usual sense of long-lost relatives rediscovering each other, but rather in the sense, perhaps, of self-recognition by Agave, whom we find in a state of denial, of trauma, of crisis, of blurry vision — of *δύσγνοια*, perhaps painted with touches of *ἀλογία*, *ἀφροσύνη*, *ἔκπληξις*, *τάραγμα φρενῶν* or some other nuanced state confused with, or subsumed under the unmarked term *μανία*: Agave holds the head of Pentheus her son, but sees a lion's head. After leading a divinely sent and frenzied *σπαραγμός* of her own son, she finds herself in an altered cognitive state in which her mind does not process in a rational way external sensory or emotional stimuli, a state in which her memory recall is compromised; a state in which her sense of knowing and understanding is unassertive, shaky, hesitant.

Other investigations² have sharpened for us the notion that we cannot superimpose our distinctions of rational and irrational on the distinctions the Greeks might have drawn; and that the conception of *mania* vis-à-vis lack of logic and lack of rational thinking is internally varied within the Greek sources and the sectors of culture they represent.

Geoffrey Lloyd, in his observations on 'madness' in *Revolutions of Wisdom* (1987, 21, n. 67) emphasizes that 'the irrational' may be madness or some other cognitive dysfunction. Four types of *mania* are famously enumerated, classified and defined in Plato *Phaedrus* 244b: mantic, telestic, poetic and erotic. Erotic mania will be touched on later in this talk.³

Von Staden discusses the challenges of such a distinction between rational and irrational in the specific case of Galen. He elicits (2003, 19 with n. 19) examples of Galen's use of the term *ἄλογος* in contexts of ridicule. Some factors which make Galen's attitude seem equivocal, or complex, are his change of heart over the course of

² The immediate reference here is to other talks at the conference held in memory of Martin Ostwald, in particular by M. Finkelberg (this volume, pp. 101-108), and H. Versnel ('Split personalities: on the desperate over-contextuality of Greek gods'). In an important article brought to my attention during final proofs by P.G.McC. Brown and by D. Gera, Devereux emphasizes the relevance of Agave's self-professed state, under the term *ἀφροσύνη*. Devereux illuminates the credibility of Euripides' stichomythic psychotherapy scene in its medical details as well as its dialogue technique, which corroborates professional practice to this day. Devereux focuses on *strategy* in the dialogue, whereas in the present study I compare and contrast the *format* and phraseology with other dialogue templates mainly in literary sources. Moreover, Devereux's interest is in the *therapy* of the word, whereas the concern in the current paper is primarily on *diagnosis* by word (see n. 35 below).

³ I will not discuss prophetic mania in this context. The interplay between *μνήμη* and telestic or poetic *μανία* were presented in a talk at the conference mentioned in n. 2 above, and are discussed in Ustinova (this volume, pp. 109-132).

time, and his allegiance to Platonistic traditions, as well as the subtle connotations of the term *daemon* within this tradition. Von Staden shows that Galen's conception harked back to a Platonic definition of the rational actions of the soul as divine: the *δαίμων* figures in Galen very often as a source for inspiration of his most ingenious 'thoughts, discoveries, and writings'.⁴

Dols (1992, 5) proposes three models for what we call 'madness': (i) a pathological condition, dysfunction of the brain; (ii) social deviation; and (iii) intelligibility (breach of rules of reason, deprivation of rationality).

All three threads are woven together in the passage from Euripides' *Bacchae* under discussion.

A careful reading of the wording, the phrasing, the rhetoric and the structure of passage (1) exposes several stereotypical models of dialogue used in literary compositions, often as well-worn *Bauformen*, or predictable scripts — stemming from genuinely functional roles, but often evolving into almost ritualized exchanges performed by actors or interlocutors in prefabricated roles.

The three dialogal situations I hope to extract from the wording in (1) above are:

(i) a father leading his daughter to a recognition of the bitter, sombre truth — that she holds the head of her dear son in her arms;

(ii) a philosopher-educator leading a novice or a slow student through the challenging catechism from ignorance to comprehension, and

(iii) a doctor uncovering true signs of a patient's condition, in order to arrive at a successful professional diagnosis, here of a cognitive breakdown due to trauma or mental disturbance.

All three models of exchange are woven into this rich literary brocade — in the traditional spirit of contrapuntal blending of *belles-lettres* and technical compositions.

When reading passage (1) above, I open by observing the stichomythic format of this dialogue, which is also marked, I may add, by signposts at its open and close, the words *καλῶς* at lines 1263 and 1300. This verbal frame is part of the formal arsenal of *Ringkomposition*, and is a nice artistic touch no less than a vital function of signaling or signposting the beginning and end of this passage.⁵

⁴ Von Staden, 2003, 35. Galen's concern with his own lot (no pun intended) as a successful practitioner, innovator, teacher, and ideologue are the object of another study on his intellectual ego, agonistic rhetoric, and professional status, as seen through reflexive comments in his own writings, through the reception of his persona in the bio-doxographical tradition, and through the role of doctors as conventionalized in the literature of the Second Sophistic period: 'Verbal Hybris, Professional Ego, and ἡθοποιία in Greek and Arabic Sources: the case of the doctor-philosopher Galen' (in preparation).

⁵ Verbal echoes framing *Ringkomposition* may be very precise, such as *καλῶς* in our passage from the *Bacchae*. A lexical rather than cognate echo is used in another Euripidean passage, from the *Hippolytus*. Within the lengthy messenger speech (1173-1254), the description of Poseidon sending the bull in a tumultuous wave opens (1201-1202) with the words ἔνθεν τις ἤχῳ χθόνιος, ὡς βροντῇ Διός, / βαρὺν βρόμον μεθῆκε, φρικώδη κλύειν: ('There a great

The *stichomythia* is associated with a range of motifs or scene-types in drama; Schwinge for example has identified the use of this *Bauform* by Euripides with a number of narrative and other situations, but also with scenes of ἀναγνωρισμός (of the type standard in drama and prose fiction between long-lost live relatives).⁶

This scene is analyzed in depth by Schwinge (1968, 411-433) in its larger dramatic context as well as in that of the immediately surrounding text. Schwinge carries to another level the comparison made by earlier commentators with the *Hercules Furens*. Wilamowitz *ad HF* 1089 identifies very precise parallels with phrases and motifs in this passage of the *Bacchae*, with special reference of the awakening from madness. Hercules awakens in a monologue ('*Erwachensmonolog*'; lines 1089-1108), and his *stichomythia* with his father Amphitryon follows after he is 'awake'. An observation introduced and emphasized by Schwinge (1968, 414 n. 145) which is relevant to our discussion is the deliberately sought after effect of stichomythic form in the *Bacchae* passage (1968, 413-414), and more broadly the contrast between the effect of the dialogue mode in the *Bacchae* scene and the monologue in the *Hercules* awakening. Another difference emphasized by Schwinge is that Kadmos takes on the task of bringing Agave back to her senses;⁷ whereas Herakles has already come to his senses by the time his stichomythic exchange with his father begins,⁸ all that is left for Amphitryon is to release Herakles from his δύσγνοια.

The first move made by Kadmos to lead Agave from her altered state to a state of awareness is to summon her sight (1263: πρῶτον μὲν ἐς τόνδ' αἰθέρ' ὄμμα σὸν μέθες). Agave agrees to cooperate (ἰδοῦ').

Kadmos' next move reminds us of the second type of script — the paedagogical exchange — and in particular of the type portrayed in Plato's Σωκρατικοὶ λόγοι between an insistent teacher and an often aporetic disciple. Agave's father Kadmos

noise in the earth, like Zeus' thunder, roared heavily. It made one shudder to hear it!' tr. Kovacs). This close of this section of the messenger speech (perhaps an "Exkurs" if we follow the analytic methods and terms of van Otterlo in his study on *Ringkomposition*) is clearly signaled: by a verbal repetition of the formidable effect (φρικῶδες), and by a lexical repetition of the echoing sonic boom in 1201 (ἠχώ) by another expression for resonance in 1216 (ἀντεφθέγγετο). The sentence is worth quoting in full (1215-16): οὐ πᾶσα μὲν χθῶν φθέγγματος πληρουμένη / φρικῶδες ἀντεφθέγγετο ... ('The whole land was filled with its bellowing and gave back unearthly echoes', tr. Kovacs). This parallel from Euripides is one that arbitrarily comes to mind. Van Otterlo, 1944, discusses *Ringkomposition* in Epic, Tragedy, and Herodotus.

⁶ Schwinge, 1968, 235-267, using the *Iphigeneia at Tauris* as a prototypical example. See his reference, on p. 236, n. 90, to research on ἀναγνωρισμός in general and in tragedy, not only in *stichomythia*.

⁷ Schwinge, 1968, 413: 'Kadmos aber macht sich an die schwere Aufgabe, sie zur Vernunft zurückzubringen, und dafür wählt er verständlicherweise die Form des Dialogs, die es ihm ermöglicht.'

⁸ Schwinge, 1968, 416, proposes in his analysis that when Herakles awakens he refers to himself as suffering from φρενῶν τάραγμα (a term echoing Iris' reference to him in line 836), which is closer to δύσγνοια (line 1007, end of *Erwachensmonolog*) than to μανία: a rupture between past and present (according to Schadewaldt, quoted by Schwinge).

wants to ascertain whether she sees things realistically or not (1266: ἔθ' αὐτὸς ἢ σοι μεταβολὰς ἔχειν δοκεῖ;). On another level, this alternative question smacks of Socratic interrogation: ὁ αὐτὸς ἢ ...; and with the very words sometimes used in moments of ἀπορία in Socratic dialogue, Agave answers his next question about her giddiness with her own admission of ἀπορία (1269: οὐκ οἶδα τοῦπος τοῦτο).

Agave will slip in and out of relative degrees of comprehension and apprehension until the punch-line at 1296, ἄρτι μαινθάνω, at the end of the dialogue, and her more reasonable answers will be attenuated by expressions such as πῶς (1269), γίγνομαι δέ πῶς ἔνιους, and idioms for 'so to speak, as they say', such as ὡς λέγουσ' (1274), ὡς γ' ἔφασκον (1278). These are mannerisms of Athenian *urbanitas* used almost involuntarily,⁹ and, here, deliberately chosen and placed applications of these alternative expressions — paradoxically unstable and cautious at the same time.

Kadmos' next question (1271) hails from the third dialogue template, that of the medical examination: κλύοις ἂν οὖν τι κάποκρίναι ἂν σαφῶς;

Clear answers to medical questioning are one of the vital tools of diagnostics whether of conditions of the body or the mind, all within the medical purview.¹⁰ Agave acquiesces (γέ) but admits loss of memory (ἐκλέλησμαι 1272). As we shall see below, memory is one of the important faculties tested by this diagnostic tool, so, although Dodds does not cite any medical literature in his commentary *ad locum*, he does refer briefly to amnesia during altered states. Questions of identity of the patient are used to this day to confirm or test the state of his cognitive faculties: Kadmos asked Agave whom she married and who her child is. Devereux discusses both partial amnesia (1970, 37) and self-identification as well as the psychotherapeutic move of resocialization (1970, 42).

Kadmos' moves veer between the personal, the paedagogical, and the medical. Those of Agave are on a cycle between confused and less confused, cognizant and less

⁹ The formal signs of *urbanitas* (e.g. uses of the potential optative, attenuative and ironic uses of the indefinite pronouns τις/τι, approximating of quantities, hedging expressions such as ὡς ἔπος εἰπεῖν, δοκεῖ μοι, κινδυνεύω, οἶμαι *et sim.*) are collected and located in the study of Lammermann (1935) within the intellectual and cultural contexts which were the breeding ground for what later evolved into involuntary mannerisms of urbane style, the Athenian ἀστεισμός. Superimposed on the rhetorical-pragmatic dimension, the evasiveness of Agave's answers may be interpreted on a psychotherapeutic one, as suggested by Devereux (1970, 43, and 44-45).

¹⁰ See n. 35 below. Medical procedure is mentioned by Schwinge (1968, 419) in the context of Kadmos' request for Agave (1262) to raise her eyes. Schwinge does not refer however to ancient descriptions of medical procedure and his observation, though correct, remains metaphorical ('Pazientin', p. 421), or impressionistic *ad hoc* detail in a comment which serves to explain the deliberate choice of stichomythic form for this questioning: 'Er spricht — jetzt nur noch in einem Vers, läßt also das Gespräch zur Stichomythie werden und schafft sich so, ... eine erfolgreiche Durchführung seines Unternehmens. Damit aber, daß er seine Aufforderung mit πρώτον einleitet, zeigen, daß er gleichsam einne medizinische Behandlung beginnt, die er Schritt vor Schritt zu vollziehen gedenkt.' For ancient medical sources referred to specifically and explicitly in similar contexts see Wilamowitz *ad HF* 1108 and n. 13 below.

cognizant, perspicuous and unclear. Just as we think she is approaching recognition, answering correctly the identification questions of marital and family status, there is a setback: she identifies the head in her hands as that of a lion: λέοντος, ὡς γ' ἔφασκον αἰθρηώμεναι. Kadmos insists on delivering the answer maieutically σκέψαι νυν ὀρθῶς (1279), or ἄθρησον αὐτὸ καὶ σαφέστερον μάθε (1281). The expression σαφέστερον μάθε is a verbal motif in Socratic dialogues of this type.¹¹

Agave finally admits full recognition (after a “leading question”): οὐκ, ἀλλὰ Πενθέως ἢ τάλαιν' ἔχω κάρα ('in my misery I hold Pentheus' head!'). This is the climax of the passage, in the primary function of recognition, and it resounds with the timbre of the phraseology of ἀναγνωρισμός dialogues, which are either stichomythic or antilabic, such as those given in passage (2) below.

At the moment when brother and sister, husband and wife, or mother and son, long-lost beloved relatives are reunited, they often say ‘I hold you’ ἔχω σε'. In what follows I bring the example from Sophocles' *Electra* when Electra finds Orestes:¹²

(2) S. *El.* 1226: Ελ. ἔχω σε χερσίν; :: Ορ. ὡς τὰ λοιπ' ἔχους ἀεί. ... (1285) Ελ. νῦν δ' ἔχω σε.
 'El. Do I hold you in my arms? :: Or. So may you always hold me! ... (1285) El. Now I hold you' (transl. Lloyd-Jones).

This is parodied in Menander *Aspis* 508 and *Misoumenos* 214, both passages damaged to the point where the context is unclear.

The remainder of the dialogue in passage (1) from the *Bacchae* brings Agave fine-tuning her awareness, and her closing admission ἄρτι μανθάνω (1297).

If the salient phrase of an ἀναγνωρισμός is represented here by ἀλλὰ Πενθέως ἢ τάλαιν' ἔχω κάρα (1284), the salient phrase of a Socratic paedagogic ‘rite de passage’ is represented by the following cycle: admission of ἀπορία (οὐκ οἶδα τοῦτος τοῦτο. 1269),¹³ followed by an admission of memory loss (ἐκλέλησμαι 1272), and then by

¹¹ See Shalev 2011, section viii.2, pp. 264-267 for more details about parallels in Platonic dialogues.

¹² Compare the phrase in Iphigeneia's lines to Orestes in the *IT*, and Admetos to Alkestis in Euripides' *Alkestis*, where formulaic elaboration of ἀέλιπτως is added: E. *Alc.* 1134: Αδ. ὦ φιλάτης γυναικὸς ὄμμα καὶ δέμας / ἔχω σ' ἀέλιπτως, οὐποτ' ὄψεσθαι δοκῶ ('Ad.: O face and form of the wife I love, I have you back / against all expectations, never thinking to see you again.' Tr. Kovacs). Compare also the words of Electra to Orestes: ἔχω σ' ἀέλιπτως in E. *El.* 579, and Kreousa > Ion σ' ἔχω in E. *Ion* 1440.

¹³ In the *HF* parallel (or near-parallel, due to the different distribution between *Erwachensmonolog* and *stichomythia*) compare 1108: σαφῶς γὰρ οὐδὲν οἶδα τῶν εἰωθότων. Wilamowitz makes a very important reference to Hippoc. *Morb. sacr.* 17, naming ἀπορία and ἀγνώσια symptoms of mental distress. I prefer, with Wilamowitz, the *lectio* σαφῶς which echoes the turn of phrase often used in Socratic paedagogical catechism and similar exchanges, e.g. R. 392d7: ἔτι δέομαι σαφέστερον μαθεῖν, compared below with *Bacch.* 1281: σαφέστερον μάθε.

correct answers to identification questions; by ἀπορία, and ultimately by admission of comprehension (ἄρτι μανθάνω 1296).

The phrase ἄρτι μανθάνω is a recurring phrase, if not a *phrase figée*, in dramatic as well as in prose dialogues of recognition and of comprehension. Schwinge does not devote any place to this in his monograph on stichomythia, but many commentators on *Alc.* 940, for example (where it also occurs at the end of an iambic trimeter στίχος), discuss this turn of phrase in its dramatic role. Some parallels which may or may not be parodic suggest that this phrase might have been recognized as formulaic or typecast.¹⁴

The template of ups and downs of ‘getting it’ recurs not infrequently in Plato,¹⁵ and I give an extended example in (3) below from the most elaborate specimen, the third book of the *Republic*, where Socrates initiates Adeimantos into the knowledge of the dangers of μίμησις:

(3) And Adeimantus said, I don’t understand what you mean by this.

Well, said I, we must have you understand. **Perhaps you will be more likely to apprehend it thus** (ἴσως οὖν τῆδε μᾶλλον εἴση). Is not everything that is said by fabulists or poets a narration of past, present, or future things?

What else could it be? He said. (τί γάρ, ἔφη, ἄλλο;)

Do not they proceed either by pure narration or by a narrative that is effected through imitation, or by both?

392d7

[A.] This too, he said, I still need to have made plainer (καὶ τοῦτο, ἦ δ’ ὅς, ἔτι δέομαι σαφέστερον μαθεῖν).

[S.] I seem to be a ridiculous and obscure teacher (διδάσκαλος), I said. So, like men who are unable to express themselves I won’t try to speak in wholes and universals but will separate off a particular part and by the example of that try to show you my meaning (Γελοῖος, ἦν δ’ ἐγώ, εἰκα δὴ δάσκαλος εἶναι καὶ ἀσαφής· ὡσπερ οὖν οἱ ἀδύνατοι λέγειν, οὐ κατὰ ὅλον ἀλλ’ ἀπολαβῶν μέρος τι πειράσομαί σοι ἐν τούτῳ δηλῶσαι ὃ βούλομαι).

Tell me (καὶ μοι εἰπέ), do you know (ἐπίστασαι) the first lines of the *Iliad* in which the poet says that Chryses implored Agamemnon to release his daughter, and that the king was angry, and that Chryses, failing of his request, imprecated curses on the Achaeans in his prayers to the god?

[A.] I do (ἔγωγε).

[S.] You know then (οἶσθ’ οὖν) that as far as these verses, ...

393d2

¹⁴ The following passages would repay further investigation: from comic drama, Ar. *Lys.* 1008; Com. Adesp. 257.16 *CGFPR*; from prose, Luc. *Lexiph.* 25.5; *Sat.* 18.9. Alongside these precise parallels are many passages with less close wording — Platonic dialogue offers no precise parallels for this phrase.

¹⁵ See for example *Soph.* 262a9; *Euthphr.* 10a4. I draw a more detailed comparison within a fuller inventory of parallel passages in my upcoming study on dialogue technique.

And lest you may say again that you don't understand, I will explain to you how this would be done

(ἵνα δὲ μὴ εἶπης ὅτι οὐκ αὖ μαιθάνεις, ὅπως ἂν τοῦτο γένοιτο ἐγὼ φράσω).

If Homer, after telling us that Chryses came with the ransom of his daughter and as a suppliant of the Achaeans but chiefly of the kings, had gone on speaking not as if made or being Chryses but still as Homer, you are aware that it would not be imitation but narration, pure and simple.

It would have been something in this wise. I will state it without meter for I am not a poet

(εἶχε δ' ἂν ᾧδε πῶς — φράσω δὲ ἄνευ μέτρου· οὐ γὰρ εἶμι ποιητικός).

The priest came and prayed ... he prayed that the Achaeans should suffer for his tears by the god's shafts. It is in this way, my dear fellow, I said, that without imitation simple narration results.

394b2

[A.] **I understand**, he said (μαιθάνω, ἔφη).

[S.] **Understand then**, said I, **that the opposite of this arises** when one removes the words of the poet between and leaves the alternation of speeches

(Μάνθανε τοίνυν, ἦν δ' ἐγὼ, ὅτι ταύτης αὖ ἐναντία γίγνεται, ὅταν τις τὰ τοῦ ποιητοῦ τὰ μεταξὺ τῶν ῥήσεων ἐξαιρῶν τὰ ἀμοιβαῖα καταλείπη).

[A.] **This too I understand**, he said. It is what happens in tragedy (καὶ τοῦτο, ἔφη, μαιθάνω ...).

[S.] **You have conceived me most rightly** (Ὀρθότατα ... ὑπέλαβες), I said, and now I think I can make plain to you what I was unable to before, that there is one kind of poetry and taletelling which works wholly through imitation, as you remarked, tragedy and comedy, and another which employs the recital of the poet himself, best exemplified, I presume, in the dithyramb, and there is again that which employs both, in epic poetry and in many other places, **if you apprehend me** (εἰ μοι μαιθάνεις).

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[A.] **I understand now**, he, said, **what you then meant** (Ἄλλα συνίημι, ἔφη, ὃ τότε ἐβούλου λέγειν).

(tr. Paul Shorey).

This passage cuts in after a protracted exchange between Socrates and Adeimantos where the student seems to understand his teacher, as expressed by an apparent *variatio* of a string of affirmative moves: πάντα μὲν οὖν — δηλαδὴ — εὖ μὲν οὖν ἔφη — οἶδα — ὀρθῶς, ἔφη, ὑπέλαβες — ἀληθέστατα, ἔφη.

After such stellar success of teacher and clear comprehension of disciple, just as we settle into a routine of easygoing, unproblematic, almost monotonous prehension, there is a setback — in a twist which follows the typical, almost stereotypical rhythm of ups and downs in such paedagogical catechism as put to life in some of Plato's Socratic dialogues. When Socrates moves in this dialogue from the topic of λόγοι (tales) to that of λέξεις (diction), Adeimantos is stumped, and the house of cards comes tumbling down in an admission of incomprehension (τοῦτο, ἦ δ' ὅς, οὐ μαιθάνω ὅτι λέγεις 392d1).

Here, as in analogous passages, Socrates, like a good teacher,¹⁶ offers to produce a clearer explanation (ἴσως οὖν τῆδε μᾶλλον εἴση).

Adeimantos asks for an even plainer explanation, καὶ τοῦτο, ἦ δ' ὅς, ἔτι δέομαι σαφέστερον μαθεῖν, echoing the very same phrase in 1281 of the *Bacchae* passage, σαφέστερον μάθε. Thereupon Socrates illustrates (δηλώσω) by transposing the opening of the *Iliad* into a prose, indirect discourse διήγησις ἀπλῆ.¹⁷

So, after the arduous uncompromising travail, with a rhythm of ‘yeses’, then ‘I don’t understand’ ... ‘not yet’, comes repeated affirmation in μανθάνω ... καὶ τοῦτο μανθάνω and finally συνίημι.

We leave now the literary ἀναγνωρισμός and the paedagogical μαίευσις, and shift our angle onto the subtlest of echoes, the minor chord in this symphony, the medical questioning.

The remainder of this article will focus on medical questioning in one form or another in tradition and in texts – with special reference to the interplay between the two, in technical-theoretical texts (e.g. the *Quaestiones medicales* of Rufus of Ephesus in [4] below or the *De praecognitione* of Galenus in [7] below), and in *belles-lettres* (e.g. Plato *Phaedo* in [5] below, or Heliodorus *Aithiopika* in [6] below). The passage from Rufus in (4) will be discussed in detail, with special reference to the Greek terminology for ‘questioning’ and to the format of questions which this implies, as well as to the interrelations of this terminology with the terms used to refer to questioning in logic, a discipline at the basis of Galenic and other medical theory and practice. The article will close with a brief presentation of a passage translated from Arabic (from *Epistles of the Brethren of Purity*, in [8] below) which is a literary tale embedded in an encyclopedic text, and which includes a medical questioning scene (in the context of diagnosing altered mental state) with strong echoes from the *Quaestiones* of Rufus.

The earliest, perhaps only surviving free-standing handbook on medical questioning is Rufus of Ephesus’ treatise *Quaestiones medicales*. Rufus was 50 years Galen’s senior, putting him in the first century AD, and under the long shadow of Galen. If this composition by Rufus is the earliest such handbook on anamnesis technique to survive,

¹⁶ Bad teachers normally offer increasingly louder, more impatient repetitions of the same explanation rather than rewording or presenting using a different technique.

¹⁷ This passage and the reformatting (φράσις) are discussed in Shalev (2011), viii.2, esp. pp. 266-267, with Platonic parallels for the dramatic pattern given in n. 92, and for promises of a clearer rephrasing in n. 93. For a parallel from drama see the example from *P. Hib. I. 22-26*: :: οὐ μανθάνω / σου τ[ὸ]ν λόγ[ον]. / :: ἀλλ’ ὡς συνήσεις / ῥαδίως ἐγὼ φ[ράσω]. / ἐπεὶ γὰρ ἦλθον ... (‘:: I don’t understand your argument (or: story? what you say?). :: Then let me rephrase it so you will understand it more easily: After I arrived...’). See Fraenkel 1912, 43 *ad locum*, where he brings this passage (identified by him as Euripidean) as an example of transition from dialogue (*colloquium*) to continuous ῥῆσις for presenting a temporally linear narrative (*longior narratio totam rem secundum temporis ordinem explicare*). Fraenkel does not, however, bring into discussion the Platonic parallels or the change of method of presentation as a paedagogical “plan b” after the catechism enters an impasse.

this is surely not to say that routines for questioning patients were not in use much earlier.¹⁸ Even if Euripides did not draw on some solidified template, he must have been drawing on common practice spontaneously generated but often repeated. Here is the passage in its context:

(4) Rufus of Ephesus, *Quaest. med.* §1

ἔρωτήματα χρή τὸν νοσοῦντα ἐρωτᾶν, ἐξ ὧν ἂν καὶ διαγνωσθεῖη τι τῶν περὶ τὴν νόσον ἀκριβέστερον καὶ θεραπευθεῖη κάλλιον. πρῶτον δὲ ἐκεῖνο ὑποτίθημι τὰς πεύσεις αὐτοῦ τοῦ νοσοῦντος ποιεῖσθαι. Μάθοις γὰρ ἂν ἐνθένδε ὅσα τε κατὰ γνώμην νοσεῖ ἢ ὑγιαίνει ὁ ἄνθρωπος καὶ ῥώμην αὐτοῦ καὶ ἀσθένειαν, καὶ τίνα ἰδέαν νόσου καὶ τίνα τόπον πεποιηκῶς εἶη. εἰ μὲν γὰρ ἐφεξῆς τε ἀποκρίνοιτο καὶ μνημονικῶς καὶ τὰ εἰκότα καὶ μηδαμῆ σφαλλόμενος μήτε τῆ γλώττῃ μήτε τῆ γνώμῃ καὶ εἰ καθ' ὄρμην τὴν οἰκείαν — εἰ μὲν ἐστὶν ἄλλως κόσμιος, πράως καὶ κοσμίως, ὁ δ' αὖ φύσει θρασὺς ἢ δειλὸς θρασέως ἢ δεδοικτό>τως — τοῦτον μὲν χρή νομίζειν τὰ γοῦν κατὰ γνώμην καλῶς ἔχειν. εἰ δὲ καὶ ἄλλα σὺ μὲν ἐρωτᾶς, ὁ δὲ ἄλλα ἀποκρίνοιτο καὶ εἰ μεταξὺ λέγων ἐπιλανθάνοιτο, αἱ δὲ τρομώδεις καὶ ἀσαφεῖς γλώσσαι καὶ αἱ μεταστάσεις ἀπὸ τοῦ ἀρχαίου τρόπου πρὸς τὸ ἐναντίον, πάντα ταῦτα παρακρουστικά. καὶ κώφωσις δὲ τοῦ κάμνοντος οὕτως τι σημαίνεται ...

One ought to ask the patient questions (ἔρωτήματα), from which a more exact understanding might be reached of something involving the illness and be treated in a better way. First of all, I want to present the questions (πεύσεις) to be asked of the patient. For you may find out to what extent the man is mentally ill or sound, as well as his strength or weakness, and what form of illness and in what locus he is suffering. For if he answers in an orderly manner, and not forgetfully and reasonably (εἰ μὲν γὰρ ἐφεξῆς τε ἀποκρίνοιτο καὶ μνημονικῶς καὶ τὰ εἰκότα) and not wavering either in language (τῆ γλώττῃ) or in thought. If otherwise he is well-mannered (κόσμιος), [answering in a] soft-spoken way, another — insolent and cowardly by nature [answers] insolently or fearfully — this man one must consider to fare well regarding his mental capacities. However, if you ask one thing but he answers another, and if in mid-speech he forgets, and the unstable and unclear words, as well as the shifts from his erstwhile manner to an opposite manner, all of this applies to delirium. Yet also hardness of hearing of the patient manifests itself in this way more or less...

The importance of questioning is detailed in the opening chapter of Rufus' *Quaestiones*, and it is well worth taking pause over the terminology he uses: 'One ought to ask the

¹⁸ According to Jouanna, 1999, 135, 'A handbook on how to question patients seems not yet to have existed in Hippocrates' time'. On pp. 134-136, Jouanna discusses the dialogue between doctor and patient, bringing references to instructions for doctors on how to speak, as well as how to listen. 'Conversation' is one of the courtesies a doctor must offer (Hippoc. *Epid.* VI). This is just one of many references brought by Jouanna, who distinguishes Hippocratic emphasis on dialogue rather than rhetoric: '... the originality of the Hippocratic manner of speaking [not in rhetoric]. It consisted in initiating a dialogue with the patient for the purpose of collecting information about the diagnosis or prognosis of the illness ...'. Jouanna adduces the text of Hippoc. *Progn.* 2.7.16. Devereux, 1970, 36-37, suggests that Euripides may have witnessed 'genuine psychotherapies administered to maenads'.

patient questions (ἑρωτήματα), from which a more exact understanding might be reached (διαγνωσθεῖη ἂν ἀκριβέστερον)?

In the very next sentence Rufus refers to these questions as πεύσεις. This variety in usage, first ἑρωτήματα, then πεύσεις, is not a facile *variatio*, tempting as such an observation may be. In fact, in works on logic where λόγος is sorted and classified, and fine distinctions are made, sometimes laboriously, a mutually exclusive distinction of essence between the two may be in the making: ἑρώτημα is used for sentence “yes-no” and alternative questions (‘Is it raining?’, ‘Is it raining or not?’) whereas πύσμα or πεύσις for constituent “wh” questions (who? what? where? when? etc.). In fact, however, this distinction (ἑρώτημα for “yes-no questions”, πύσμα for “wh questions”) is not itself so clear-cut or mutually exclusive.¹⁹ A *differentia* which suggests itself is ἑρώτημα (and cognate verbs and adjectival terms) unmarked and thus, although used most repeatedly to refer to “yes-no questions”, also used to refer to “wh questions”; and πύσμα (and cognates) as marked for “wh questions”.

One may easily be tempted to consider it an unfair demand on a medical man to maintain the rigorous terminological distinctions legitimately expected of a theoretical logician. And yet, on an ideological level, it is important — for ancient physicians, being philosophers was an ideal, and being versed in logic was a *sine qua non* for success. *A fortiori*: Ἰητρὸς γὰρ φιλόσοφος ἰσόθεος.²⁰ This is preached more famously in Galen’s *Why the best doctor is also a philosopher*.²¹ Galen himself wrote on logic, and is even credited with having innovated a type of syllogism, but I did not find in his *Institutio*

¹⁹ Theoreticians were not so consistent: See Shalev, 2008, esp. 254, but also *passim* for a brief discussion of the types of questions and their definitions in theoretical literature, with special reference to the variety of terms for reference to the distinct types: the Peripatetic or Sophistic sources adduced (Ari. *Po.* XIX. 1456b10, Protagoras *apud* Diogenes Laertius 9.54 — passages [5] and [2] respectively in Shalev, 2008) are not specific; the Stoic source adduced (Diocles quoted in D.L. 7.66-67 — passage [3] in Shalev, 2008) distinguishes the two types by the two terms; and a Neoplatonic commentator of Aristotle uses the unmarked term ἑρωτηματικὸς λόγος with general reference to questions but giving as an example a “wh-question” (Ammonius *ad* Ari. *De int.* — passage [10] in Shalev, 2008). Some derivative references (e.g. progymnastic works) show the same consistency of taxonomy and terminology as seen first among Stoics (see Shalev, 2008, n. 69); thus also the much later derivative sources, such as the seventh-century(?) Anonymous Coislinianus (See *CAG* iv.5 ed. Busse, p. xxii). Yet there is not enough evidence to determine whether there are trends of chronology or philosophical school. Moreover, more work needs to be done on the internal variety and consistency of authors such as Ammonius.

²⁰ Hippoc. *Decent.* § 5 (vol. ix, p. 232 Littré); see also Littré’s introduction, p. 225, for more on this *shibboleth*.

²¹ ὅτι ὁ ἄριστος ἰατρὸς καὶ φιλοσοφός. This treatise reflects a long cultural tradition rather than an individual original argument of Galen. In this context I refer to a comment in Daremberg-Rouelle (1879: xxvi) on the philosophical or epistemological method used by Rufus in *Quaest. med.* in anticipation of Galen: ‘C’est une application très-intéressante de la méthode dogmatique ou rationnelle exposée depuis par Galien.’ See also their quotation of Gal. *De sect.* iii in n. 1 *ad locum*.

logica any definitions or discussions of question types.²² On another level, the questions which Rufus instructs to ask are prominently “wh questions”, *πεύσεις* or *πύσματα*: ‘When first? What? How often? How much?’. The structure of Rufus’ treatise and the organization of its contents have been well observed and analyzed,²³ and will below prove pivotal for identifying traces and influences of Rufus’ text (and perhaps suggest the existence of a traditional sequence for conducting diagnostic interrogations).

I would like here to close my observations on the so-called *variatio* in Rufus’ terminology in the *prooimion* to the *Quaestiones medicales* with an account of the format of the suggested questions he prescribes. This will show, I hope, that Rufus follows the usage in most texts on logic,²⁴ namely employing *ἐρώτημα* and cognates as the *unmarked* terms for questions, mainly sentence questions (“yes-no” and “alternative”), but also occasionally constituent questions (“wh”); and *πύσμα* or cognates as *marked* terms, exclusively referring to sentence-constituent questions (“wh”).

An exhaustive tally of the questions prescribed by Rufus in his *Quaestiones medicales* shows this *differentia* saliently: from section 11²⁵ until the end of the prescriptions, forms of the verb *πυθάνομαι* are used to frame suggested questions eight times, and forms of the verb *ἐρωτάω* are used to frame such questions more than thirty times: this sharp majority alone suggests *ἐρωτάω* as a source for unmarked terms. A closer inspection of the content framed by these expressions further corroborates this distinction:

The questions suggested within the *πυθάνομαι* frame are never formatted as sentence (“yes-no”) questions: they are either absolute,²⁶ imply information-seeking, or frame indirect but explicit constituent (“wh”) questions, with interrogative openers such as *ὅποια* in § 63: ... *ὄϊον εἴ τις ἀφίκοιτο εἰς τὴν ξένην, πυθάνεσθαι χρὴ περὶ τῶν*

²² For Galen’s logic and dialectics, see Barnes, 1991, with many valuable and stimulating suggestions for further research in the dialogue technique of some of the passages in his case studies, and with special reference to the interface between literary, paedagogical, and technical models.

²³ For a thorough and systematic summary of the content and account of the order and structure of the composition, see Sideras, 1994, 1143-1147 (section titled ‘Aufbau und Inhaltsübersicht’). See also Gärtner’s observations in his commentary of the treatise, p. 12-13, and *passim*.

²⁴ The evidence suggests (but may not be sufficient to prove) that Stoics, exceptionally, make mutually exclusive use of the two terms.

²⁵ Sections 1-10 form the *prooimion*, which is more rhetorical and polemical, less technically “prescriptive”. It has one occurrence of *πεύσεις ποιείσθαι* — §2 (on which see Gärtner’s commentary), and five occurrences of terms derived from *ἐρωτάω* — including *ἐρωτήματα* in the title of the treatise.

²⁶ See § 21 less prescriptive than polemical, and § 41, again, not merely prescriptive, but emphasizing the added value of interrogation on top of observation of moans of pain which may be histrionics (*ἀλλὰ ἔστι μὲν κάξ <οἶκ>των διαγιγνώσκειν τοὺς πόνοους τῶν νοσοῦντων, χρὴ δὲ καὶ διαπυθάνεσθαι καὶ οὐδὲ τοῦτό πως ἔξαρκεῖ [καὶ] πρὸς τὴν ὄλην διάγνωσιν, ὡς πολλοὶ ἤδη μαλακία καὶ τρυφῆ οὐδέν τι που ἀκομψότερον ὀδύνην ὑπεκρίναντο τῶν ἐν ταῖς τραγωδίαις οἰμωζόντων.*)

ὕδατων, ὁποῖά ἐστι καὶ εἴ τινας ἐξαιρετέους ἔχει δυνάμεις οἷαι εὐρίσκονται πολλάί... ('... for example, if one arrives in a foreign territory, it is necessary to ask what the qualities of the water, and — if it possesses any extraordinary features which abound plentifully — [one must inquire about them]').²⁷

The questions framed by terms derived from ἐρωτάω are often sentence questions or alternative questions,²⁸ but others are constituent ("wh") questions,²⁹ and yet others are combinations of all types,³⁰ aptly introduced by an unmarked frame.³¹

The purpose of asking is often not solely to obtain the content of the answer, but to observe and deduce the state of the patient from the manner of his responding.³² This is clearly the aim of Kadmos in questioning his daughter, as analyzed above, and explicitly the aim of Amphitryon in questioning his son in *HF*, to wit, 1121: καὶ σ' εἰ βέβαιως εὖ φρονεῖς ἤδη σκοπῶ ('I am examining you to see if you are now quite sane', tr. Kovacs). The medical 'visit', 'inspection', or 'examination' is technically termed ἐπίσκεψις (see below, discussion with passages (5) and following), derived from the same verb used here by Amphitryon, σκοπέω, perhaps not without deliberate intent.

Answers *compos mentis* — according to the introductory section of Rufus' treatise (see n. 32 for full wording) — involve features such as order (ἐφεξῆς), memory

²⁷ Other than §§ 21, 41, and 63 referred to above, the other "wh questions" framed by this verb are: content in prepositional phrase § 17 (ἐπὶ τοῖς συμβαίνουσι); § 52 (περὶ χρίσματος τῶν τοξευμάτων). Content in "wh" word, sometimes preceded by prolepsis § 43 (οὐ γὰρ δήπου τοὺς μὲν ἄλλους παροξυσμοὺς ἀναγκαῖον πυνθάνεσθαι πῆνικα γίνονται); § 35 (see n. 31 with εἰδέναι); § 37 (implies ὅτι ἐδῆδοκεν, only apparently absolute use of verb).

²⁸ Alternative sentence questions, e.g. § 37 (ἐρωτητέον δὲ καί, εἰ προσῆρτο τὸ σιτίον ἢ οὐ). Cf. §§ 15, 18, 21, 46, 50.

²⁹ Constituent questions, e.g. § 39 (ἐρωτητέον δὲ καὶ τί τὸ ἥδιστον αὐτῷ τῶν σιτίων). Cf. with interrogative openers §§ 11, 14, 21, 36, 38, 39, 41; with verbal nouns and other nominal content summary §§ 16, 23, 26, 26 bis, 40, 59, 62; with prepositional phrases §§ 21, 27, 46; absolute §§ 22, 37, 54.

³⁰ Combinations of "wh" and "yes-no / alternative" questions: §§ 26, 28, 44, 60.

³¹ Other interesting terms, either borderline frames for indirect question models, or frames for 'medical examination', and 'diagnostic activity', which would repay further study, include: μανθάνω and compounds (§§ 2, 4, 7, 17); εἰδέναι (§§ 27, 35, 37) — both verbs introducing indirect "wh" questions. Further: τεκμαίρομαι (§§ 38, 41), ἀνακρίνω (§§ 49, 55). Introducing "yes-no" questions ἐξευρίσκω (§ 36), ἐπιβλέπω (§ 42). Most noteworthy: σποκοῦμαι (§§ 16, 35).

³² See passage (4) above: μάθοις γὰρ ἂν ἐνθένδε ὅσα τε κατὰ γνώμην νοσεῖ ἢ ὑγιαίνει ('For you may find out to what extent the man is mentally ill or sound'). ... εἰ μὲν γὰρ ἐφεξῆς τε ἀποκρίνοιτο καὶ μνημονικῶς καὶ τὰ εἰκότα καὶ μηδαμῆ σφαλόμενος ('For if he answers in an orderly manner and not forgetfully and reasonably, this man one must consider to fare well regarding his mental capacities').

(μνημονικῶς) and reasonability (τὰ εἰκότα). Galen also connects failed memory with emotionally charged states.³³

Defining questions via the manner of response is common in later Neoplatonic commentaries on the Aristotelian *Organon*, and such characterization — not of mental illness or wellness, but of ethical propriety and social norms (νόμοι) — through the manner of response, can be found in the descriptions and prescriptions of discourse aberrations in Theophrastus' *Characteres* or in the more contemporary *De garrulitate* of Plutarch.

Passage (4) above provides only the introduction of Rufus' *Quaestiones medicales*. The rest of the composition lists the types of question beginning with onset, individual health history, causes, symptoms, secretions, sleeping patterns, dreams, congenital conditions, regimen, food intake, pains, etc.³⁴

Most of Rufus' *oeuvre* was epitomized by later medical writers and encyclopedists, but the *Quaestiones medicales*, due to its format, was preserved in its original form.

Rufus' technical treatise is imbued with ethical and logical connotations, and we saw in (1) above the Euripidean passage woven from many dimensions of dialogue formats, including that of the medical examination.

Diagnostic medical examination relied on observation by the senses³⁵ — which after Hippocrates³⁶ included taking the pulse — on analysis of urine and excretions, and on questioning. This diagnostic event evolved into a formalized motif in literary texts, just as diagnostic procedure and case-studies in the medical literature were peppered with fictional elements.

³³ '... he mentioned strong emotional states as interfering with attention and so causing the memory to fail to register actions and events that occurred during such a state' (Gal. *in Hippoc. Epid. III* comm. II *CMG* V.10.1, p.208.17-37).

³⁴ A systematic *précis* is provided in Sideras, 1994 (see also n. 23 above).

³⁵ In the *Quaest.*, reference is made to sight and palpation (§ 50), as well as to hearing (§ 33). For a systematic account of diagnostics in Rufus, and the place of anamnesis within the larger apparatus, see Sideras, 1994, 1266-1274. On Galen, with special reference to the senses, see Nutton, 1993. For diagnosis see, generally, Lloyd, 1987; von Staden, 1989: in Hippocrates, Jones, 1943, ix-xiii (introductory essay I, 'Prognosis'); in Galen, observations in Nutton, 1979, introduction and *passim*; The literature on diagnostics in Galen is abundant. See, e.g., García-Ballester, 1994, esp. 1651-1658, for the evidence of the senses in Galenic diagnostics, with references. For later medical practices: drawing on Hippocratic and non-Hippocratic tradition, see, e.g., Wallis, 2000. For a broad historical account, from pre-Greek to modern medicine, see Nicholson, 1993.

³⁶ For the absence of pulse from the diagnostic arsenal in the Hippocratic Corpus, see Longrigg, 1998, 144. For ready references to sources designating Praxiteles as πρῶτος εὑρετῆς of pulsation in diagnosis, see Longrigg, 1998, 140-141. For in depth analysis and interpretation of sources on pulse and the process of its innovation in the history of Greek medicine, see von Staden 1989.

The medical visit, the examination, ἐπίσκεψις, often involving question-and-answer routines, can be traced in many literary passages. The scene of Socrates' death in Plato's *Phaedo*, one of the most touching passages of *belles-lettres* offers us a prime example:

(5) Plato, *Phaedo* 117e:

καὶ ἄμα ἐφαπτόμενος αὐτοῦ οὗτος ὁ δοῦς τὸ φάρμακον, διαλιπὼν χρόνον ἐπεσκόπει τοὺς πόδας καὶ τὰ σκέλη, κάπειτα σφόδρα πιέσας αὐτοῦ τὸν πόδα ἤρετο, εἰ αἰσθάνοιτο· ὁ δ' οὐκ ἔφη· καὶ μετὰ τοῦτο αὐθις τὰς κνήμας;

The man who had administered the poison laid his hands on him and after a while examined his feet and legs, then pinched his foot hard and asked if he felt it. He said 'No'; then after that, his thighs ... (tr. H.N. Fowler, LCL).

The general action of inspection, ἐπίσκεψις ('... examined his feet', ἐπεσκόπει τοὺς πόδας), is followed by an elaboration of the specific diagnostic tool, in this case interrogation and response ('... asked if he felt. He said "No"', ἤρετο, εἰ αἰσθάνοιτο· ὁ δ' οὐκ ἔφη).

In passage (6) below is an example from an ancient novel, namely the doctor's visit to Charikleia in Heliodorus' *Aithiopika*, an ἐπίσκεψις including questioning: ἡρώτων ὅ τι πάσχοι ('they asked what her pain was'). Here, lack of communication, along with pulse and dissociation, lead to a diagnosis of love sickness:

(6) Heliodorus *Aethiopica* 4.7:

ὁ δὲ Χαρικλῆς εἰς τὴν ὑστεραίαν ἐντυχὼν ἡμοῦ τε εἶδε, καὶ προσδραμὼν ἐφίλει πολλὰ τὴν κεφαλὴν, ... συνεχῶς ἀναβοῶν '... ἐρᾷ Χαρίκλεια.' ...πρὸς ταῦτα ἐθρυπτόμην, ἀνέσπων τε τὴν ὄφρυν, καὶ βλακῶδες βαίνων ...ἔλεγον '... ἀλλὰ πόθεν, ὦ Χαρίκλεις, ἐρῶσαι ἐγνωρίσατε' 'σοὶ πεισθέντες' ἔφη 'τοὺς γὰρ εὐδοκίμους τῶν ἰατρῶν, ὡς αὐτὸς ὑπέθου, παρακαλέσας ἦγον εἰς τὴν ἐπίσκεψιν, ἀμοιβὴν τὴν προσοῦσαν οὐσίαν ὑπισχνούμενος, εἴ τι δύναντο ἐπικουρεῖν. οἱ δὲ ὡς τάχιστα εἰσῆλθον, ἡρώτων ὅ τι πάσχοι. τῆς δὲ ἀποστρεφομένης, καὶ πρὸς μὲν ἐκείνους οὐδ' ὀτιοῦν ἀποκρινομένης, ἔπος δὲ Ὀμηρικὸν συνεχῶς ἀναβώσσης ...

On the next day, when Charicles met me he ran up as soon as he saw me and kissed my head again and again, and cried out repeatedly, '... Charicleia is in love!'. At this I preened myself and arched my brows and paced delicately about. '... But Charicles, how did you discover that she is in love?' 'By your advice', said he, 'I called in the most highly reputed physicians, as you suggested, to examine her, and promised them all my fortune as a fee if they could help her. As soon as they came in they asked what her pain was. She turned away and made them no answer at all, but kept repeating a verse from Homer ... (tr. Moses Hadas).

This anecdote is told, with some variety, throughout literature,³⁷ for example in Plutarch's biography of Demetrius, in Lucian's *De dea Syria*, about Stratonike and Antiochus, and in pseudo-Hippocrates about Perdicas.

The following passage (7) offers a version by Galen, who tells it with dramatic buildup as if it were his own experience and a personal achievement in diagnostic

³⁷ The variety and cross-pollination of motifs is studied by Rohde, ²1900; Mesk, 1913; Amundsen, 1974; and Pinault, 1992, among others.

expertise. I quote very briefly, repeating the phraseology³⁸ παρεκλήθημεν εἰς τὴν ἐπίσκεψίν ... ('I was called in to see'), the patient's inability to respond, her body language, her covering up, and (not included here, the pulse taking, and the staged introduction of characters into the room).

(7) Galen, *Praecogn.* 14. 631K

... ὅπως μὲν Ἐρασίστρατος ἔγνω, τοῦτο λέγειν οὐκ ἔχω. ὅπως δὲ αὐτὸς ἔγνω ἦδη σοι φράσω. παρεκλήθημεν εἰς τὴν ἐπίσκεψίν τινος γυναικὸς, ὡς ἀγρυπνούσης ἐν ταῖς νυξὶ καὶ μεταβαλλούσης ἑαυτὴν ἄλλοτε εἰς ἄλλο σχῆμα κατακλίσεως, εὖρον δ' ἀπύρετον, ἐπιθύμην ὑπὲρ ἐκάστου τῶν κατὰ μέρος αὐτῆ γεγυνομένων, ἐξ ὧν ἴσμεν ἀγρυπνίας συμβαινούσας. ἢ δὲ μόγις, ἢ οὐδ' ὅλως ἀπεκρίνετο, ὡς μάτην ἐρωτωμένην ἐνδεικνυμένη καὶ τὸ τελευταῖον ἀποστραφεῖσα, τρίς μὲν ἐπιβεβλημένους ἱματίους ὄλω τῷ σώματι σκεπάσασα πᾶσαν ἑαυτὴν, ἄλλω δὲ τινι μικρῷ ταραντινιδίῳ τὴν κεφαλὴν ἔκειτο καθάπερ οἱ χρήζοντες ὕπνου. χωρισθεὶς οὖν ἐγὼ δυοῖν θάτερον αὐτὴν ἐνόησα πάσχειν, ἢ μελαγχολικῶς δυσθυμεῖν ἢ τι λυπουμένην οὐκ ἐθέλειν ὁμολογεῖν.

Just how Erasistratus found this out I cannot say: but I shall tell you how I did so. I was called in to see a woman who was said to lie awake at night, constantly tossing from one position to another. When I found that she was not suffering from fever, I asked about each of the details that had happened to her from which we know the presence of insomnia. She replied hesitantly or not at all, as if to show the folly of such questions, and finally turned over, buried herself completely deep in the blankets, covered her head with a small wrap and lay there as if wanting to sleep. On my departure I decided she was suffering from one of two things: from a depression caused by black bile or from some worry she was unwilling to confess (tr. V. Nutton, *CMG* V.8.1).

This story-motif, whether through the Hippocratic or through the Galenic tradition³⁹ is retold often in medieval Arab sources in the doxographers,⁴⁰ and — about Ibn Sina — also in the Persian medieval tradition.⁴¹

The role of the word in medicine, in medical writing, in writing on deontology, and in diagnostics, has been steadily gaining more and more scholarly attention.⁴²

³⁸ See Nutton, 1991, 8, for a remark on the frequency use of the verb σκοπέω in diagnostic passages in Galen.

³⁹ *De praecognitione* was translated into Arabic.

⁴⁰ E.g. Ibn Abī Uṣaybi'a, al-Ruhāwī (these two parallels are given in the first apparatus in Nutton's edition *ad locum*, see also commentary), and also in the *Munṭakhab Ṣiwān al-Ḥikma*, and others. al-Ruhāwī and the *Munṭakhab Ṣiwān al-Ḥikma* are accessible in English to non-Arabists in the translations of Levey, 1967, and Dunlop, 1979, respectively. Most recently Ibn Abī Uṣaybi'a's work has appeared in an online English version (http://www.tertullian.org/fathers/ibn_abi_usaibia_01.htm) prepared already in the 1950s.

⁴¹ See Ibn Sina's biography by Niẓāmī 'Arūḍī, accessible in the English translation of Ed. Granville Browne, 1910.

⁴² The following are some of the studies dedicated to these aspects of medical writing generally or of particular authors: Laín-Entralgo, 1970; Barnes, 1991; García-Ballester, 1994; van der Eijk, 1997; Mattern, 2008; Petit, forthcoming.

Rufus, in *Quaestiones medicales*, and Galen, in *Quod optimus medicus sit quoque philosophus*, both mention the importance of the word. Galen's treatise was very influential, also in medieval Arab medicine — where its translation was read and preserved;⁴³ Arabic medical training and practice as well as theory were very much concerned with deontology, and its standardization.

Although Rufus' work *Quaestiones medicales* has not survived in its Arabic translation, Ibn Abī Uṣaybi'a records that a translation of it was made and must have circulated.⁴⁴

Homer, Poetry, Herodotus, Drama, Plato, did not survive in the Arabic world, which faithfully preserved all of Aristotle, a few passages from Plato, and the Galenic corpus including some works which were lost in the Greek. So there is no Arabic version of the *Bacchae*, and could not have been. But we know, even if we do not emphasize it enough, that Galen embedded much belletristic material in his medical writings. We saw in (4) a well-known and wondrous example.

This essay started as an interpretation of the technique of the dialogue between Agave and Kadmos in Euripides' *Bacchae*, and an exposure of personal, paedagogical, and medical dialogue templates — through exposure of common phraseology, structuring, and motifs. Special reference was then made to the models for diagnostic questioning, and their interface with literary conventions — again through exposure of common phraseology, structuring, ordering, and motifs. Since the texts involved were those of Rufus of Ephesus and of Galen, this essay begged an exploratory sortie into the *Nachleben* of these sources in the medieval Arabic tradition, itself deeply embedded in a generic tradition which by convention intertwines the technical and the literary. In this context, I would like to close this study with an open-ended offering: a rudimentary translation of a 'Tale of the Persian King' from a text which is not yet widely accessible to most Classicists (at time of press, a translation into English by de Callatay and Halflants [2011] has come to my attention which I have not yet seen, but will surely supercede the translation in [8] below). The *Epistles of the Brethren of Purity* is a written record of the activity of a group of scholars in an open-minded Isma'īlī milieu in tenth-century Baṣra. The *Epistles* read like a sympotic encyclopedic compilation of knowledge peppered with anecdotes, quotations from the Qur'ān, Bible, Midrash, Ḥadīth, prophet stories, 'King Stories', Indian and Persian lore, science, occult, and many other sources, including Neoplatonist ones. The fifty-second (and last) epistle, on magic and talismans, brings the translation of the longest passage from Plato in Arabic, as well as rich pickings of indirect survivals of Greek lore through the Sabaeen and Ḥarranian Hermetic traditions. The story which is excerpted in (8) below is one of a group of 'King Stories', and tells of the spiritual transformation of a king who falls ill and goes through a series of revelations mediated by a sage mentor (*sheikh*). The excerpt is from the early part of the story, where his vizier is trying to figure out what ails his king, bringing doctors and other consultants:

⁴³ See the edition of Bachmann, 1965, with translation into German and introduction.

⁴⁴ For background on Rufus' life and *oeuvre* see, for example, Daremberg-Rouelle, 1897; Gärtner, 1962. For his *Nachleben* in the Arabic tradition, see, among others, Sezgin, 1970 and Ullmann, 1970 and 1994.

(8) ... There was among them a great sheikh who had both knowledge and experience, and he said: 'Oh vizier, the disease which resides in the king is known by its manifestation, hidden in its inner qualities, and there is nothing like //317// this illness except in two situations: one of the two in the soul and the other in the body. That which is in the soul may be divided into two parts: one exclusive to the rational soul (*nafs nāṭiqā*) and the intellectual power (*quwwa 'āqila*), and the other exclusive to the animal soul (*nafs ḥayyawāniyya*) and appetitive instinct (*quwwa shahwāniyya*) ... As for the part special to the animal soul and the appetitive force, it is like passion for the bestial form of a woman or a youth or maidens, like what befalls a man in love when his beloved is absent, and there is an obstruction between him and his beloved, and in him is manifest the bodily fatigue which is weakness and change of complexion, the upset of balance and physical corruption and perhaps an excess penetrates him which leads him to melancholy, and he burns, and the illness reaches the pericardium and he perishes. As for the diseases in the body which issue from the four elements, every disease which occurs due to disruption of balance, the elements overcome one another, and has symptoms by which this disease is identified, and places on which are remedies are applied ... **and the skillful doctor ought not to embark on treating the patient until after asking him about the circumstances (*al-su'āl lahu 'an sabbab*) for this disease**, What it is, How did it come about, From where it emerged, What its origin is, whether it is some form of food he overate, Or a drink in which he luxuriated, or whether some grief has befallen him, or some worry which entered him? Or a condition which preoccupied his heart and his mind, or a pleasant attractive image which he saw and which got fixed in his heart, then dissolved between him and the figure and prevented him from deriving his pleasures from it. What location in his body holds the pain? In which organs the pain is focused? What he desires, what [love] story pleased and gratified him, what sound enchants him. So, if the patient informs (*akhbara*) his doctor of any of the things we mention when he asks him and the patient is **clearminded (*sahīḥ al-'aql*)**, then the seasoned physician increases his knowledge thereby, and he corroborates (*istashhada*) what the patient **informs him verbally (*akhbarahu lafẓan*)** with evidence provided by his senses [of observation] (*ḥiss*) and the **soundness (*siḥḥa*)** of pulse which is indicated and aids him in verifying the soundness of what the patient conveys to him. **And the doctor seeks indication (*yastarshidu*) according to the speech of the sick man (*'alā qawli 'l-marīḍ*)** and the testimony of the pulse ...' ('Tale of the Persian King', epistle 52, *Epistles of the Brethren of Purity*, p.317f, Bustānī ed.).

My main aim in quoting this passage is to present the 'medical questioning',⁴⁵ possibly an indirect survival of '*Quaestiones medicales*' in a literary anecdote embedded in an encyclopedic handbook of knowledge. But I added the context of the division of the soul: the consultant explains that the illness of the soul resides either in the rational soul or the animal soul, whether intellectual or appetitive impulses are involved. Specifically love sickness is described in its physical manifestations.

The role of questioning is given, just as it is in the *Quaestiones medicales*, as a means of distinguishing between a well person and an ill one. On a more practical level, the types of questions are also given, in an order not different from that set out in Rufus'

⁴⁵ More systematic investigation into the usage of the terms '*istishhād, istirshād*', which are used in this text (printed in bold in (8) above), and the term *su'āl*, which is found here as well as in the more technical text by Ruhāwī (see n. 47 below), may be rewarding.

Quaestiones medicales (with the addition of the influence of love stories and pleasant spectres).

We know from Ibn Abī Uṣaybi‘a that the *Quaestiones medicales* were translated into Arabic and circulated.⁴⁶ But they have not survived directly. Their influence, even signs of the original structure of the treatise are suggested in a medical examination in an embedded anecdote, and possibly this is taken from a ninth-century work on medical deontology by al-Ruhāwī.⁴⁷

There were three strands which were identified in the rich web of the dialogue between Agave and Kadmos in Euripides’ *Bacchae*. All three, the intimately emotional, the paedagogical, and the medical, involved the counterpoint between recognition and denial, between comprehension and cognitive ἀπορία, and between soundness of mind and some altered mental state — be it δύσγνωσια, ἀλογία, λήθη, ἀφροσύνη, ἔκπληξις, παράγμα φρενῶν or some other nuanced state confused with, or subsumed under the term μανία. The power of the word in exposing these states, as well as in leading the unwell, the incognizant, and the uncomprehending out of darkness, will always be the driving force which propels the drama of the mind, of the soul, of the heart, and of the basic instincts of gods, heroes, and mortal humans.

Hebrew University, Jerusalem

⁴⁶ Ibn Abī Uṣaybi‘a, *Ṭabaqāt al-Aṭibbā’*, I. 34.11 (Müller): treatise on what the physician must ask the sick about.

⁴⁷ ‘There are many different kinds of differences and contraries between the information given him by the patient and what the physician may find. These contraries, which may be numerous, are of two types. One is the ignorance of the patient concerning the questions asked of him by the physician; the second is what diverts him from the answer. This is because some symptoms are known by the senses, and some are perceived by deduction known only to the physician. Knowledge of the signs and symptoms of ailments which the senses perceive is common both to the physician and patient. ... He does not ask the patient what is obvious since this would indicate inability and ignorance on the part of the physician. He employs special methods of deduction and analogy; ... As to what is not obviously perceived by the senses, there is a pressing need on the part of the physician to determine it by asking questions of the patient or his nursing servant’ (al-Ruhāwī, *Adab al-Ṭabīb*, chapter 7 [p. 62 Levey, 67b in Arabic ms.] tr. M. Levey).

Bibliography

- Amundsen, Darrel W. 1974. 'Romanticising the Ancient Medical Profession'. *Bulletin of the History of Medicine* 48, 320-337.
- Bachmann, Peter. 1965. *Galens Abhandlung darüber, daß der vorzügliche Arzt Philosoph sein muß*, Arabisch und Deutsch hrsg. Göttingen: NAWG I: Phil.-hist. Kl. Jg. 1965 Nr. 1.
- Barnes, Jonathan. 1991. 'Galen on Logic and Therapy'. In: F. Kudlien, R.J. Durling (eds.), *Galen's Method of Healing*. Leiden, 50-102.
- Browne, Edward Granville. 1921. (transl.). *Chahār maqāla (the four discourses) of Niẓāmī-i-'Arūdī of Samarqand*. London: Luzac & Co.
- Daremborg, Charles, Charles-Emile Ruelle (eds.). 1879. *Oeuvres de Rufus d'Ephèse*. Paris: Imprimerie Nationale
- De Callatay, Godefroid, Bruno Halfants. 2011. *On Magic I: An Arabic Critical Edition and English Translation of Epistles 52 of the Brethren of Purity*. Oxford: Oxford University Press.
- Devereux, Georges. 1970. 'The Psychotherapy Scene in Euripides' *Bacchae*'. *JHS* 90, 35-48.
- Dols, Michael W. 1992. *Majnūn: The Madman in Medieval Islamic Society* (ed. Diana E. Immisch). Oxford: Clarendon.
- Dunlop, Douglas M. (ed.). 1979. *The Muntakhab Šiwān al-Ḥikmah of Abū Sulaimān al-Sijistānī*. Arabic text, introd., transl., ind. Paris: Mouton.
- Eijk, Philip J. van der. 1997. 'Towards a Rhetoric of Ancient Scientific Discourse'. In: Egbert J. Bakker (ed.), *Grammar as Interpretation. Greek literature in its linguistic contexts*. Leiden - New York - Köln: Brill, 77-129.
- Fraenkel, Eduard. 1912. *De media et nova comoedia quaestiones selectae*. Diss. Göttingen.
- Gärtner, Hans (ed., tr., comm.). 1962. *Rufus von Ephesos. Die Fragen des Arztes an den Kranken*. CMG Suppl. IV. Berlin: Akademie Verlag.
- García-Ballester, Luis. 1994. 'Galen as a Clinician: His Methods in Diagnosis', *ANRW* II 37/2, 1636-1671.
- Goethe, Johann Wolfgang von. 'Übertragungen', Bd. 14 of *Gedenkausgabe der Werke, Briefe und Gespräche* hrsg. von Ernst Beutler. 1964. Zürich: Artemis.
- Jones, William H.S. ²1943. *Hippocrates*. Vol. II. [LCL]. Cambridge, Ma. - London: Harvard University Press, Heinemann.
- Jouanna, Jacques. 1999. *Hippocrates*. Baltimore: Johns Hopkins University.
- Laín-Entralgo, Pedro. 1970. *The Therapy of the Word in Classical Antiquity* (ed./transl. L.J. Rather, J.L. Sharp). New Haven: Yale University Press.
- Lammermann, Karl. 1935. *Von der attischen Urbanität und ihrer Auswirkung in der Sprache*. Diss. Göttingen.
- Levey, Martin. 1967. *Medical ethics of Medieval Islam. With special reference to al-Ruhāwī's 'practical ethics of the physician'*. *Transactions of the American Philosophical Society*, n.s. 57/3. Philadelphia.
- Lloyd, Geoffrey E.R. 1987. *The Revolutions of Wisdom*. Berkeley - Los Angeles - London: University of California Press.

- Longrigg, James. 1998. *Greek Medicine from the Heroic to the Hellenistic Age. A sourcebook*. London: Duckworth.
- Mastrorarde, Donald J. 1979. *Contact and Discontinuity. Some conventions of speech and action on the Greek tragic stage*. Berkeley - Los Angeles - London: University of California Press.
- Mattern, Susan P. 2008. *Galen and the Rhetoric of Healing*. Baltimore: Johns Hopkins University
- Mesk, Josef. 1913. 'Antiochus und Stratonike', *RhM* 68, 366-394.
- Müller, Iwan von. 1891. *Claudii Galeni Pergameni Scripta minora*. Leipzig: Teubner. (*Quod opimus medicus sit etiam philosophus* Vol. II. Pp. iii-xi, 1-8.).
- Nicholson, Malcolm. 1993. 'The Art of Diagnosis: medicine and the five senses'. In: W.F. Bynum, R. Porter (eds.), *Companion Encyclopedia of the History of Medicine*. Vol. 2. London - New York: Routledge, chapter 35.
- Nutton, Vivian (intr., ed., tr., comm.). 1979. *Galenus. De praecognitione*. CMG V.8.1. Berlin: Akademie Verlag.
- Nutton, Vivian. 1993. 'Galen at the Bedside: the methods of a medical detective'. In: W.F. Bynum, R. Porter (eds.), *Medicine and the Five Senses*. Cambridge: Cambridge University Press.
- Otterlo, Willem A.A. van. 1944. *Untersuchungen über Begriff, Anwendung und Entstehung der griechischen Ringkomposition*. Amsterdam.
- Petit, Caroline. Forthcoming. 'Saphèneia. Clarity, Accuracy and Demonstration in Galen's Commentaries to Hippocrates' Epidemics'. In: P. Pormann, S. Swain (eds.), *Epidemics In Context: Greek Commentaries On Hippocrates In The Arabic Tradition*. Proceedings of the conference held in London 12-13 November 2010, to appear in the Scientia Graeco-Arabica series, De Gruyter.
- Pinault, Jody R. 1992. *Hippocrates Lives and Legends*. Leiden: Brill.
- Rohde, Erwin. ²1900. *Der griechische Roman und seine Vorläufer*. Leipzig.
- Schwinge, Ernst-Richard. 1968. *Die Verwendung der Stichomythie in den Dramen des Euripides*. Heidelberg: Winter.
- Sezgin, Fuat. 1970. *Geschichte des Arabischen Schrifttums*. Band III. *Medizin – Pharmazie – Zoologie – Tierheilkunde bis c. 430 H*. Leiden: Brill, 64-68.
- Shalev, Donna. 2008. 'Speech Act Theory and Ancient Sources for the Division of λόγος'. In: G. Calboli (ed.), *Papers on Grammar* 10, 243-275.
- Shalev, Donna. 2011. 'Mimēsis, Dihēgēsis, Style: Socrates' Paraphrase of Homer *Iliad* 1.11-42 (Plato *Rep.* 393d8-394a6)'. In: G. Calboli (ed.), *Papers on Grammar* 11, 233-272.
- Sideras, Alexander. 1994. 'Rufus von Ephesos und sein Werk im Rahmen der antiken Medizin'. *ANRW* II. 37/2, 1077-1253.
- Ullmann, Manfred. 1970. *Die Medizin im Islam (Handbuch der Orientalistik I. Nahe und mittlere Osten VI/1)*. Leiden - Köln: Brill, ch. VII. 'Rufus'.
- Ullmann, Manfred. 1994. 'Rufus von Ephesos: die orientalische Überlieferung seiner Werke'. *ANRW* II. 37/2, 1293-1349
- Von Staden, Heinrich. 1989. *Herophilus. The art of medicine in early Alexandria*. Cambridge: Cambridge University Press.
- Von Staden, Heinrich. 2003. 'Galen's Daimon: reflections on "irrational" and "rational"'. In: *Rationnel et irrationnel dans la médecine ancienne et médiévale*.

- Aspects historiques, scientifiques et culturels*. Textes réunis par Nicoletta Palmieri (Centre Jean Palerne, Mémoires XXVI). Publications de l'Université de Saint-Étienne, 15-43.
- Wallis, Faith. 2000. 'Signs and Senses: Diagnosis and Prognosis in Early Medieval Pulse and Urine Texts'. *The Society for the Social History of Medicine*, 13/2, 265-278.
- Weisser, Ursula. 1989. 'Das Corpus Hippocraticum in der arabischen Medizin'. In: Gerhard Baader, Rolf Winau (eds.), *Die Hippokratischen Epidemien*. Stuttgart.
- Wilamowitz-Moellendorff, Ulrich. ²1909. *Euripides Herakles*. Berlin: Weidmannsche Buchhandlung.