

Categorizing Knowledge and Knowledge Reference in Galen: Perspectives from different fields

International Workshop
Humboldt-Universität zu Berlin, 9–10 October 2025

Booklet of Abstracts

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Theresa M. Roth, Matteo Macciò, Leon Heblík, Humboldt-Universität zu Berlin

Categorizing linguistic evidentiality in Galen: the case of verbs of perception

Tuesday, 9 October 2025
Unter den Linden 6, 2nd floor, room 3053

9:15-9:30 Opening remarks

9:30-10:30

Peter N. Singer, Humboldt-Universität zu Berlin

Between scientific certainty and the blindingly obvious: Galen's formal and informal vocabulary of persuasion

The questions of evidentiality and modality in Galen's scientific writing have been substantially addressed within the discipline of 'ancient philosophy', insofar as they relate to Galen's own theory of epistemology. Here he gives a sophisticated account of the nature of secure knowledge and scientific demonstration (ἐπιστημονικὴ ἀπόδειξις), of the relationship of empirical experience or testing (πεῖρα) and reasoning (λόγος, λογισμός), and of different levels of certainty. They have not however been addressed with the tools and approaches of modern linguistics. In this paper I will attempt an overview of Galen's 'official' theory of scientific knowledge and of the different epistemic statuses accorded to different kinds of statement about reality, before then looking at the repertory of vocabulary and linguistic strategies he uses, more informally, to convey the plausibility or persuasiveness, or alternatively the implausibility or illogicality, of propositions, and his stance-taking in relation to these. Here I will focus on a few indicative case studies, in particular formulations involving wonder, admiration or surprise (θαυμαστόν, θαυμάσιος) and their opposites; rhetorical questions of the form 'what must one imagine?', 'should one not think?'; and *ad hominem* arguments centred on his opponents' membership of particular groups. The paper thus aims to contextualize Galen's informal or discursive language of persuasion in relation to his formal epistemological theories, suggesting that his stance-taking is informed by those theories, but also that it operates in a distinct manner, parallel to and at times quite divergent from the procedures implied by those theories.

10:30-11:00 Coffee break

11:00-12:00

Markus Asper, Humboldt-Universität zu Berlin

Commentary and performance narrative: kinds of stance-taking in Galen

While the self-presentation of authorship in ancient Greek medical texts has been explored through various lenses and terminologies, Galen's dynamic interplay of literary form and medical content presents serious challenges across his extensive body of work.

This paper proposes ‘stance-taking’ as a more adaptable framework and focuses on two types of texts—or sections of texts—that are less firmly established in the medical tradition: the commentary and the performance narrative. Both forms are abundantly present in Galen’s writings. Specifically, I will examine his commentaries on the *Hippocratic Aphorisms* and *Epidemics III*, as well as some of his performance narratives in *Anatomical Procedures* and *On Prognosis*. Through this analysis, I aim to demonstrate that Galen is, in fact, always taking stances—thereby pushing us to adopt particular perspectives—even in contexts where we might not expect him to do so.

12:00-13:00

Vincenzo Damiani, Università di Catania – Julius-Maximilians-Universität Würzburg

Authorial presence and authority construction in Galen’s De animi affectuum/peccatorum dignotione et curatione

This paper examines Galen’s authorial presence in the twin treatises (sometimes regarded as two books of a single work) *On the Affections and Errors of the Soul*, paying particular attention to the strategies he employs to establish his authority, according to audience and occasion of composition. These strategies include engaging with addressees, providing explanatory remarks on his argumentative methods and cross-references, distancing himself from predecessors, presenting case studies, appealing to authoritative tradition and mythological *exempla*, drawing analogies, offering definitions and conceptual or mathematical models of moral reasoning, employing autobiographical narratives, and introducing a mediating figure of an external “supervisor” (ἐπόπτης), likened to a physician and, at least implicitly, aligned with the author himself. Moreover, medical language functions here as an objectivising device. Against this background, the paper focuses on two aspects in particular: first, Galen’s metatextual reflections on the forms of exposition he chooses; and second, his use of first-person accounts as a means of establishing his authority.

13:00-14:00 Lunch

14:00-15:00

Elena Squeri, Sapienza Università di Roma

Degrees of ontological commitment in the metaphorical lexicon of Ancient Greek medicine

The concept of “ontological commitment” was elaborated in logic, with reference to the truth conditions of theories reduced to first-order logic predicates, that identify properties of elements. For the truth value of a predicate to be established, we need to assume the existence of the element of which it is predicated (Quine 1948: 33; Hylton 2004 § 1). A statement as “(all) atoms are indivisible” [$\forall x(\text{indivisible}(x)); x = \text{atom}$] is committed to

the existence of atoms, i.e. the bound variable of the predicate, and can then be evaluated as true or false based on atoms being or not being indivisible.

The involvement of ontological commitment in common discourse is debated, but logicians usually agree on its exclusion from figurative language (Bricker 2016 § 4). By uttering “I have butterflies in my stomach” the speaker need not commit to the existence of butterflies [$\exists x(\text{in my stomach } (x)); x = \text{butterfly}$], for the predicate to be either true or false. If one takes metaphorical sentences to have ontological implications, all of them are inherently false. The use of metaphor, thus, does not seem to require any form of epistemic stance over one’s assertion, since the catachrestic nature of the predicate prevents from proceeding to the assessment of its truth value.

This last observation clashes with the frequent use made of metaphors in science as means of exposing, or even elaborating, a theory (“Pedagogical” and “Theory constitutive metaphors” in Boyd 1979), which should indeed make the object of verification. This is why Steinhart (2001) asserts that, contrary to not having truth conditions, metaphorical predicates like “Achilles is a lion” actually have them double: a metaphor can be evaluated as true only if one is ontologically committed to both the existence of the subject of the predicate in the target domain (Achilles) and the existence of the referent of the metaphorical predicate in the source domain (lions), so that the analogical link between the two may subsist.

Furthermore, there are both diachronic and synchronic reasons which make it hard to give a univocal evaluation of the ontological commitment of metaphorical expressions used in science, and, thus, of the capacity of metaphors to convey aspects of observable reality. This paper aims to investigate these issues in some Galenic passages, to evaluate the different approaches taken by Galen towards the epistemic value of metaphorical expressions.

It is first of all possible for a predicate, which, in a certain system of beliefs, is perceived as metaphorical, i.e. as being logically false, to be perceived as reflecting a true state of affairs in another system (Nyord 2017). In “Yesterday the sun raised at 6 am”, the verb *raise* is used figuratively, so that the interpreter is relieved from assessing the truth value of a movement predicated of the sun. In a geocentric system, however, the truth conditions of this assertion would be very different. Some Galenic passages as well analyse metaphorical expressions in which the source domain seems to have some implications on the ontology of the target. When commenting on the Hippocratic hapax ἐφθότης (*Acut.* 49.1, p. 47, 16-18 Joly = 13; 2.330.3 L.), ‘fatigue’, from ἐφθός, *met.* ‘worn out’ (← ‘boiled’), for instance, Galen asserts that the word choice is particularly appropriate, since ἐφθότης refers to a condition of fatigue that is triggered by a hot moistness of the body (Gal. *In Hipp.Acut.* II 55, p. 216, 22-217, 17 Helmreich [15.624-625 K.]) Therefore, the source domain of the analogy on which the metaphor is built has some implications on the ontology of the target, something about which Galen may take an epistemic stance.

As with the use of *raise*, a metaphorical expression can become so entrenched in common or technical language that is not perceived as figurative anymore, as it normally happens with embodied and ontological metaphors (Lakoff–Johnson 1980, esp. ch. 6). In these cases, we evaluate the predication as if the sentence had standard truth values. Galen seems to be aware of this problem. In *PHP*. 1.7.32 (p. 86, 24-27 De Lacy), for instance, he discusses the fact that, even though the progress of science has shown that the name of the καρωτίδες does not have any ontological implication on their nature, the name is still used, since it is strongly established (ἤδη κρατεῖ τοῦνομα).

Between these two poles, and inevitably closer to the one or the other, we find more or less lively metaphors. We will then proceed to evaluate the overall epistemic import that is attributed to true metaphorical expressions by Galen (on the subject see also von Staden 1995): is he more on the traditional side, which states that metaphors do not bear any link to reality, or does he agree on the fact that they can bring light to scientific matters by creating an analogical link to different possible worlds? What is very interesting with reference to the topic of the workshop is that Galen’s position on the epistemic value of metaphors seems to be strongly based on the verifiability of their truth conditions via sense perception (see e.g. Gal. *Diff.Puls.* 3.7 [690.10.14 K.]: ἀπτόν γάρ τοι τὸ σκληρόν ἐστι καὶ ἡ σκληρότης ἀπὴ ποιότης. ὅταν οὖν ἐπὶ γεῦσιν, ἢ ὄσφρησιν, ἢ ὄψιν, ἢ ἀκοήν, ὁ λέγων μεταφέρει τοῦνομα, τηνικαῦτα χρὴ τὸν ἀκούοντα τῆς πρὸς τὸ κύριον ὁμοιότητος ἀναμιμνήσκεσθαι ‘For the hard is certainly tangible, and hardness is a tangible quality. Therefore, whenever the one speaking transfers the name to tasting, smelling, seeing or hearing, it is necessary under these circumstances for the one listening to be mindful of the likeness to the reality’, on the link between language and sensorial perception in Galen see also Singer 2022), i.e. on the same criteria which lay the ground for strong evidentiality markers (Aikhenvald 2018 § 1.3.1).

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* <https://plato.stanford.edu/archives/win2016/entries/ontological-commitment/>

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15:00-16:00

Ezra la Roi, Universiteit Gent – Katholieke Universiteit Leuven

Correlating stance taking strategies with register and diachrony in Galen's medical writings

In this talk, I explore the interpretative stance taking strategies that we find in Galen's medical writings from a linguistic perspective, placing Galen's Greek both in a Post-Classical Greek perspective and assessing his linguistic positioning with respect to the traditional technical register of Greek medical writing. I discuss three case studies involving a selection of modal and particle expressions that may show correlations between Galen's interpretative stance taking, register and diachrony.

16:30-17:00

Nathalie Rousseau, Sorbonne Université

Tracking, encoding, analysing and publishing Galen's lexical knowledge: towards a Medical Dictionary According to Galen of Pergamum

Due to its very large size, the Galenic corpus represents a significant challenge for researchers. How can we make the best use of digital tools, not only to produce a large number of close reading analyses, but also to connect them with one another and make the overall research data as accessible as possible to readers?

In this paper, we will outline the solutions adopted in the development of the *Medical Dictionary According to Galen of Pergamum*, currently in progress. Its aim is to make available Galen's own analyses on the form, meaning, and use of medical terms, which are dispersed across more than a hundred treatises.

We will discuss the scientific and technical challenges raised by each stage of the workflow (tracking, encoding, analysing, and publishing), with particular emphasis on the issue of striking a balance between analytical thoroughness and bringing the overall project to completion.

Friday, 10 October 2025
Unter den Linden 6, 2nd floor, room 3053

9:30-10:30

Theresa M. Roth, Matteo Macciò, Leon Heblík, Humboldt-Universität zu Berlin

Categorizing linguistic evidentiality in Galen: the case of verbs of perception

Evidentiality can be defined as the linguistic category conveying the source (and kind) of information on which the speaker's proposition is based: perception, inference, or hearsay (Willet 1988; Dik&Hengeveld 1991; Aikhenvald 2004: 3).

Some languages codify this category grammatically, as is the case in many native North and South American languages (e.g. Shasta and the Quechuan languages, respectively) or in the Balkan *Sprachbund*, where in particular Slavic languages encode a firsthand/non-firsthand opposition via verbal morphology (Friedman 2004).

On the other hand, languages that lack dedicated grammatical markers can still express evidentiality by means of what are usually referred to as “evidential strategies”.

Since Ancient Greek is one of such languages, we approach evidentiality in a broad functional sense, considering as evidential strategies various repurposed elements and structures at the morphological, lexical, and syntactic level (e.g. the optative, some particles, or some types of clausal complementation, respectively). This enables us to investigate not only evidentiality in a language which does not encode it via grammar, but also its entrenchment in two further linguistic categories, epistemic modality and speaker's stance, as well as its variation across registers—within the context of the Collaborative Research Centre 1412 “Register: Language Users' Knowledge of Situational-Functional Variation” (Humboldt-Universität zu Berlin / Leibniz-Zentrum Allgemeine Sprachwissenschaft).

In this talk, we will focus on verbs of perception and their complementation as evidential strategies.

Verbs of perception can receive evidential readings in so far as they are able to combine their lexically inherent reference to direct perception with a cognitive meaning referring to acquisition of knowledge and inference. This combination can arise either at the sentential level, when the verb of perception appears in the dependent clause of a predicate of cognition, or at the clausal level, when certain types of completive clause license a cognitive reading of the verb of perception in the matrix predicate.

Van Rooy 2016 makes a general attempt at pointing out the relevance of evidentiality in Ancient Greek by assessing possible linguistic means in Plato's *Apology* and *Crito*. Regarding the complementation of verbs of perception, he takes into consideration the alternation between *genitivus-cum-participio* (GcP) and *accusativus-cum-participio* (AcP), ascribing a direct perceptual value to the former and a hearsay value to the latter.

As to finite complementation, ὅτι would point to mediated information and ὡς to personally accessed one (besides low speaker's commitment).

Luraghi's 2020 monograph briefly addresses evidentiality in Homeric Greek within a constructionist approach, focusing on predicates of visual and auditive perception. Notably, she finds inference based on perception (type III in Dik&Hengeveld 1991) to be absent in Homeric Greek.

Masliš 2023 adopts evidentiality as a parameter to investigate distributional patterns in participial, ὅτι and ὡς complementation of verbs of sight and knowledge in Attic oratory. Thus, participial complementation can either encode direct perception of a state of affairs or—in contrast with Homeric Greek—circumstantial inference (*ergo* acquisition of knowledge about a state of affairs, *ergo* propositional content), provided that the speaker has direct access to the evidence on whose basis the inference is drawn. Conversely, ὅτι and ὡς always introduce propositional content, but they are interpreted as having different implications on intersubjectivity, ὅτι being the unmarked complementizer and ὡς the marker of lack of intersubjectivity (rather than subjectivity).

Finally, Ceperaga's 2024 dissertation provides a comprehensive study of the constructions of verbs of hearing in the Classical prose. Based on her corpus on ἀκούω, she largely confirms the hypothesis and intuitions of previous research. GcP complementation always signals direct auditive perception (mostly speech acts with *verba dicendi* as participial predicates), AcP complementation entails acquisition of knowledge and serves common ground management, finite complementation is used for assertions and new information. As an alternative to ὅτι and ὡς, AcI would be preferred when the source of the reported speech is undetermined or deemed unreliable by the reporting speaker (s. already Debrunner's volume of the *Griechische Grammatik*).

Our aim is to investigate a sample of Galen's medical texts (including but not limited to *Protrepticus*, *De sectis*, and *De locis affectis*) against this background.

Given the crucial role of sensory perception in both medical practice (physical examination, diagnosis, prognosis, etc.) and medical theory (anatomy, epistemology, etc.), Galen is likely to refer to a broad range of perceptual sources. A first point of interest is therefore to investigate his usage of verbs of vision as opposed to verbs of hearing, on one hand, and of both classes as opposed to verbs of touch (and secondarily of smell and taste), on the other.

Crucial in Galen's œuvre are also the communicative domains of didactics (informing the εἰσαγωγαί) and polemics (often prominent in the πραγματεῖαι). In this respect, a second point of interest is the study of finite complementation in the light of pragmatic notions such as intersubjectivity and speaker's commitment. Finite complementation of verbs of perception is also worth considering from the perspective of evidentiality because it allows fine-grained distinctions between different grades of cognitive reading.

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10:30-11:00 Coffee break

11:00-12:00 Final discussion and closing remarks