



Marion Durand*

The Stoic Theory of Case

<https://doi.org/10.1515/apeiron-2023-0115>

Received December 20, 2023; accepted October 21, 2024; published online November 18, 2024

Abstract: This article presents a new account of the Stoic theory of case. It argues that cases belong to the Stoic class of *lekta* and that they play a twofold semantic role. Firstly, they relate words to the world in a process akin to reference. Secondly, they encode syntactic information which captures structural elements of the world, contributing to language's ability to represent reality and its structure by enabling it to capture both objects and the ways in which these objects relate to each other.

Keywords: Stoicism; *lekta*; case; semantics

Among the lesser known and most poorly understood Stoic innovations in semantics is their theory of case, which has long been a subject of interest and puzzlement among scholars of Stoic dialectic.¹ Ancient thinkers, much like modern grammarians, considered case to be little more than a grammatical feature of words: a variation in the ending of a word to indicate its syntactic function in the sentence.² The Stoics stand out from Aristotle who preceded them and the grammarians who followed them by considering case to be not just a morphological feature of words but something that some words signify. Cases were, for the Stoics, also part of the meaning or semantic content of inflected words. Nonetheless, it is not clear exactly where the Stoics situated these cases, now distinct from the words that signify them, in their semantics. The metaphysical status of cases and the role that they play in the semantics of words that signify them, and indeed which words do and do not signify

1 See esp. Frede (1994a), Primavesi (1994), Schubert (1994), Hadot (1966), Gaskin (1997), Bronowski (2019), as well as Long (1971), Delammare (1980), Alessandrelli (2013), Gourinat (2018).

2 On ancient conceptions of case, see e.g. Pohlenz (1948) I.44 and Long and Sedley (1987) Vol. 1 p. 201. On the relationship of the Stoic conception to Aristotle's, see esp. Primavesi (1994).

I am grateful for the support of Brad Inwood, Rachel Barney, James Allen, and Gurpreet Rattan as I developed the ideas presented here, as well as to Stephen Menn, Charles Brittain, and Susanne Bobzien for generous discussion of earlier versions. Audiences in Munich, Montreal, and Groningen, and the comments of anonymous referees helped clarify and improve much of the view.

***Corresponding author: Marion Durand**, Corpus Christi College, University of Oxford, Oxford, UK, E-mail: marion.durand@philosophy.ox.ac.uk

them, remain controversial. Evidence on these questions is sparse and sources present apparently conflicting views. Few attempts have been made to provide a comprehensive account of the theory and perhaps the most extensive and notorious one, Michael Frede's (1994) "The Stoic Notion of a Grammatical Case", presents, as some have suggested, a view that is philosophically problematic.³

This article presents a new reconstruction of the Stoic theory of case. I begin by considering the metaphysics of case. I argue that case belongs to the Stoic class of *lekta*, the items which are expressed by words and form the contents of our thoughts. I then turn to the semantic function of case, with particular attention to the semantics of nouns. I suggest that cases play a twofold role. Firstly, they relate words to the world in a process akin to reference. Secondly, they encode syntactic information at the level of *lekta* which correlates to structural elements of the world. By capturing the ways in which objects relate to each other, case thus contributes to language's ability to describe or represent reality and its structure. I conclude with some tentative and more speculative remarks on the potential role of cases in the semantics of other types of inflected words, notably pronouns.

³ Gaskin (1997), and to some extent Ildefonse (2007, 168ff), Gourinat (2018, cf.1999), and Bronowski (2019, ch.6). All these previous attempts to contend with this question face methodological challenges which my own reconstruction must also necessarily grapple with. The state of the surviving evidence on semantic matters is generally poor. Fragments are few and often in contexts demanding a cautious approach. Many are found in texts by authors who are hostile to the Stoics or who display some confusion regarding the theory they report. Some of the evidence on the topic of case specifically is found in primarily grammatical rather than philosophical texts. As a result, the authors frequently lack a full understanding of the technical terminology introduced by the Stoics, and sometimes fail to represent the sophisticated nuances of Stoic views. In what follows, I work to make full use of these various and disparate sources while treating them with a necessary amount of caution and scepticism, considering especially ways in which the views they report might have been distorted, intentionally or not, by their authors. I do not take a stance on the question of the evolution and development of views among Stoics. Although there can be little doubt that views evolved over time in the Stoa, and that different Stoics disagreed with each other (reports of disagreements on other questions are not infrequent, e.g. Numenius, fr. 24 des P., apud Eusebius *Praep. Ev.* 14.4), the evidence hardly allows us to trace these historical developments adequately – for more on this, including some suggestions of possible points of disagreement between Chrysippus and Diogenes, see especially Gourinat (2018, 146ff). I remain sensitive throughout to these possible divergences, but generally refer to the theory as the "Stoic" theory, as scholars often do. Such a unified theory, if it is not a mere figment, is most likely Chrysippus' view or something close to it, which is usually assumed to have been orthodoxy from then on. More work is needed to identify and track the detail of the distinct Stoic views, if indeed such an enterprise is possible, but I hope that this can be done all the more effectively with the new perspective on the theory on offer here.

1 The Metaphysical Status of Case

Before attempting to understand its place in the semantic theory, we must establish what case is for the Stoics. The Stoics distinguish between *semainonta*, things that signify, which are at the level of what they call *phōnē*, voice, and *semainomena*, things signified.⁴ One might expect to find case described as a purely linguistic feature, at the level of *phōnē*, rather than as something signified. In this respect, the Stoic notion of case differs from the standard modern notion of grammatical case, as well as from many ancient conceptions of it.⁵ Evidence suggests that the Stoics thought of case as part of the signified, and not merely as a feature of words at the level of *phōnē*.⁶ Most notably, in Diogenes Laertius' account of Stoic doctrines, case is mentioned not in the discussion about the signifying (*peri phōnēs*) but about the signified.⁷ Similarly, in his description of so-called categorical propositions, Diogenes describes them as composed of a nominative case and a predicate (κατηγορικὸν δέ ἐστι τὸ συνεστὸς ἐκ πτώσεως ὀρθῆς καὶ κατηγορήματος, Diogenes Laertius (DL) VII.70). Propositions are signified, as are predicates. Cases are thus put on a par with signified components, rather than components of the sentences expressing them.

To be sure, this needn't mean that case is thought by the Stoics to be only at the level of signified. It is a fact about the Greek language that it is inflected and most linguistically inclined thinkers both before and after the Stoics spoke of case as a property of words, at the level of the signifying.⁸ In reporting Stoic views, Diogenes Laertius (VII.58) attributes to some a definition of certain parts of speech (verbs, conjunctions) as caseless (*aptōton*) while others (the article) are said to admit of case (*ptōtikos*), all apparently at the level of the signifying. We therefore needn't infer that case was, for the Stoics, solely a signified, while it was for almost everyone else a morphological feature of words. Rather the Stoics likely thought of case as twofold:

4 DL VII.44.

5 See n3 above. Aristotle certainly seems to have conceived of it as a grammatical feature (and he believed the nominative to be the standard form of a noun, rather than a case, claiming that only oblique cases are cases, which fall from the nominative. (Aristotle, *De Int.* 16b1-5, Ammonius, *in Ar. de Int.* 42.30–43.20, on which see discussion below)). It is also the view found in most later grammarians, who enumerate case as one of the “accidents” of words. However, the *Tēchnē* attributed to Dionysius Thrax states that cases belong to the signified not the expressions signifying them (230.34–6). Frede (1994a, 14) argues that the view put forward in this passage of the *Tēchnē* is Stoic. Primavesi (1994, 90) similarly counts case as purely signified. The only recent proponent of the view that case is not a signified for the Stoics is Alessandrelli (2013, 154).

6 Frede (1994a, 14ff). provides a full and thorough survey of the evidence for this, which I will not repeat here.

7 DL VII.65.

8 see nn.3 and 5 above.

both signified and a property of *phōnē*.⁹ In fact, it is likely that they took linguistic case to be a marker of the semantic content expressed by words that bore it: grammatical case, as a feature of *phōnē*, reveals case at the level of signified. At any rate, it is the latter which is of interest here and what I will mean by “case” in the following discussion will be, unless otherwise noted, the signified case.

The first salient question, then, is what kind of signified is case? Some of the most prominent signified items (*sēmainomena*), in the Stoic taxonomy are *lekta*, “sayables”, which are expressed by written and spoken words, and which form the content of thoughts and beliefs.¹⁰ Notably, *lekta* are incorporeal.¹¹ In establishing the status of case, we might therefore begin with whether cases are incorporeal, which would put them among the *lekta*. Several sources do in fact suggest that cases are incorporeal.¹² Among them, a treacherous passage in Clement states the incorporeality of case in no uncertain terms:¹³

ἡ πῶσις δὲ ἀσώματος εἶναι ὁμολογεῖται· διὸ καὶ τὸ σόφισμα ἐκεῖνο οὕτως λύεται· “ὁ λέγεις, διέρχεται σου διὰ τοῦ στόματος”, ὅπερ ἀληθές, “οἰκίαν δὲ λέγεις, οἰκία ἄρα διὰ τοῦ στόματός σου διέρχεται”, ὅπερ ψευδός· οὐδὲ γὰρ τὴν οἰκίαν λέγομεν σῶμα οὔσαν, ἀλλὰ τὴν πῶσιν ἀσώματων οὔσαν, ἧς οἰκία τυγχάνει.

Case is agreed to be incorporeal; and hence the famous sophism is solved as follows: “What you say passes through your mouth.” This is true. “You say: A house. Therefore a house passes through your mouth.” This is false. For what we say is not the house, which is a body, but the case, which is incorporeal and which the house bears.

Clement *Strom.* VIII.9.26.5 (translation Long and Sedley 1987, modified)

According to this – difficult and potentially dubious – passage, case is signified and incorporeal. Taken at face value, the passage therefore suggests that case must be a

⁹ For a similarly dual view of the status of case (as both signified and at the level of *phōnē*), see Gourinat (2018), *contra* Primavesi (1994) and Frede (1994a, 24). The view I put forward here attempts to bridge the gap between case at the level of signified and case at the level of signifying. The duality in turn makes sense of apparently confused or problematic passages, such as Plutarch *Plat. Quaest.* 1011d, where *ptōsis* is clearly discussed as a property of nouns (parallel to tense for verbs) and which Alessandrelli (2013, 140) uses as evidence that case is not a signified.

¹⁰ DL VII.63, SE M VIII.70.

¹¹ The Stoics recognised four incorporeals: *lekta*, void, place, and time (SE M X.218). These differ from other entities in the world in that, although they are “somethings”, they do not exist (only bodies have existence) but merely subsist.

¹² Here again, for a full review and discussion of the difficult evidence on the (in)corporeality of cases see Frede (1994a, 14ff). I will focus on just a few key passages, including Clement’s, my interpretation of which is markedly different from Frede’s.

¹³ This passage motivates Ildefonse’s (1997, 187) view that case is incorporeal. See Gaskin (1997, 96) for a similar argument.

lekton of some kind, since it must fall under one of the four classes of incorporeals (place, time, void, and *lekta*) and *lekta* is the only plausible candidate.

Although our evidence provides many examples of *lekta*, both complete and incomplete, case is rarely if ever listed as one of them.¹⁴ Nonetheless, it is mentioned immediately following the enumeration of predicates (*katēgorēmata*) in Diogenes Laertius, where cases appear to be to nouns what predicates are to verbs. Predicates are said to be incomplete *lekta* (ἔστι δὲ τὸ κατηγορήμα... λεκτὸν ἑλλειπὲς DL VII.64). They are the incorporeal counterparts, at the level of *lekta*, to the corporeal verbs at the level of *phōnē*. Predicates are also said to be constructed with cases (συντακτὸν ὀρθῇ πῶσει DL VII.64). This would suggest that verbs express predicates while nouns express cases.¹⁵ Cases, then, would be *lekta* much in the same way as predicates.

This view is rejected by scholars including Frede, Schubert, and, to some extent, Long.¹⁶ While all agree that cases are not properties of expressions and accept the overwhelming evidence in favour of the view that they are part of what is signified by expressions, they nonetheless deny that cases are *lekta*. Long argues that the meaning of a noun is not a *lekton* but rather the very thing to which it refers.¹⁷ Cases on his view are “the means of referring [deficient *lekta*, namely predicates] to a subject or actual thing”. This leaves a few unanswered questions: what it means to refer *lekta* to things, how cases do this, or why they are necessary in order to do it. The usual distinction is between the corporeal signifying expressions and the incorporeal signified (the *lekton*), which bears some relation to reality. Propositions, which are expressed by signifying expressions, correspond to facts or states of the world: the proposition ‘Socrates walks’ corresponds to Socrates walking. At a more granular level, predicates, as constituents of propositions, seem to correspond to constituents of states of the world: ‘walks’ in ‘Socrates walks’ corresponds to the disposition walking realised in Socrates.¹⁸ On Long’s view it would seem that the intermediary, the incorporeal signified, is left out of the semantics of nouns, and

¹⁴ One possible exception is the inclusion among the complete *lekta* in the list in DL VII.67 of the “address” or “appellative” (προσαγορευτικόν) which is illustrated with “most glorious son of Atreus, Agamemnon, lord of men” (Ἀτρεΐδῃ κύντιστε, ἀναξ ἀνδρῶν Ἀγάμεμνον). Although the text is corrupt, and no explicit mention of cases is made here, the example appears to be composed of a vocative case (if we assume that is what is expressed by the nouns and adjectives here) with no predicate. If so, it would amount to a vocative case being listed as a complete *lekton* and speak in favour of the view that cases are *lekta*. This is the view taken by Gourinat (2018, 161–2) cf Gourinat (1999).

¹⁵ I return to this point in more detail below.

¹⁶ Frede (1994a), Schubert (1994, 73ff), Long (1971).

¹⁷ Long (1971, 105).

¹⁸ In speaking of constituents of propositions, I implicitly disagree with Bronowski (2019)’s view that propositions are indivisible units (though I do not deny their unity).

replaced with the case, *ptōsis*. The exact metaphysical status of *ptōseis* is not well accounted for, nor is the mechanism by which they act as a means of referring (which I take to mean relating in some sense) *lekta* to things. Long's view appears to leave us with an under-specified entity in the already complex Stoic theory.¹⁹

Frede's view is not entirely dissimilar to Long's, though it is a little more elaborate. He similarly thinks that case is a non-linguistic item, neither a property of expressions nor a *lekton*. Instead, he argues that case should be understood as a particular instance of a universal.²⁰ "Man", on this view, signifies a case of an individual man, which Frede identifies as the instantiation of the common quality (man-ness) in the individual man.²¹ Unlike on Long's view, the case does not seem to have a mediating role between the word and an object, here an instantiation of a quality. Instead, case just is the instantiation of the quality in the individual to which the noun refers. In other words, cases and qualities coincide so that saying that a noun signifies a case is just the same as saying that a noun signifies the instantiation of a quality.

One of Frede's arguments in favour of this is that qualities are distinct from the objects they qualify, fitting nicely with evidence suggesting that words, cases, and objects are distinct from each other. Frede indeed bases his view on the report that nouns such as "Socrates" signify qualities (DLVII.78) together with the claim that propositions such as "Socrates walks" are composed of a case and a predicate (DL VII.63-4). This presents two difficulties. Firstly, it is not clear that qualities and qualified objects are sufficiently distinct for the view to gain traction. It is certainly true that a quality is conceptually distinct from the object it qualifies, but the distinction is notably imperceptible to the human eye. Referring to the quality and referring to the object which has the quality will likely be, for any human, one and the same process. To justify introducing both case and quality into the semantic theory in the way the Stoics do, both ought to have more of a role to play, if only an explanatory one. Secondly, and by his own admission, Frede's view cannot account for words other than nouns. For example, pronouns, which do not signify qualities, nonetheless seem to express case, since propositions of the form "this one walks" are said to be comprise a "deictic nominative case" (DL.70).²² This speaks against a view on which case and quality are one and the same thing.

¹⁹ A similar worry arises from the views of Bronowski (2019) and Schubert (1994), on which see n34 below.

²⁰ Frede (1994b, 124).

²¹ Frede's view is motivated by a passage (DL VII.58, quoted below) reporting that nouns signify qualities. For a discussion of this very passage, qualities, and their relationship to cases, see Section 2 below.

²² On other parts of speech, see Section 4 below.

In addition, Frede gets to his view by dismissing much of the evidence for the incorporeality of cases as either confused or untrustworthy.²³ While he is right that many of our sources are either untrustworthy or confused (or both), the details of his diagnoses seem worth prodding. In particular, Frede dismisses Clement's testimony (above) as possibly reflecting a non-stoic view and adapting the Stoic notion of case to a Platonic theory.²⁴ Yet the context here is clearly a Stoic one. We know from Diogenes Laertius that Chrysippus did deal with this particular sophism.²⁵ Clement has been discussing the Stoic theory of causation.²⁶ The idea that Clement would report the Stoic solution to the sophism using a Platonic adaptation of a Stoic concept is not sufficient to dismiss the report that case is incorporeal. Frede also argues that Clement may be confused, since a more plausible answer to the sophism would be to say that the sound, not the incorporeal meaning, goes through one's mouth. This is certainly true, and it is unlikely that Chrysippus would have said that the incorporeal passes through the mouth. Nonetheless, an alternative diagnosis of the confusion is available. It is quite possible that Clement could be mistaken about the answer to the sophism, but not about the incorporeality of case. In fact, he may well be conflating – a common mistake – the signifying expression (the *phōnē*) with what it signifies (an incorporeal *lekton*) and giving a garbled report of the answer to the sophism on the basis of what he knows to be true: that case is incorporeal.²⁷ I am therefore disinclined to dismiss this passage outright, and rather think that we ought to attempt to make sense of it.

Another reason to think that Clement's report may well be right is given to us by Diogenes Laertius, in his definition of predicates. Predicates, he tells us, are incomplete *lekta* which are to be constructed, or combined, with cases in various ways:

23 Frede (1994a, 14–7).

24 Frede (1994a, 22). See also Gourinat (2018, 154 n12), who suggests that Clement likely takes the Platonist view that air is an incorporeal.

25 DL VII.187, where “house” is replaced by “wagon”.

26 Clement *Strom.* VIII.9.25.5ff, a passage whose authenticity or reliability is not usually questioned, though it is difficult and possibly a little muddled.

27 For discussions of the articulation of and answer to the sophism, see Bobzien (2006) and Atherton (1993, 202, 296–8 esp. n71). Schubert (1994, 73ff) similarly dismisses Clement's report on account of his confusion, including further evidence where he gives as an example of a case *temnesthai* and *to naun gignesthai*, which Schubert rightly notes the Stoics would not have considered cases. Here again, it seems perfectly plausible that Clement is confused about the details of the theory and providing inadequate examples, while being correct in reporting the more basic fact that cases are incorporeal. See Bronowski (2019, 352) for a similar diagnosis.

ἔστι δὲ τὸ κατηγορημα τὸ κατὰ τινος ἀγορευόμενον ἢ πρᾶγμα συντακτὸν περὶ τινος ἢ τινῶν, ὡς οἱ περὶ Ἀπολλόδωρον φασιν, ἢ λεκτὸν ἐλλιπὲς συντακτὸν ὀρθῇ πτώσει πρὸς ἀξιώματος γένεσιν. (...) οἷον τὸ ‘διὰ πέτρας πλεῖν.’ καὶ τὰ μὲν ἔστι τῶν κατηγορημάτων ὀρθά, ἃ δὲ ὕπτια, ἃ δ’ οὐδέτερα. ὀρθά μὲν οὖν ἔστι τὰ συντασσόμενα μιᾷ τῶν πλαγίων πτώσεων πρὸς κατηγορήματος γένεσιν, οἷον ‘ἀκούει,’ ‘ὄρᾷ,’ ‘διαλέγεται’

A predicate is what is said of something, or a thing to be constructed with something or things, according to Apollodorus, or an incomplete sayable to be constructed with a nominative case to form a proposition. (...) And of predicates, some are active, some passive, and some neither. Active are those which are construed with an oblique case so as to produce a predicate, for example ‘hears’, ‘sees’, ‘converses’.²⁸

Diogenes Laertius VII.64

This passage, too, is difficult and contentious. For our purposes, we only need to note that predicates are clearly thought of as being in some way constructed with (*suntakton*) cases, either nominative or oblique. On Frede’s view, this will require a corporeal (a case) and an incorporeal (a predicate) being constructed or joined with one another to form another incorporeal (a proposition). How this might work is unclear. How can a body be constructed with an incorporeal and how can an incorporeal have a corporeal constituent?²⁹ Frede does not address this worry. It seems that he does not think it implausible that the Stoics would have held such a view. Yet, the Stoics are staunch physicalists. On their view, incorporeals do not exist and only subsist. Even if we were to think that their subsistence does not mean that they are necessarily dependent on existing things, we cannot deny that they have a relevantly different ontological and metaphysical status from bodies.³⁰ We may think that *lekta* are “items in the world”, as Bronowski argues,³¹ but they are not in the world in the same sense that bodies are in the world. The idea that they could combine in any meaningful way with corporeal things seems difficult to square with Stoic doctrine. Incorporeals, after all, unlike bodies, cannot act or be acted upon, and Nemesius attributes to Cleanthes the view that “no incorporeal interacts with a body and no body with an incorporeal” (81.6-10).³² It is even more implausible to think that this combination of a corporeal and an incorporeal could together form an

²⁸ I use single quotation marks for propositions and other *lekta* and double quotation marks for the sentences and other expressions by which they are expressed.

²⁹ See Gaskin (1997, 99) and Bronowski (2019, 409) for similar objections. I do not take the role of *lekta* in Stoic causal theory to provide a parallel or satisfying answer here.

³⁰ The metaphysical question of the dependence relations between *lekta* and other things is fraught, and the details matter little for my purposes here. See Frede (1994b) and Schenkeveld and Barnes (1999) for standard interpretations, and Alessandrelli (2013), Gourinat (2018), and Bronowski (2014, 2019 esp. ch 6) for recent discussions.

³¹ Bronowski (2014, 87).

³² cf. SE M VIII.263, Cicero *Acad.* I.39.

incorporeal, that is, that incorporeal *lekta* could have corporeal constituents. Diogenes tells us that predicates can join with cases to form other predicates. A two-place predicate, ‘hears’, will construct with a case, for example ‘Plato’ (in the accusative) and this will yield the one-place predicate ‘hears Plato’.³³ This new predicate can, in turn, be constructed with a nominative case, for example ‘Socrates’, to form a proposition, ‘Socrates hears Plato’. Both predicates and propositions are incorporeal. Yet, on this view, they would be partly composed of corporeals. This seems unlikely, given Stoic ontological commitments.

I am much more inclined to agree with those who argue that cases are in fact *lekta*.³⁴ The argument from silence – based on the fact that *ptōsis* is not explicitly listed as a *lekton*³⁵ – is perhaps the strongest one against this view, and it is weak, given the state of the evidence. On the other hand, the evidence that cases are incorporeals, and such as to be connected to other *lekta* is clear and speaks in favour of the idea that cases, too, are *lekta*, since it is likely that an incorporeal *lekton* can only be constructed with another incorporeal *lekton*. This in turn supports taking Clement’s albeit otherwise confused report as reliable in this particular respect.

This leaves open the questions of whether cases are expressed by nouns as a whole and whether they exhaust the *lekta* expressed by nouns. We could perhaps think that just as a noun can be broken down into a nominal root and an ending, e.g. “Socrat-es”, the lektical bits can similarly be broken up so that the nominal root, “Socrat-” expresses one thing (or nothing) and the ending “-es”, which marks case at the level of *phōnē*, expresses another, namely case.³⁶ The latter might be thought to be a bit of the *lekton* expressed by the noun as a whole, which would be divisible into

³³ See Ammonius in *Ar. de Int.* 44.11–45.6.

³⁴ Gaskin 1997, Gourinat 2018; see also Ildefonse (1997, 187) who argues that *ptōsis* must be incorporeal, and therefore, I take it, a *lekton*. Bronowski (2019, 412–15, possibly in a departure from Bronowski 2014, 84–5) agrees that cases cannot be corporeal but stops short of identifying them as *lekta*. Instead, the suggestion seems to be that “case-*ptōseis*” are yet another sort of entity, one “borne by particulars insofar as there are true attributions made of them, and utterly dependent on a *katēgorēma*”. The exact nature of this entity is unclear. The view bears some similarities to the one offered by Schubert (1994, 92–103). He suggests that cases are, though not strictly *lekta*, *lekta*-like meanings, which he nonetheless describes as qualities (but not in the way Frede understands it) and corporeal, positing what seems to be, again, an ontologically dubious entity. The view presented here, by taking cases just to be the *lekta* expressed by nouns, has the advantage of avoiding the introduction of any additional under-specified entities to the already complex Stoic ontological system.

³⁵ Cf. n15 above.

³⁶ A view of this kind might be suggested by Scholia in DThrax 523.9-27 which identifies case at the level of *phōnē* with the word ending rather than the inflected word as a whole, cf. Gourinat 2018, 148 n41. Given that there is very little evidence regarding Stoic views on case at the level of *phōnē*, it is hard to know how much of this view originated in the Stoic theory.

‘Socrat-’ and ‘-es’, mirroring the division of the noun. We would then have to account for what the expressed ‘Socrat-’ is, if anything. Recall that the examples of propositions given by Diogenes Laertius and Sextus Empiricus suggest that ‘Socrates walks’ provides an adequate rendering of the content of a middle proposition, and that, according to the argument so far, this content must be lektical, so that ‘Socrates’, even if it is to be broken up, must be broken up into *lekta*. This would have the undesirable result of leaving ‘Socrat-’ as a new and unaccounted for type of *lekta*. In addition, the evidence according to which the binding of a case and a predicate yields a proposition again suggests that the constituents of the proposition ‘Socrates walks’ just are the predicate (‘walks’) and the case. This all speaks in favour of taking the case (at the level of the *lekton*) to be ‘Socrates’, and not merely ‘-es’.³⁷ At any rate, it seems possible to conclude broadly that cases are *lekta*, paradigmatically expressed by nouns, and counterparts to predicates, the *lekta* expressed by verbs; the two, joined together, can form complete *lekta*, such as propositions.

2 The Semantic Function of Case

As transpires from the discussion so far, cases are just one of several items that are said to be in some way signified by nouns, which appear to be the paradigmatic and best attested signifiers of case. We must therefore now account for the role cases, as *lekta*, might play in the larger semantic picture.

Let us survey some of the evidence relating to the semantics of nouns. The Stoics distinguished between three main types of propositions: definite, indefinite, and middle, following Sextus Empiricus’ terminology.³⁸ Sextus in fact distinguishes the different propositions by the semantics of their respective subjects and what expresses them and describes middle propositions in the following way:

³⁷ This is not to say that each constituent cannot encode diverse information and it is worth remembering that *lekta* are not isomorphic with language. We know, for example, that tense operates over a proposition as a whole and it is plausible that this is information encoded in the predicate. On how this might work and could be consistent with a view according to which the lektical bits are to be broken up more finely, cf n63 below.

³⁸ SE *M* VIII.96-98. Sextus’ account is echoed by DL VII.70. See Brunschwig (1986), Ebert (1993) and Bobzien (1999, 97) esp. n.56 for comparative discussions of the two accounts. The differences between the two accounts matter little for my purposes here since they agree on the aspects most salient to my investigation. I adopt Sextus’ terminology for the sake of simplicity. Since in both taxonomies proper and common nouns form the same type of proposition, and since types of propositions appear to be primarily distinguished on semantic grounds, I take proper and common nouns together as I proceed to discuss their semantics.

μέσα δὲ τὰ οὕτως ἔχοντα ‘ἄνθρωπος κάθηται’ ἢ ‘Σωκράτης περιπατεῖ’. (...) τὸ δὲ ‘Σωκράτης κάθηται’ μέσον ὑπῆρχεν, ἐπεὶ οὔτε ἀόριστόν ἐστιν (ἀφώρικε γὰρ τὸ εἶδος), οὔτε ὠρισμένον (οὐ γὰρ μετὰ δείξεως ἐκφέρεται), ἀλλ’ ἔοικε μέσον ἀμφοτέρων ὑπάρχειν, τοῦ τε ἀορίστου καὶ τοῦ ὠρισμένου.

Middle propositions are ones such as ‘man is sitting’ or ‘Socrates is walking’. (...) And ‘Socrates is sitting’ is middle, according to them, since it is neither indefinite (for it has delineated a species), nor definite (for it is not expressed with *deixis*), but it seems to be between the indefinite and the definite.

Sextus Empiricus *M* VIII.97.2-3,9-11

What the subjects of the sentences that express them have delineated (*aphōrike*), that is, what they pick out, and how (with or without *deixis*), is what sets different types of propositions apart. Proper nouns (*onomata*) and common noun (*prosēgoriaī*) form sentences that express the same kind of propositions because they share a semantic feature: they delineate a “species” (*aphōrike to eidos*).

Diogenes Laertius adds that proper nouns and common nouns signify qualities, a proper noun a proper quality, and a common noun a common quality:³⁹

ἔστι δὲ προσηγορία μὲν κατὰ τὸν Διογένη μέρος λόγου σημαῖνον κοινὴν ποιότητα, οἷον ‘ἄνθρωπος,’ ‘ἵππος.’ ὄνομα δὲ ἐστὶ μέρος λόγου δηλοῦν ἰδίαν ποιότητα, οἷον ‘Διογένης,’ ‘Σωκράτης’.

According to Diogenes [of Babylon], a common noun is a part of speech which signifies a common quality, for example “man”, “horse”. A proper noun is a part of speech which designates a proper quality, for example “Diogenes”, “Socrates”.

DL VII.58

As we have seen, Diogenes Laertius also later reports that that the propositions expressed by sentences formed by nouns are ones “composed of a nominative case and a predicate, for example ‘Dion is walking’” (τὸ συνεστὸς ἐκ πτώσεως ὀρθῆς καὶ κατηγορήματος, οἷον ‘Δίων περιπατεῖ’, DL VII.70) and I have argued that this is because case is the *lekton* expressed by the noun. That is, in this report about the syntax of propositions, the case appears to be the lektical correlate to the noun, just as the predicate is the lektical correlate to the verb, so that the case at the lektical level is ‘Dion’, the *lekton* expressed by the proper noun “Dion”.

³⁹ Unlike Brunschwig (1984, 127), followed by Gourinat (2018, 145), I am disinclined to put much weight on the terminology here, for example thinking that a contrast is drawn between what is signified (*sēmainon*) and designated (*dēloun*), since there is no evidence that these terms – nor any other verbs with related meanings- are used in such a systematic way.

These passages are thus reporting different facts about proper and common nouns, all couched in slightly different terms, providing (i) an explicit report about what they “signify” or “designate”; (ii) an indirect report of what they – or more precisely the propositions they contribute to expressing – “delineate”; (iii) an implicit indication of what they express, that is what they contribute to the proposition at the lektical level. All three thereby appear to attest to different aspects of what proper and common nouns signify in a broad sense. That is, all are in some broad sense about the *semainomena* (signifieds) related to proper and common nouns. This therefore suggests that case is part of a larger semantic picture which somehow also includes species and quality. What is less clear is how case, species, and quality all relate to each other *qua* signifieds, and in what way or in what sense, they are signified (or designated, or expressed, or delineated) by proper or common nouns. Let us therefore try to understand how they might relate and where they might fit in this overall semantic picture for proper and common nouns.

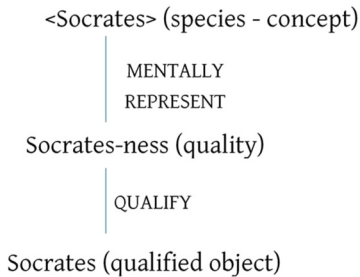
Species and quality are closely related.⁴⁰ Quality – or perhaps more accurately the qualified (*poion*) – is one of the four Stoic ontological categories. It is corporeal and with matter jointly constitutes qualified objects. Species is a similarly technical notion for the Stoics. It includes species with just one individual, so that both man and Socrates are species. Importantly, *eidē* are special kinds of *ennōemata*, concepts, namely universals.⁴¹ For any qualified individual, there are thus both a corresponding quality and a corresponding *eidōs*. Just as man-ness and Plato-ness

⁴⁰ The details of this relationship are beyond the scope of this article. I provide here only a brief overview of it. For more see esp. Brunschwig (1988), Sedley (1984, 1999), Caston (1999), and Sellars (2011). On the still debated Stoic notion of quality, see esp. Sedley (1999) and Menn (1999). For a discussion of the role of quality in the semantics of nouns, see Lloyd (1971, 1978) and Brunschwig (1984). As will become clear, though I agree with the basics of their view, I find it to be unsatisfactory in that it does not account for the respective roles of cases and *eidē*. Bronowski (2019 esp. 410-1) is the only account that attempts to tie together these aspects, arguing that qualities are central to articulating the semantic apparatus insofar as case, nouns, and concepts all relate to qualities. The strategy and the view I develop here share much with hers, though I am somewhat disinclined to make qualities quite as explicitly pivotal. In fact, as will become clear below, in order to accommodate cases expressed by pronouns, it may be more accurate to place this emphasis on concepts. This would also have the benefit of answering a puzzle that troubled Primavesi (1994, 92) as to why verbs or predicates and adverbs are not said to have cases: it may be that predicates or what is expressed by adverbs do not bear the same relationship to concepts.

⁴¹ DL VII.60-61. This is also confirmed by SE PH II.219. I am here following a generally accepted interpretation of these passages, according to which, as Caston’s (1999, 160) puts it, “provided that a conjunction of concepts is itself a concept – every genus and every species (above the lowest) will be a concept”. On this view, species and universals bear some relation to the corporeal qualities in the world but are distinct from them and not themselves corporeal. For more on concepts and universals, see Crivelli (2007, 2010); Ierodiakonou (2024).

are qualities, the concepts <man> and <Plato> are *eidē*.⁴² These *eidē* are items perceived or tended to by our minds, which correspond to qualities in the world. In this sense, they are mental representations of qualities.⁴³ The concept <Plato> is a mental counterpart to the corporeal quality Plato-ness.

Returning to semantics, we can think of the link between quality and *eidos* as playing a role in reference-fixing. The reference of a proper noun such as “Plato” is neither a quality nor a concept, but rather an object in the world, namely Plato himself, who has the proper quality of being Plato. Nonetheless, the concept <Plato> and the quality Plato-ness both play a part in fixing the reference of the noun “Plato” to the qualified individual Plato. The quality delineated by the noun enables reference to the object in the world because the object has the quality of which this concept is a mental representation. By using the proper noun “Plato”, then, I refer to Plato by means of the concept <Plato> and insofar as he has the quality of being Plato. Concept and quality thus work together to fix reference to objects. The relationship of species and quality to the referent of a noun can thus be illustrated as in the following diagram:



Nouns refer to the qualified object, signify (or designate) the quality, and delineate the species. It is precisely by doing the latter that they do the former. And it is in this sense that both species and quality feature in the semantics of nouns.

We must now account for the role of cases in this picture. Here, Frede’s work may help. His view is founded on evidence that suggests that *ptōseis* are so called because they have fallen (*peptōkasi*) from a concept. In particular, Ammonius tells us that the Stoics disagreed on this matter with Peripatetics. Peripatetics called cases

⁴² I use angled brackets to signal reference to concepts throughout.

⁴³ Note that by mental representations I do not mean to suggest that they are in our minds. Concepts are the extra-mental objects of mental states, conceptions (*ennoiai*). As Caston (1999, 173–4) notes, concepts are not modifications of the soul (which would be corporeal), and so they are not mental states, but “intentional objects towards which mental states are directed.” Concepts are, as it were, non-perceptual images.

ptōseis because they had fallen from the nominative, and therefore did not call the nominative a case. The Stoics, on the other hand, did call the nominative a case and justified it in the following way:

ἀποκρίνονται <οἱ ἀπὸ τῆς Στοᾶς> ὡς ἀπὸ τοῦ νοήματος τοῦ ἐν τῇ ψυχῇ καὶ αὕτη πέπτωκεν· ὁ γὰρ ἐν ἑαυτοῖς ἔχομεν τοῦ Σωκράτους νόημα δηλώσαι βουλόμενοι τὸ “Σωκράτης” ὄνομα προφερόμεθα· καθάπερ οὖν τὸ ἄνωθεν ἀφεθὲν γραφεῖον καὶ ὀρθὸν παγὲν πεπτωκέναι τε λέγεται καὶ τὴν πτώσιν ὀρθὴν ἐσχικέναι, τὸν αὐτὸν τρόπον καὶ τὴν εὐθειᾶν πεπτωκέναι μὲν ἀξιούμεν ἀπὸ τῆς ἐννοίας, ὀρθὴν δὲ εἶναι διὰ τὸ ἀρχέτυπον τῆς κατὰ τὴν ἐκφώνησιν προφορᾶς.

The Stoics reply that it [sc. the nominative case] too has fallen, namely from the thought (*noēma*) in the soul: ‘For when we want to make clear the thought of Socrates which we have in ourselves, we utter the name “Socrates”. So, just as a stylus released from a height and lodged upright is said both to “have fallen” and to have “the upright fall (=case)” (*orthē ptōsis*), in the same way do we <Stoics> think that the nominative “has fallen” from the conception (*ennoia*), and that it is “upright” because it is the archetype of the utterance used in the expression <of its other forms>.’

Ammonius in *Ar. de Int.* 42.30 (translation Blank 2014, modified)⁴⁴

44 See also Stephanus Alex. in *Ar. de Int.* 10.28; Anonymous in *Ar. de Int.* 2.14–15; Magentinus in *Ar. de Int.* Scholia in Aris Brandis 104n. This passage is complex and difficult and open to different interpretations. Some (e.g. Gourinat (2000, 127n3, 166–7; 2019)) take Ammonius to be speaking here of the level of words or utterances rather than *lekta*. The view is motivated at least in part by the fact that we are told that a name is uttered (ὄνομα προφερόμεθα), and that the nominative is the archetype of an utterance used in the expression (κατὰ τὴν ἐκφώνησιν προφορᾶς). This is indeed plausible. As stated above, there are cases at the level of words so that the nominative referred to here could theoretically be a word-case and not an expressed case, and this passage might well be read in this light. Nonetheless, I prefer to follow Frede (1994) and Bronowski (2019, 420) in taking this passage as evidence not about word-cases but rather expressed ones. It is firstly not uncommon for later sources, and Ammonius in particular, to conflate the idiosyncratically Stoic levels of expression and expressed. Even if Ammonius takes himself to be reporting a view about *phōnē*, it may therefore nonetheless actually have been a view about *lekta*. Secondly, it may be possible to read Ammonius more charitably here by noting that *prophora* needn’t straightforwardly be taken to refer to the level of voice. Indeed, other passages, such as DL VII.63 which discusses the *ekphora* of certain *lekta* as if it were a feature of *lekta* themselves rather than the *phōnai* expressing them, suggest that compounds of *pherein* may have been used for *lekta* (or *semainomena*) and not just or not always for what expresses them. Here the coupling with *ekphōnēsis* may seem to make it more likely that both the *prophora* and the *ekphōnēsis* are at the level of *phōnē*. Yet the phrase is odd and its meaning unclear: *prophora* could just as well be taken to refer to what has been expressed by the *ekphōnēsis*. (Similarly, we can understand our use of the (nominative) noun “Socrates” as what expresses a *lekton*, the nominative case, thereby making clear our thought.) These terminological difficulties in turn could explain why Ammonius and the grammatical sources below might have taken this to be about words when the Stoic theory they report was in fact about *lekta*. Whatever we make of this particular point, as will be clear from what follows, I believe the view is both more plausible and more elegant if we take it to be about *lekta*.

The nominative, according to Ammonius, has fallen from a conception (*ennoia*) in our soul.⁴⁵ This is promising, if we want to link cases to *eidē*, which are concepts. However, *ennoiai* are not identical to *ennoēmata*: *ennoiai* are psychological states which have *ennoēmata* as their object.⁴⁶ Nonetheless, it is possible that Ammonius is conflating the two here.⁴⁷ In fact, other passages on the subject of case suggest that incorporeal cases fall not from our psychological states, but from the non-existent objects towards which our soul is directed.⁴⁸ The scholiast Stephanus, in his commentary on the *Tēchnē*, attributes to the Stoics the view that cases fall from the general into the particular:

Εἰ ὀρθή, πῶς πτώσις; Ὅτι πέπτωκεν ἐκ τοῦ ἀσωμάτου καὶ γενικοῦ εἰς τὸ εἰδικόν· ὀρθή δέ, ὅτι οὐπω ἐκινήθη εἰς πλάγιον, ἢ ὅτι ἐξ αὐτῆς τὰ καλούμενα παρὰ τοῖς <Στωϊκοῖς> ὀρθὰ ῥήματα, ἃ εἰσιν ἐνεργητικά, οἶον Ἐσωκράτης τύπτει.

If it [sc. the nominative] is upright (*orthē*), why is it a case? Because it has fallen from what is non-corporeal (*asōmaton*) and generic (*genikon*) into what is specific (*eidikon*). But it is upright, because it has not yet been altered into an oblique [case], or because it is the foundation of what the Stoics call upright, that is active, verbs, e.g. “Socrates strikes”.

Scholia in DThrax 230.25-33 (translation Long and Sedley 1987)

⁴⁵ Although Ammonius first uses the term *noēma*, I am inclined to think that this too is intended to refer to the *ennoia*. *Noēma* is an Aristotelian term, usually used to mean “thought”. *Lekta* might seem to provide a closer parallel in the Stoic theory to these Aristotelian *noēmata*, but the fact that the *noēma* is “in the soul” (and *noēmata* are also described as “passions of the soul”, *pathēmata tēs psychēs*, in *Ar. de Int.* 24.11) suggests that is not the meaning here (since *lekta*, unlike *ennoiai*, are not in the soul). In addition, Ammonius rephrases the exact same idea at the end of the passage with the word *ennoia*.

⁴⁶ On this see Sedley (1984, 88–9), Sellars (2011, 187).

⁴⁷ Later authors, especially grammarians, certainly tend to use this terminology confusedly. For a full linguistic study of those terms in Stoic sources, see Dyson (1975), cf. Brittain (2004). It is worth noting that Ammonius elsewhere (in *Ar. de Int.* 17.20–28) criticises the Stoics for adding *lekta* as mediating between the two components of the Aristotelian diptych, thoughts (*noēmata*) and things (*pragmata*), which he says are both signified by words, the former directly and the latter indirectly, by means of the former (cf. 24.5–12). Simplicius, on the other hand, identifies *noēmata* with *lekta* (in *Ar. Cat.* 9.31–40.4). None of them, it seems, distinguish the *ennoia*, the thought *qua* psychological state, from the *ennoemā*, the thought *qua* object of the psychological state.

⁴⁸ Ildefonse (1997, 160) also takes from this, and the following passages from the Scholia, that the nominative falls from the concept. Delamare (1980, 343) rejects the idea that the nominative falls from the “nom général [the view of the grammarians, see next note], c’est-à-dire un signifié abstrait,” and argues instead that “le noème sera donc corps, la notion singulière de Socrate ou Dion dans l’âme.” This seems to misunderstand the metaphysical status of both nouns and concepts.

καθὸ μὲν γὰρ πέπτωκεν ἀπὸ τοῦ κοινοῦ εἰς ἰδιότητα, ὀνομάζεται πτώσις.

Since it has fallen from the general (*koinon*) into a particular property (*idiotēs*), it is called a case.

Scholia in DThrax 231.22⁴⁹

These passages tell us that what cases fall from is non-corporeal (*asōmatos*) and generic (*genikon*) or common (*koinon*). They are difficult because Stephanus is not using technical Stoic terminology accurately. In particular, he is not using *asōmatos* (incorporeal) in the technical Stoic sense. That is, case does not fall from one of the four Stoic incorporeals. It could, however, have fallen from something that is not corporeal, namely an *eidōs*. In other words, we must assume that the scholiast is here describing the concept as “incorporeal”, even though the Stoics did not include concepts among the incorporeals.⁵⁰ The metaphysical distinctions underlying these Stoic views and their use of terminology are tenuous and it should not surprise us if they confused scholiasts, who did not share their view, much less the basis for them, and might easily have conflated what is not-corporeal with incorporeals, as I suggest Stephanus did here.

The formulation in Stephanus is also echoed by another passage from the *Scholia*, which adds that case falls upon bodies:

Ἡ δὲ εὐθεΐα καλεῖται πτώσις, καθὸ μεταπίπτει εἰς τὰς λοιπὰς πτώσεις, ἢ καθὸ ἀπὸ τοῦ γενικοῦ μεταπίπτει εἰς τὸ εἰδικόν, ἤγουν ὅτι ἐπιπίπτει τοῖς σώμασι.

It is called the straight (*eutheia*) case, because it falls into the remaining cases or because it falls from the generic (*genikon*) into the specific (*eidikon*), that is to say, because it falls upon (*epiptei*) bodies.

Scholia in DThrax 550.25-27⁵¹

⁴⁹ This passage is followed by the falling stylus analogy, also found immediately following the Ammonius passage and seems quite clearly to be reporting a Stoic view. Cf. also Scholia in DThrax 383.5. The interpretation of these texts is made more difficult by the fact that ancient grammarians tend to think of cases as derivations of an archetypal name, in a theory devoid of any of the metaphysical considerations that might have foregrounded the Stoic theory. The details of the Stoic theory which might have formed a (possibly loose) basis for the grammatical and linguistic theory of the grammarians, must therefore necessarily be speculated. For an alternative, according to which the Stoics adopt the locution from Plato and take it to be the correct (natural or immediate) form of the name, see Belardi (1990). The interpretation I offer here allows these passages, with minimal distortion accounted for by their indirect and complex provenance, to fit with the rest of the more straightforward evidence.

⁵⁰ Concepts are “quasi-somethings” whereas even incorporeals are “somethings” (cf. DL VII.60-61). “Quasi-somethings”, it seems, do not have existence and therefore cannot have corporeality, according to the Stoics. For discussions of the ontological status of *eidē*, see Brunschwig (1988), Sedley (1984, 1999), Caston (1999), Sellars (2011) and Bailey (2014).

⁵¹ The idea here appears to be that there are multiple ways of dealing with the nominative. The latter view matches what we have seen attributed to the Stoics so far. It seems plausible that the clarificatory last phrase is supposed to illuminate the odd, unattributed, but presumably Stoic, claim that

What it means for a case to “fall upon” a body, or to “fall into” the specific is unclear. It seems likely that compounds of the verb *piptein*, “to fall”, are used here precisely because the matter at hand is the word “case”, *ptōsis* (literally “fall”), which comes from the verb. We needn’t take the falling image too literally: it is used to explain the fact that cases are so called, more than as a serious analogy or illustration.⁵² Nor should these texts be interpreted as suggesting that case goes from the specific or the particular into a body, or renders it into a body, as Frede (1994a, 19–20) argues.⁵³ Rather case appears to be something that falls or happens upon a body. This is consistent with the passage in Clement (*Strom.* VIII.9.26.5, above) where the house, a particular, is said to bear or meet (*tunchanein*) a case.⁵⁴ All three passages taken together, then, suggest that cases link or mediate between something non-corporeal and something corporeal: a case falls from the non-corporeal (πέπτωκεν ἐκ τοῦ

precedes it. As should be clear my overall reconstruction does not rest on any one of the passages discussed here – each of which on its own provides at best dubious evidence – and to discount one would not, I take it, require a reworking of the overall view I present.

52 How much one can read into the imagery that the terminology inspires is generally dubious. As Belardi (1990) discusses, the uses of *orthos* and *euthus* (‘straight’ or ‘direct’) are similarly intractable, even (or especially) with reference to their use in technical geometry terminology. It is nonetheless perhaps worth emphasising that I do not take any of these passages as suggesting that cases *originate* in a strong sense in concepts and much less than they take their subsistence from them.

53 Frede takes such passages to support his view (discussed above) that case is a particular instance of a quality which falls from a generic, or common concept. He sees the stated link between concepts and bodies as one mediated by words. When I say “man”, I signify the corporeal quality of man-ness instantiated in some individual man I am referring to. My saying the word bridges the gap, so to speak, between the concept in my soul and the corporeal quality man. Though this is not very far from the view I present here, I do not think that his is the only interpretation of these passages available to us, nor do I think it is the best possible one. These passages are problematic, especially in their use of terminology. What they mean by *eidikon*, the “specific”, is particularly unclear. The “specific” here appears to be put on a par with the particular. Yet, as we have seen, Stoic *eidē* are concepts and they include species with multiple individuals as well as species with just one individual. It is therefore not the case that, on the Stoic view, the *eidikon* and the *idion* are necessarily the same. In the case of Socrates, the specific and the particular coincide, but not in the case of man, where the specific includes all particular men.

54 As Sedley (1982, 198) notes, this cannot be understood to mean, as Frede would have it, “having a quality”. I am also inclined to reject Bronowski’s interpretation of this passage according to which the *tunchanon* is an additional, separate entity (2019, 451). On her view, there is, distinct from the external body, a *tunchanon* which is not “the thing itself but that thing insofar as an expression has successfully got a *lekton* said with reference to it – but this is not the same thing as referring to an external thing” (2019, 351). The nature of this *tunchanon* is somewhat unclear and it is not obvious from the evidence that this additional entity is needed at all. What bears the case may well be taken just to be the qualified object. This (much as the identification of cases with *lekta*, cf. n34 above) avoids the proliferation of ontologically dubious entities in an already ontologically rich system.

ἀσωμάτου, 250.25) and it falls upon bodies (ἐπιπίπτει τοῖς σώμασι, 550.26).⁵⁵ Alongside Ammonius' testimony, this suggests that *eidōs* is a likely candidate for the point of origin of cases' so-called fall, since *eidē* are concepts, which are non-existent (and non-corporeal) universals.

What they fall into, as it were, is less clear. They are said to fall into the specific (*eidikon*) or a particular property (*idiotēs*). The latter might suggest that they fall into qualities. However, Stephanus is not using the Stoic terminology entirely accurately. *Idiotēs* is not the technical term for Stoic proper quality, *idia poiētēs*. Rather, it parallels *to eidikon* in the two other passages, and is set in contrast with *to koinon*, what is common, so that it is likely that it is used for *to idion*, what is particular, rather than for the Stoic proper quality. Similarly, *to eidikon* is set in contrast with *to genikon*, which parallels *to koinon* at 231.22, so that it is plausible that it is used not for what belongs to a species, but rather for what is specific, as opposed to general, that is, what is particular. If this is right, the texts are then all suggesting that cases bear relations to concepts, which are common or universal, on the one hand, and to particulars, on the other.⁵⁶

Still, this dual relationship needs to be defined further. I suggest, speculatively, that this relationship which operates as a link from concepts, towards which we direct our minds, to particulars in the world is akin to reference-fixing. It operates in the following way. When I utter a noun, I make use of the associated concept: as I utter the noun, I activate the *ennoia* which has as its object the *ennoēma* associated with the noun. When I say “Socrates”, I invoke, as it were, my concept of Socrates-ness. This concept is what enables reference, because it is linked to the *ptōsis*, the *lekton* ‘Socrates’, expressed by the noun “Socrates”. When expressed, the *ptōsis* falls from the concept.⁵⁷ By saying “Socrates”, I put the concept <Socrates> to work and from it falls the *ptōsis* ‘Socrates’. Now, the concept <Socrates> has a special relationship with the peculiar quality Socrates-ness, which qualifies Socrates’ matter. It is, as we have seen, a mental representation of it. The noun I utter, “Socrates”, which

55 The verb ἐπιπίπτειν, “to fall upon”, is often used in a concrete sense with a hostile force, meaning “to assail” (e.g. Hdt. 4.105, Thuc. 1.117) or “to come upon”, usually of misfortunes (e.g. grief at Thuc. 3. 82, storms at Hdt. 7.189, or illnesses at Hippocrates *Aēr.* 3.17). Interestingly, it is also used figuratively to mean “to think of” something (as e.g. in Plutarch *Oth.* 9.4.3, or Isoc. 5.89).

56 Ildefonse (1997, 159 n5) translates “the particular”. It is possible that what should be understood here is not an individual but a particular instance of a quality, as instantiated in the individual as Frede suggests. Though I am inclined towards the former, the view, as I outline it below, can accommodate either interpretation. The view is also partly aligned with Bronowski’s who sees what she calls “the case-*ptōsis*” as “indicating the species” and sharing with the *tunchanon* “the role of particularising or individuating one case of a generic”, insofar as it is the particular thing of which the predicate is said (2019, 415).

57 Note that I remain agnostic as to the exact relationship of this concept to my mind.

expresses the *ptōsis* ‘Socrates’, is linked to the quality Socrates-ness in the world, by the concept <Socrates>.

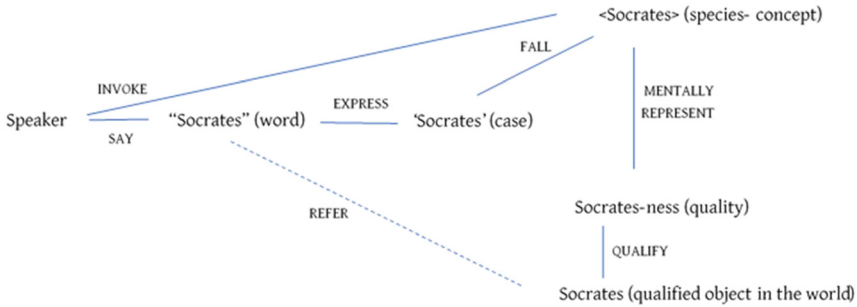
It is precisely through the concept that the noun is able to refer to Socrates.⁵⁸ The *ptōsis* thus expressed calls the same concept <Socrates> to my interlocutor’s mind: it gives rise to an *ennoia*, a psychological state, directed at the concept and thus delineates the *eidōs* <Socrates>, as Sextus Empiricus suggests when he claims that middle propositions ‘delineate a species’ (*aphōrike to eidōs*, SE *M* VIII.97, above). The relationship of cases to concept, the so-called “fall”, should therefore be thought as operating in both directions: when I utter the noun, activating my *ennoiai*, and appealing to the concept, the case falls from the concept, and is expressed by the noun. Once it has been expressed, it can be grasped by my interlocutor. Grasping the case will take her to the concept from which it has fallen, which will in turn take her to the referent, by allowing her to pick out the corresponding quality in the world, and to understand that I am saying something about Socrates.

To sum up, when I say “Socrates” and express ‘Socrates’,⁵⁹ invoking, or directing my soul towards <Socrates>, I thereby invoke <Socrates> in my interlocutor’s mind, allowing her to pick out Socrates, the individual qualified by the quality Socrates-ness. By this process, cases make particular objects qualified by given qualities distinguishable or identifiable by means of the concept from which they fall and enable us to communicate about them. The full semantic picture, then, could be represented thus.⁶⁰

58 I take successful reference to be fundamentally communicative.

59 I am inclined to think that, just as we use “I refer” and “the noun refers” interchangeably, when the noun I utter expresses a *ptōsis*, it is also true that I have expressed the *ptōsis*, even though, strictly speaking words are the *sēmainonta* of the *sēmainomena*, here, the *letka*.

60 The account could accommodate a different stance on the question of the universality of concepts. That is, my concept <Socrates> and my interlocutor’s concept <Socrates> may be one and the same, or they may be distinct concepts, which we have each peculiarly formed, but which are relevantly related – presumably because they were formed on the basis of the same quality. It seems to me more plausible that there is just one concept, which both of our minds have access to, given Stoic psychological theory. Nonetheless, if we were to think, with Graeser (1977, 370), that concepts are subjective, I do not think that this would pose an unsurmountable problem for my view. One would simply need to distinguish my concept from my interlocutor’s concept, and add the interlocutor’s concept to the diagram below – and the interlocutor’s concept would bear the same relationship as my concept to the other elements of the apparatus.



The complexity here explains the difficulties encountered in our sources. There are a number of elements at play: the expression, the signified case, the concept, the quality, and the qualified object.⁶¹ Several of these (the case, the concept, and the quality) are conceived of in very specific ways by the Stoics, ways which may not be clear or intuitive to some of our sources. It is then not hard to see why some of them may have been confused, forgetting a step in the process or collapsing two elements. This reconstruction of the theory has the benefit of incorporating all the moving parts mentioned in the various reports, without the need to conflate entities with different metaphysical status or adding additional entities,⁶² while also explaining how they fit together.

3 Oblique Cases

One aspect is nonetheless yet to be addressed: my account has not so far made any mention of oblique cases. If case is, as I have suggested, at the level of both *phōnē* and *lekta*, then just as nouns can be used in several cases, there are, for any noun and associated quality and concept, several lektical cases expressible. While at the level of *phōnē*, case is marked by the ending of the noun, things cannot be quite so simple

⁶¹ The picture drawn here bears many similarities with the one painted by Bronowski (2019, ch. 6 and 9), but with some crucial differences. In particular, it treats the case as a *lekton* (and the constituent of a *lekton* when expressed as part of a proposition), and does not include, as she does, a separate *tunchanon* (cf. n54 above), thereby limiting the number of different entities at play to what I take to be the very minimum in light of the evidence. The view thus accounts for all the moving parts that the evidence attests to, without unnecessarily positing any additional ones. I take this to be a virtue, given the already incredibly complex nature of the apparatus.

⁶² As, e.g., Frede and Bronowski do, respectively.

at the level of *lekta*. As we have established, cases are *lekta* and constituents of other *lekta*. The constituents of the proposition ‘Socrates walks’ are the predicate ‘walks’ and the (nominative) case ‘Socrates’, in line with Diogenes’ report that a middle or categoric proposition is composed of a nominative case and a predicate (κατηγορικὸν δέ ἐστι τὸ συνεστὸς ἐκ πτώσεως ὀρθῆς καὶ κατηγορήματος, DL VII.70). Similarly, we might think that in the less-than-predicate ‘loves Plato’, the constituents are the predicate ‘loves’ and the (accusative) case ‘Plato’. In both instances, the lektical case is the *lekton* expressed by the noun.⁶³ If this is right, although all of the cases of a given noun will delineate one and the same species, signify one and the same quality, and refer to one and the same qualified object, a noun in different (phonetic) cases will nonetheless express different (lektical) cases and therefore contribute different content to different propositions.

From a purely mechanical perspective, the account and diagram above can easily accommodate this. When I utter a noun in the nominative, a nominative case will fall from the concept; when I utter a noun in the accusative, an accusative case will fall from the concept, etc.⁶⁴ There is nothing in the account above to prevent a many-to-one relation of cases to qualities and species. Nonetheless, we ought to explain the need for different cases at the level of *lekta* and just how just how these lektical contents differ.

Here, Frede’s view is on the right track. He suggests that cases specify how the object “enters into the proposition”.⁶⁵ Cases, according to Frede, represent the way in which the objects to which they relate are constitutive of truths. Frede gives the example of “a man hits a ball” and explains that the man and the ball are part of the truth in different ways: the ball on the receiving side and the man on the active side. Their differing cases in Greek (nominative for “man” and accusative for “ball”)

63 This is taking the holistic view of both nouns and the *lekta* they express and so assuming that the bit of *phōnē* that expresses the case is the inflected noun, rather than merely its ending, as discussed at the end of Section 2 above. Perhaps an account could be given that the lektical bit whose role is that which I described in Section II is the one expressed by the nominal root while the one whose role is that which I describe in what follows is the one expressed by the ending. Though it is not clear that the evidence supports such a granular distinction, a view of this kind, which is suggested in broad strokes by Gourinat 2018 n45, might be worth exploring further.

64 We needn’t take this to mean that the expression determines the case. It is, however, likely (in line with, for example, Ammonius’ report of views on impersonal predicates at *in Ar. de Int.* 44.11–45.6) that the grammatical case at the level of *phōnē*, ought to match the lektical case and that the grammatical (phonetic) case is likely to be the way to reveal the lektical case for the purpose of communicating it to someone else.

65 Frede (1994a, 18), see also p. 23. Note that Frede talks here about a body entering a *lekton*. How an incorporeal *lekton* can be “entered” by a corporeal entity is puzzling.

reflect this. This is supported by the evidence. For example, Apollonius Dyscolus, a grammarian heavily influenced by Stoic philosophy of language, clearly describes cases as indicating certain relationships between subjects and objects:⁶⁶

Ὅμοίως ἐπὶ γενικὴν φέρεται καὶ ὅσα ἐπικράτειάν τινων σημαίνει εἰς τὴν τῶν ὑπερεχόντων ἢ κυριευόντων διάθεσιν κατὰ λόγον οὐκ ἀπίθανον. προφανὲς γάρ ἐστιν ὡς χωρὶς γενικῆς κτῆμα οὐκ ἔστιν ἐπινοῆσαι. διὰ τοῦτο τὰ κτητικὰ εἰς γενικὰς ἀναλύεται καὶ ἀπὸ γενικῶν παράγεται ἔν τε ὀνόμασιν ἔν τε ἀντωνυμίαις, ἀπάντων τῶν δυναμένων κτῆσιν ἀναδέξασθαι.

All [sc. verbs] which signify domination similarly govern the genitive to indicate the function of superiors or masters, according to a plausible account. For it is clear that possession cannot be conceived without the genitive. Because of this, possessives are analysed into genitives and derived from genitives in both pronouns and nouns, since they all designate things able to possess.

Ap. Dysc. S III.174 = GG 2.2.419.13-420.5⁶⁷

Ἐφαμεν ἔν τοῖς προκειμένοις τὰς μὲν πλαγίας πτώσεις ἀναφέρεσθαι ἐπ' εὐθείας τῶν μετὰ ζῦ ρημάτων τὴν μὲν ἐνέργειαν ταῖς εὐθείας ἀναπεμπόντων, τὸ δὲ πάθος ταῖς πλαγίαις, ὡς 'Διονύσιος ἔτυψεν Θέωνα, ἐγὼ σε ἐτίμησα'. (τὸ δὲ πάθος ἐγγενόμενον κατὰ τὰς πλαγίας μεθίστησιν αὐτὰς εἰς εὐθείαν, τῆς προκατελεγμένης εὐθείας τρεπομένης εἰς γενικὴν μετὰ τῆς ὑπὸ προθέσεως, 'ἐγὼ σε ἔδειρα, σὺ ἐδάρης ὑπ' ἐμοῦ'.)

We have said previously that oblique cases refer back to straight ones as middle verbs assign activity to direct cases and passivity to oblique cases, e.g. "Dionysius (nom.) hit Theon (acc.); I (nom.) honoured you (acc.)". (The passivity which happens in the obliques changes them into straight ones, as the primitive nominative turns into the genitive with the preposition *hupo* (by): "I (nom.) thrashed you (acc.); you (nom.) were thrashed by me (gen.)")

Ap. Dysc. S II.141= GG 2.2.236.8-14

These texts confirm that, according to Apollonius, different cases are used to capture different relationships between the objects to which the words refer. A genitive is used for instances of possession and domination, which would not be rendered by an accusative or a dative. The nominative carries a notion of activity: it is used when the object is performing the action designated by the verb; while the obliques carry notions of passivity: they are on the receiving end of this action. If this attests to a Stoic view, and put in strictly Stoic terms, cases, by specifying syntactic relations at the level of *lekta*, render the ways in which their referents relate either to each other

⁶⁶ The depth of the Stoic influence on Apollonius Dyscolus has been argued for and discussed at length by, e.g., Blank (1982), Sluiter (1990), Ildefonse (1997), Lallot (1997), Luhtala (2000), Blank and Atherton (2013). Durand (2018) ch 1 argues at greater length that his work, albeit not strictly speaking Stoic, can serve as a source for Stoic views.

⁶⁷ Cf. S II.136 = GG 2.2.232.9-233.11, esp. 232.16–233.4.

(e.g. as one possessing the other, in the case of a genitive) or to the action picked out by the verb (e.g. as the one acting or being acted upon).

While Frede is therefore on the right track here, this attractive aspect of his view in fact fits better with the theory as I have reconstructed it thus far than with the rest of his own reconstruction. On his account, case seems to encapsulate two very different things. On the one hand, it is equated with the quality itself. As such, it is a body, something in the world. On the other, it signifies the way in which the object it qualifies enters into the proposition. In this respect, it seems to serve a very important function at the level of the *lekton*, the truth-bearer. If the case is the quality, and nothing more than the quality, it is not clear how it can perform this second function. Does case vary so as to reflect the way in which the object qualified by it enters a proposition or functions as a constituent of a truth? It is surely not the case that an object has multiple qualities: nominative-Platoness, accusative-Platoness, vocative-Platoness, so that each can be signified depending on how Plato enters the proposition.⁶⁸ Nor can the quality itself change depending on how Plato enters the proposition: Plato's Plato-ness is not affected by whether Plato is teaching or being taught. The idea then must be that case both is (i) the quality – a body – and furthermore (ii) the specification of the way in which the object qualified by this quality enters the proposition.

This twofold conception is problematic for two reasons. Firstly, it seems odd that case would be the quality and the way in which the *object* enters the proposition.⁶⁹ Secondly, this seems to require two oddly separate semantic processes. On the one hand, signifying a quality must be thought to be akin to a denoting sort of relationship. On the other, signifying the way in which the object enters the proposition can hardly be such a relationship. It seems to be a semantic relationship between the noun and an incorporeal meaning of some kind. That a noun would bear two such relationships may not seem entirely implausible if the two things to which it is related are somehow also related to each other. Yet, if we follow Frede, the quality and the way in which the object enters the proposition do not seem to be related in any such way; they in fact seem quite unconnected. This mismatch is problematic. Case appears to serve double duty and one would want the two roles to either be attributed to two distinct semantic entities, or to match more closely and work together in a tighter way.

On the view of case presented in the preceding sections, cases are *lekta* and constituents of propositions. As such, they contribute information to the propositions

⁶⁸ See Schubert (1994, 73) and Gaskin (1997, 99) for a similar objection.

⁶⁹ It may be more plausible to think that signifying the quality somehow also necessarily expresses the way in which the *quality itself* enters the proposition. But, again, why think that the quality of being Plato should tell us anything about the way in which Plato himself features in a truth?

they compose. This propositional content can – and I suggest does – take the form of both a lektical counterpart, as it were, to its referent and syntactic information. Just as the noun “Socrates” in the nominative refers to Socrates and encodes syntactic information (its being a subject), the lektical case, both captures or represents in some way its referent, enabling reference to it in the way outlined in Section 2, and encodes syntactic information at the lektical level by specifying the way in which the elements of the *lekton* fit together.

This syntactic or structural specification at the level of *lekta* in turn goes hand in hand with the idea that *lekta* are in some way intended to reflect, capture or otherwise be representative of the world. As Bronowski notes, “ce qu’il y a à dire, c’est comment est structuré le réel”.⁷⁰ On Bronowski’s view, language is not so much an assemblage of words supposed to mirror the assemblage of things in the world but an expression of structural elements. *Lekta* are in other words such as to capture the structure of the world. To do this, there must not only be components of *lekta* which relate to things in the world, but also components which capture the relationship between the things in the world which words pick out. A case does just that in both enabling reference thanks to its relationship to the relevant concept and encoding in the *lekton* syntactic information. This lektical syntactic information correlates to the structural relation of the objects captured by the *lekton* it constitutes. Just as the noun “Socrates” in the nominative marks its being the subject of the sentence, the lektical case ‘Socrates’ not only enables the noun that expresses it to refer to Socrates, it also marks it at the subject of the predicate expressed by the verb. This in turn reflects the structure of the world, namely the relation of Socrates to the property, activity, disposition, relation (etc.) captured by the predicate. On this account, cases are therefore key to *lekta*’s ability to capture reality in its structural complexity.

4 Cases and Other Parts of Speech

The account presented so far has focused on cases as expressed by nouns, and on the role of case in the semantics of nouns. Yet there is some evidence that some pronouns also express cases.⁷¹ Recall that we are told, for example, that a proposition of the

⁷⁰ Bronowski (2014, 86, 88). She at times talks of *lekta* as expressing the structure of the world, which is somewhat confusing terminology since *lekta* are expressed, not expressing.

⁷¹ It is worth noting that the Stoics did not count the pronoun as a distinct part of speech, nor would they have classed the demonstrative and the indefinite as subspecies of the same genus. This is therefore a descriptive account of the examples in contemporary terms, rather than the way a Stoic would have theorised the taxonomy. Nonetheless, insofar as they distinguished types of propositions on the basis of their subjects, as the examples suggest, the Stoics did seem to have some sense of the differences between demonstrative pronouns, indefinite pronouns, and proper and common nouns.

form ‘this one is walking’ (οὗτος περιπατεῖ) is “one composed of a deictic nominative case and a predicate” (τὸ συνεστὼς ἐκ πτώσεως ὀρθῆς δεικτικῆς καὶ κατηγορήματος, DL VII.70). The demonstrative pronoun (*houtos*, “this one”) therefore here seems to express a (deictic) nominative case (*ptōsis orthē deiktikē*). The matter is less clear when it comes to indefinite pronouns. We are told that propositions of the form ‘someone is walking’ are composed not of an indefinite case but of an “indefinite part or parts” (τὸ συνεστὸς ἐξ ἄοριστου μορίου ἢ ἄοριστων μορίων, DL VII.70).⁷² What an “indefinite part” is is unclear. “Part” here could be short for “part of speech”. Yet parts of speech are at the level of the signifying. An indefinite part of speech, that is, an indefinite pronoun, can help compose a sentence, and, together with a verb, express a proposition. It cannot compose a proposition, as the parts are said to do here. More likely, then, Diogenes means an indefinite part of a *lekton*. These indefinite lektical parts, as it were, are indefinite pronouns’ counterparts at the level of *lekta*. Now, the fact that they are called “parts” not “cases” might well indicate that indefinite pronouns do not in fact express cases, but other kinds of *lekta*.⁷³ Nonetheless, we might think that the fact that both nouns and demonstrative pronouns express cases suggests that all inflected words, that is, all words with case at the level of *phōnē*, express cases at the level of *lekta*.⁷⁴ This would especially make sense given the role I have suggested cases play in Section 3. If cases encode syntactic or structural information and thereby enable *lekta* to capture structural features of reality, they will be required to play this role for the lektical counterparts of all inflected words. In case that is right, I offer here some suggestions as to how the theory I have outlined might be extended to cases expressed by pronouns, if indeed there are some.

Let us start with deictic cases, since those are attested. What might distinguish a deictic case from other cases is not clear. One obvious difference is that a deictic case is one expressed with *deixis*. Yet if we do take seriously the idea that deictic cases are expressed by demonstrative pronouns, there must be more to it. Unlike nouns, pronouns are not said to signify qualities or delineate *eidē*. Demonstrative pronouns

72 cf. SE M VIII.97, where such propositions are described as ones in which “an indefinite part governs”. (ἀόριστόν τι κυριεύει μόριον).

73 Crivelli (1994, 189) calls them “indefinite particles.” They are, on his view, *lekta* (or, as he calls them, “meanings”) though where they might fall in the classification of *lekta* is less clear. Rather than adding yet another kind of unlisted incomplete *lekton*, which they would presumably be, it seems more economical for the *lekta* expressed by indefinite pronouns to also be cases. Crivelli claims that indefinite pronouns cannot express case, because case is said to be a feature of nouns in middle propositions. He takes that to mean that cases are exclusive to nouns. I am not convinced Diogenes’ report must yield this conclusion, not least because cases also feature in definite propositions.

74 Note that the Stoics did not distinguish between adjectives from nouns, nor did they class the article as a separate part of speech.

refer not by appealing to the qualities of their referent, but to its matter.⁷⁵ The diagram presented above, in which cases are linked to objects in the world through species-concepts and qualities can therefore not apply to demonstrative pronouns. Deictic cases differ from cases expressed by nouns not merely in that they are expressed with *deixis*, but also in that they do not bear the same relationship to the world, namely one mediated by species-concepts. Certainly, to be a case (*ptōsis*, literally “fall”) at all, it must be thought to fall from something. But perhaps it does not fall from a species-concept, but from something else. In the absence of any evidence on the matter, what that might be must remain entirely speculative. I am inclined to think that perhaps all deictic cases fall from a single and unique concept, one associated with *deixis* or ostension and accessible to all competent speakers.⁷⁶ If this is right, they will be easily accommodated in the account above.

Indefinite pronouns, in turn, might be thought to behave much as demonstrative pronouns. If the “indefinite parts” are in fact indefinite cases, then perhaps the idea is that indefinite pronouns express special cases, namely indefinite ones. Since, just as demonstrative pronouns, indefinite pronouns do not signify qualities, indefinite cases would not fall from a quality-representing concept. What they might fall from is once again a matter of speculation, though it seems plausible that such cases would fall from a very broad concept, such as the concept of being someone, or existing.

It is clear is that the cases expressed by both definite and indefinite pronouns – if there are such cases – cannot bear the same relationship to species-concepts as the cases expressed by nouns, but this needn’t undermine the account above. These cases do not link them to objects in the world in quite the same way as the cases expressed by nouns, by way of a species-concept and a quality. Nonetheless, it would seem that cases expressed by demonstrative pronouns play a similar role insofar as they are deictic and the *deixis* which accompanies the case is what enables those pronouns to refer. Discrepancies of this kind – in the exact role of cases in a word’s semantics – are therefore compatible with the theory presented above, which can accommodate variations in the details of the information encoded in the *lekta* constituted by different cases. In fact, much of the detail of the picture I have painted, for example that cases capture structural elements of the world by encoding syntactic information, will remain unchanged across all inflected parts of speech.

⁷⁵ Ap. Dysc. S II.22.3-24.4 = GG 2.2.142.1-144.4 on which see Durand (2019).

⁷⁶ It seems plausible that a rational and competent speaker would have acquired some concept of pointing to, though what the content of that concept might be is unclear.

5 Conclusion

The Stoic semantic case, I have argued, is a *lekton* expressed by nouns and other inflected words. It plays a crucial part in the wonderfully complex semantic content and reference-fixing mechanism of the words that express it. Proper and common nouns refer to objects in the world by means of case, concept, quality (common or peculiar), and finally the qualified object which is the noun's referent. Cases expressed by nouns fall from *eidē*. An *eidos* is a concept, a mental representation corresponding to a quality (common or peculiar) in the world. It is by appeal to this *eidos* that a qualified individual is referred to. Cases expressed by other parts of speech, such as pronouns, are not linked to qualities in the same way and, I have suggested, fall from other kinds of concepts, and play a similar part in reference-fixing. In addition, case is an essential component of complete *lekta* and most especially propositions. It encodes syntactic information correlating to structural elements of the world, such as relationships between objects in the world and between objects and actions. The Stoic theory of case was thus both extremely sophisticated and crucial to articulating their overall semantics.

References

- Alessandrelli, M. 2013. *Il Problema del Lekton nello Stoicismo Antico*. Firenze: Olschki.
- Atherton, C. 1993. *The Stoics on Ambiguity*. Cambridge: CUP.
- Bailey, D. 2014. "The Structure of Stoic Metaphysics." *Oxford Studies in Ancient Philosophy* 46: 253–309.
- Belardi, W. 1990. "Aspetti del linguaggio e della lingua nel pensiero degli Stoici. II. Il senso originario di "casus rectus"." *Rendiconti dell'Accademia Nazionale dei Lincei. Classe di Scienze morali, storiche e filologiche* 9 (1): 15–25.
- Blank, D. L. 1982. *Ancient Philosophy and Grammar: The Syntax of Apollonius Dyscolus*. Chico, CA: Scholars Press.
- Blank, D. L. 2014. *Ammonius: On Aristotle on Interpretation*, 1–8. Bristol: Bristol Classical Press.
- Blank, D., and C. Atherton. 2013. "From Plato to Priscian: Philosophy's Legacy to Grammar." In *The Oxford Handbook of the History of Linguistics*, edited by K. Allan. Oxford: OUP.
- Bobzien, S. 1999. "Logic: The Stoics." In *The Cambridge History of Hellenistic Philosophy*, edited by K. Algra, J. Barnes, J. Mansfeld, and M. Schofield, 77–176. Cambridge: CUP.
- Bobzien, S. 2006. "The Stoics on Fallacies of Equivocation." In *Language and Learning, Proceedings of the 9th Symposium Hellenisticum*, edited by D. Frede, and B. Inwood, 239–273. Cambridge: CUP.
- Brittain, C. 2004. "Common Sense. Concepts, Definition and Meaning in and Out of the Stoa." In *Language and Learning. Proceedings of the Symposium Hellenisticum 2001*, edited by D. Frede, and B. Inwood, 165–209. Cambridge: CUP.
- Bronowski, A. 2014. "La Structure du langage ordinaire chez les stoiciens." In *Philosophie et Langage Ordinaire de l'Antiquité à la Renaissance*, edited by J.-M. Couston, 83–96. Leuven: Peeters.
- Bronowski, A. 2019. *The Stoics on Lekta: All There Is to Say*. Oxford: OUP.

- Brunschwig, J. 1984. "Quelques remarques sur la conception stoïcienne du nom propre." *Histoire épistémologie Langage* 6: 3–19., [reprinted and translated by J. Lloyd in Brunschwig (1994) *Papers in Hellenistic Philosophy*, pp. 39–56].
- Brunschwig, J. 1986. "Remarques sur la classification des propositions simples dans les logiques hellénistiques." In *Philosophie du langage et grammaire dans l'Antiquité*, 287–310. Brussels/Grenoble: Ousia.
- Brunschwig, J. 1988. "La théorie stoïcienne du genre suprême et l'ontologie platonicienne." In *Matter and Metaphysics*, edited by J. Barnes, and M. Mignucci (eds.), 19–27.
- Caston, V. 1999. "Something or Nothing: The Stoics on Concepts and Universals." *Oxford Studies in Ancient Philosophy* 17: 145–213.
- Crivelli, P. 1994. "Indefinite Propositions and Anaphora in Stoic Logic." *Phronesis* 39: 187–206.
- Crivelli, P. 2007. "The Stoics on Definitions and Universals." *Documenti E Studi Sulla Tradizione Filosofica Medievale* 18: 89–122.
- Crivelli, P. 2010. "The Stoics on Definition." In *Definition in Greek Philosophy*, edited by D. Charles, 359–423. Oxford: OUP.
- Delammare, A. J. L. 1980. "La Notion de ptōsis chez Aristote et les stoïciens." In *Concepts et catégories dans la pensée antique*, edited by P. Aubenque, 51–79. Paris: Vrin.
- Durand, M. 2018. *Language and Reality: Stoic Semantics Reconstructed* (Doctoral Thesis). Toronto: University of Toronto.
- Durand, M. 2019. "What Does "This" Mean? Deixis and the Semantics of Demonstratives in Stoic Propositions." *Methodos* 19, <https://doi.org/10.4000/methodos.6023>.
- Dyson, H. 1975. *Prolepsis and Ennoia in the Early Stoa*. Berlin: De Gruyter.
- Ebert, T. 1993. "Dialecticians and Stoics on the Classification of Propositions." In *Dialektiker und Stoiker zur Logik der Stoa und ihrer Vorläufer*, edited by K. Döring, and T. Ebert, 111–27. Stuttgart: Steiner.
- Frede, M. 1994a. "The Stoic Notion of a Grammatical Case." *Bulletin of the Institute of Classical Studies* 39: 13–24.
- Frede, M. 1994b. "The Stoic Notion of a Lektion." In *Language*, edited by Stephen Everson, 109–28. Cambridge: CUP.
- Gaskin, R. 1997. "The Stoics on Cases, Predicates and the Unity of the Proposition." *Bulletin of the Institute of Classical Studies. Supplement* 41 (68): 91–108.
- Gourinat, J.-B. 1999. "La définition et les propriétés de la proposition dans le stoïcisme ancien." In *Théories de la phrase et de la proposition de Platon à Averroès*, 133–50. Paris: Presses de l'École Normale Supérieure.
- Gourinat, J.-B. 2000. *La Dialectique des Stoïciens*. Paris: Vrin.
- Gourinat, J.-B. 2018. "Stoic Dialectic and its Objects." In *Dialectic after Plato and Aristotle*, edited by T. Bénatouil, and K. Ierodiakonou, 134–67. Cambridge: CUP.
- Graeser, A. 1977. "On Language, Thought, and Reality in Ancient Greek Philosophy." *Dialectica* 31 (3-4): 359–88.
- Hadot, P. 1966. "La notion de « cas » dans la logique stoïcienne." In *Le langage. Actes du XIIIe congrès de la société de philosophie de la langue française. Genève 2-6 août 1966*, 109–12. Neuchâtel: La Baconnière.
- Ierodiakonou, K. 2024. "The Stoics on Conceptions and Concepts." In *Conceptualising Concepts in Greek Philosophy*, edited by G. Betegh, and V. Tsouna, 237–258. Cambridge: CUP.
- Ildefonse, F. 1997. *La naissance de la grammaire dans l'Antiquité grecque*. Paris: Vrin.
- Lallot, J. 1997. *Apollonios Dyscole, De la Construction*. Paris: Vrin.
- Lloyd, A. C. 1971. "Grammar and Metaphysics in the Stoa." In *Problems in Stoicism*, edited by A. A. Long, 58–74. London: Athlone.

- Lloyd, A. C. 1978. "Definite Propositions and the Concept of Reference." In *Les Stoïciens et leur logique*, edited by J. Brunschwig, 285–96. Paris: Vrin.
- Long, A. A. 1971. "Language and Thought in Stoicism." In *Problems in Stoicism*, edited by A.A. Long, 75–113. London: Athlone.
- Long, A. A., and D. N. Sedley. 1987. *The Hellenistic Philosophers*. Cambridge: CUP.
- Luhtala, A. 2000. *On the Origin of Syntactical Description in Stoic Logic*. Münster: Nodus Publikationen.
- Menn, S. 1999. "The Stoic Theory of Categories." *Oxford Studies in Ancient Philosophy* 17: 215–47.
- Pohlenz, M. 1948. *Die Stoa. Geschichte einer geistigen Bewegung. 2 Vols.* Göttingen: Vandenhoeck & Ruprecht.
- Primavesi, O. 1994. "Casus — Πῶς αἰς. Zum aristotelischen Ursprung eines umstrittenen grammatischen Terminus." *Antike und Abendland* 40 (1): 86–97.
- Schenkeveld, D.M., and J. Barnes. 1999. "Language." In *Cambridge History of Hellenistic Philosophy*, edited by K. Algra, et al., 177–226. Cambridge: CUP.
- Schubert, A. 1994. *Untersuchungen zur Stoischen Bedeutungslehre*. Göttingen: Hypomnemata.
- Sedley, D. N. 1984. "The Stoic Theory of Universals." *The Southern Journal of Philosophy* 23: 87–92.
- Sedley, D. N. 1999. "Hellenistic Physics and Metaphysics." In *The Cambridge History of Hellenistic Philosophy*, edited by K. Algra, J. Barnes, J. Mansfeld, and M. Schofield, 355–411. Cambridge: CUP.
- Sedley, D. N., Rist, J. M. 1982. Review: The Stoics by John M. Rist in *Phoenix*, 36(2), 198–200
- Sellars, J. 2011. "Stoic Ontology and Plato's *Sophist*." *Bulletin of the Institute of Classical Studies* 54: 185–203.
- Sluiter, I. 1990. "Ancient Grammar in Context." In *Contributions to the Study of Ancient Linguistic Thought*. Amsterdam: VU University Press.