Rational Empiricism: The Stoics on Reason, Experience and *Katalepsis**

Ada Bronowski

Abstract

In this paper, Stoic epistemology is analysed in terms of how to achieve a stable grasping of reality through *katalepsis*. The paper argues that for the Stoics, this is a state accessible to any rational being because it is the upshot of a mental capacity we are necessarily bound to put into operation, namely that of experiencing and mentally ordering objects from the sensible world. The paper puts forward an original interpretation relying on a reconsidered notion of Stoic *empeiria* or experience. It connects the Stoic theory of the development of reason and formation of conceptions with a more fluid oscillation between belief and knowledge so as to establish a peculiar relation between reason and the Stoic notion of experience, articulating a form of rational empiricism.

Knowledge, *episteme*, for the Stoics is a state of mind – quite literally. For they say that knowledge is the mind (the soul or the commanding faculty, the *hegemonikon*) disposed in a certain way. It is a state of mind which is characteristic of the soul of the perfectly wise. For the Stoics believe that only the wise attain such a state. The epithets which describe this state are echoed from one source text to another: it is a state which is "stable", "steadfast", "firm", "unshakeable", and which, moreover, no further reasoning or reason can move. The last stipulation marks out *episteme* not so much as a static psychological state a person receives or has as a matter of individual disposition (according to which a person is more or less disposed to be wise), but rather as the culmination of a rational process. The wise man is not swayed by further reasoning because he has reached a superior stage in his capacity for argumentation and reasoning. The conclusions he puts forward have not merely got equipollent validity with respect to other argumentations. Rather, given that no further reasoning can alter them, they correspond to truths in the world which the wise man has succeeded in fully grasping. Knowledge, *episteme*, is thus the end state of a rational process.

^{*} This paper was inspired by the musical works of Max Richter and can be read as a running commentary to the rationalisation over random sound-data through musical structuring which characterises Richter's distinctive musical minimalism. I am, in more practical terms, very much indebted to Prof. Jonathan Barnes, Prof. Pieter Sjoerd Hasper, Prof. Justin E. H. Smith and to a very helpful anonymous reviewer for useful and perspicacious comments on a first draft of this paper. Many thanks also go to Prof. Katerina Ierodiakonou for giving me the opportunity to write this piece in the first place.

S.E. PH. II. 80 and M. 7. 39: πᾶσα δὲ ἐπιστήμη πῶς ἔγον ἐστὶν ἡγεμονικόν.

² S.E. M. 7. 152; Stob. Ecl. II. 7. 11 m, 106 f.; Cic. Acad, II. 145.

³ S.E. M. 7. 151; Stob. Ecl. II. 7. 5l, 5–6; ps-Galen Def. Med. 19. 350, 3f.

⁴ In the texts, the word λόγος (e. g. S.E. M. 7. 151) and *ratio* in the Latin translation (e. g. Cic. Acad. I. 41) are used to refer to a counter-argument or reasoning which, were this state capable of being swayed (that is, were this state merely belief) would indeed sway it. Knowledge is thus specifically contrasted to belief (*doxa*) in these texts as precisely not being susceptible to be altered by further reasoning: ἀμετάθετον ὑπὸ λόγου (S.E. ibid.).

The qualifiers applied to this end state (those of strength and steadfastness) acquire proper descriptive weight in context; namely in comparison with the different states a human soul can reach. For the Stoics, the soul-state corresponding to knowledge is a state determined in comparison with two other soul-states: that of *doxa* (belief) and that of *katalepsis* – the well-known peculiar Stoic coinage, problematic because it is fleeting, though it is differentiated from belief – which indicates a mental state of grasping or understanding. The term '*katalepsis*' is commonly translated as 'cognition', a translation which misses out however on the more idiosyncratic aspects of the Stoic notion: for a *katalepsis* is a mental grasping, and as such has indeed something cognitive about it (but so have belief and knowledge). More crucially and distinctively, a *katalepsis* is characterised by its admitting of more or less fleetingness relatively to belief or knowledge. The translation as 'cognition' is thus unhelpful and possibly misleading, if indeed the main characteristic is a certain kind of fluctuation fixed by certain conditions which need to be examined. In what follows we shall keep to the transliterated form '*katalepsis*'.

One of the aims of this article is to articulate the conditions for the stabilisation of katalepsis. The tension between katalepsis being fundamentally relative and the possibility for its becoming a stable state resolves through a radical shift in the kind of knowledge state there is to be had, one that is determined on the basis of how to achieve *katalepsis*.⁵ Attaining a katalepsis, namely through developing the capacity to recognise the associated kataleptic impressions, is brought to bear directly on the means for realisation of the maximal state of katalepsis which is, in effect, knowledge, episteme. The second part of the article thus delves into what it takes to develop such a capacity by bringing to light the contribution of the Stoic notion of experience, *empeiria*, to a person's progressively increasing capacity to recognise kataleptic impressions. The more kataleptic impressions are recognised as such and the less non-kataleptic impressions get acknowledged for what they are, the more fixed the state of katalepsis is bound to become. But we are in effect, bound to gain empeiria, and, through the necessary development of reason are bound to acquire such conceptions which allow for the recognition of at least some kataleptic impressions. The path to a stable katalepsis is thus methodically traced out by the Stoic theory of the development of reason through experience.

Belief and knowledge, *doxa* and *episteme*, are the two canonical opposites whose descriptions are set one against the other: the stability or steadfastness (*asphales*) of *episteme* is gauged against the flimsiness and weakness (*asthenes*) of *doxa*. *Episteme* resides solely in the wise, *doxa* is the lot of the foolish.⁶ But with the introduction of the intermediate state of *katalepsis*, the contrast is recalibrated and loses its starkness: *katalepsis* is defined as falling short of *episteme* but is more solid than mere *doxa*. It corresponds to a solid mental grasping which guarantees the truth of what is being grasped but lacks the utter inalterability of *episteme*. It thus constitutes an intermediate state which cements the relativity of one state to another rather than an irreducible opposition. For

⁵ The relativity which the notion of *katalepsis* introduces is familiar enough from the literature on the Stoics. In more recent scholarship (e. g. Meinwald 2005) emphasis has been put on how *katalepsis* enables the Stoics to nuance the status of beliefs. Here, more distinctively, we focus on the notion of knowledge it underscores.

⁶ S.E. M. 7. 152: τὴν μὲν ἐπιστήμην ἐν μόνοις ὑπίστασθαι λέγουσι τοῖς σοφοῖς, τὴν δὲ δόξαν ἐν μόνοις τοῖς φαύλοις.

katalepsis is the state which can be reached by fools but is also the basis for the state of knowledge of the wise. Knowledge – we learn from our sources – is but the most steadfast kind of *katalepsis*.⁷

However problematic it may be, the introduction of the state of katalepsis alters the relation between belief and knowledge by opening the possibility to move from one to the other through the availability of katalepsis. The state of katalepsis relies on the possibility of recognising the truth of true impressions (precisely the *kataleptic* impressions). For this, a person must be in full possession of reason. For it is reason which enables a person to recognise the things he is impressed by as the things they truly are, thanks to a correct application of the right conception (e.g. of human being) to the received impression (e.g. of a featherless biped walking up the road). 8 Given that katalepsis is available to the foolish, this implies that the conceptions in question minimally cover those acquired naturally and which form the basis of reason – not merely just available to all rational beings, but necessarily present in each and every rational being. 9 For the Stoics believe that there is at least a basic set of conceptions that all rational beings come to acquire because that is what it is to be rational (e.g., the conception of a human being). Hence their acquisition is natural. It would be unnatural and falling short of rationality not to have acquired them. Hence no special, technical training is necessary to be fully aware of the truth of at least a basic set of *kataleptic* impressions (others more complex will require such training). Fools also can apply correctly these most basic and natural conceptions to recognise certain impressions for what they truly are. This kind of recognition is thus not true belief but something more secure. It is crucial for this account that its fundamental assumption is that individuals grow up in a natural environment, that is to say not artificially re-created or manipulated such as by an evil demon or deceptive god. The sanity required of the mind (see fn. 8) is paralleled by the sanity or rationality required of the cosmos 10 – a requirement which sets out the grounds for an empirically based account of ontology and epistemology.

It thus appears that the possibility of *katalepsis* goes hand in hand with the natural development of reason. To understand *katalepsis* and its status as an intermediary between belief and knowledge, we must therefore follow the stages of the acquisition of reason. The progress, or at least possible progress from weakest to strongest state of the soul (from

 $^{^{7}}$ See S.E. M. 7. 151; Stob. Ecl. II. 7. 51, 4–5; εἴναι δὲ τὴν ἐπιστήμην κατάληψιν ἀσφαλῆ.

⁸ In Sextus' lengthy discussion of the problems raised by the possibility of a kataleptic impression (M. 7. 249 ff.), a point made repeatedly is that a kataleptic impression requires the perceiver to be utterly sane of mind so as to receive an impression of what is actually there to be perceived; the examples of Orestes' seeing the Furies when it is actually Electra who is standing before his eyes (and similar cases of madness with Heracles and Menelaus) show that it is not enough that the imprinting itself of the external object be crystal clear but that perspicacity and clarity must also be present at the receiving end, i. e. in the mind. An aspect picked up on in Cicero, Acad. II. 88–90 claiming against the Stoics that the criterion for sanity is not cogent enough given that the madmen in question at the time of their actions think that the impressions they receive are produced by real things in conformity with those impressions. This critique helps to establish that the Stoic sanity requisite is meant to bolster the objective validity of the *kataleptic* impression: independent of individual circumstances, it relies on a founding notion of reason investing all rational beings.

 $^{^9}$ Chrysippus, quoted by Galen, PHP V. 3, describes reason (λόγος) as "a collection (ἄθροισμα) of concepts and natural conceptions".

¹⁰ See D.L. 7. 138: "of the cosmos [...] reason pervades every part of it utterly, just as the soul does for us" (τὸν δὴ κόσμος [...] εἰς ἄπαν αὐτοῦ μέρος διήχοντος τοῦ νοῦ, καθάπερ ἐφ' ἡμῶν τῆς ψυχῆς).

belief to *episteme*) which is punctuated by the availability of *katalepsis* is connected to the stages and the manner by which our reason arises in us – first and foremost, the manner by which our natural conceptions arise. In effect, the acquisition of knowledge is bound to the development of reason such that reason, and the degree of perfection we are able to bring it to, determines the epistemic state our soul reaches. What is more, the kind of knowledge we can have is tied to what we come to acquire through this development.

Reason develops naturally in us from contact with the external world. If all goes as it should, our acquisition of natural conceptions and other more sophisticated conceptions acquired through study should ultimately lead us to understand and cherish above all else the natural order of the world. We come to realise this is the only true good and desire to live thus in conformity or in agreement with it. ¹¹ The Stoic account of the development of reason ends with the articulation of the goal of life. Such is the life of the sage who reaches this end thanks to the state of *episteme* of his soul. ¹² Accordingly, the claims concerning the goal of life and those about reaching a state of *episteme* describe connected states and similar directions for progress.

There are stages in the moral awakening. They run parallel to the stages which mark the development of reason. The goal of life is set out in formulae which all tend to express understanding and conformity with the order or laws of nature. One of the formulae sets out the goal of life in terms of conformity with experience, *empeiria*: "to live following the experience of what happens by nature" There is a special, Stoic understanding of the notion of experience, it shall be argued here. It plays a central role in the development of reason and in particular in our capacity to form conceptions. That it appears as the pivotal notion on which rests the goal of life gives an added weight to the peculiarity of the Stoic understanding of the notion of *empeiria*: the first filter of inarticulate random data from the external world and at the same time the mark of supreme rationality. It is a liminal notion which appears to be central to Stoic epistemology and moral theory. It frames the kind of knowledge the Stoics think the sage has and the kind of knowledge we can aspire to: namely knowledge determined by experience derived from particulars on the basis of a direct contact with particulars.

Reading the texts about the development of rationality in parallel with passages analysing the moral ascent in pursuit of the goal of life – from irrational first impulse to voluntarily giving or withholding assent – enable us to properly assess the complementarity and correspondence between epistemic states and action and right action. The intermediary epistemic stage of *katalepsis* is the guiding thread in this analysis. The conditions for its realisation shine a light on the peculiarity of the Stoic theory of knowledge as a form of rational empiricism.

The antithetical pair of *doxa* and *episteme* is familiar from Platonic epistemology. In Plato, beliefs are said to be unreliable, forever changing and contradicting one another in correspondence with the continuously changing sensible objects – continuously becoming and never being – which beliefs are about. But knowledge is unwavering and steadfast and

¹¹ See Ps-Plut. Plac. 900B-C; Cic. Fin. iii. 21; Stob. Ecl. II. 7, 6a-e. On progressing towards this state: D.L. 7. 91.

¹² One of Zeno's disciples, Herillus of Carthage is said to have affirmed that knowledge, *episteme*, was the goal of life, (the *telos*) see D.L. 7. 37.

¹³ Chrysippus, see D.L. 7. 87, Stob. Ecl. II. 7, 6a, 8–9: ζῆν κατ' ἐμπειρίαν τῶν φύσει συμβαινόντων.

as elevated a mode of apprehension as are its actual objects, the unmixed, unchanging, eternal Forms. ¹⁴

There are at least two aspects which mark out the Stoic approach. For one, the Stoics apply the pair of opposites to an ontology in which there is no higher reality. The Platonic barrier dissolves between the objects of sense-perception and the eternal Forms. Knowledge and belief thus do not have different objects of apprehension and it is not the nature of the object inquired into which determines whether one has knowledge or belief about it. Moreover the stability of knowledge in contrast with the instability of belief does not rest on the different kinds of objects of which we have knowledge or belief, but rather on an internal, mental capacity to reason and discriminate over sense impressions. Knowledge and belief are respectively the results of a correct or a misapplied use of that capacity over one and the same impression. The stability or weakness which qualifies the states of knowledge or belief is thus a qualification which describes primarily our mental capacity, namely the capacity to assent for the right reason to an impression. This is what reasoning consists in. Its tools are the conceptions the mind has created and hoarded through experience derived from contact with the world. Our assent is firm or weak on the basis of how precise our reasoning capacity has become.

It follows thus that the second main contrast with Plato is that for the Stoics there is a difference in degree between the state of knowledge and that of belief but not a difference in kind as on the Platonic account. There is a difference in the degree of steadfastness in discriminating over impressions. Since the soul is corporeal on Stoic doctrine (D.L. 7. 156–157), this has something to do with the kind of corporeal state a person manages to get his soul in. In effect, *doxa* and *episteme* on Stoic doctrine are no longer stark opposites. The contrast is dulled by the possibility of progress afforded by having *katalepsis*. Indeed it seems as though the word '*episteme*' is merely used to refer to the most advanced stage of having *katalepsis*. It is reached once a person succeeds in maintaining a constant state of *katalepsis* resisting any relapse into *doxa* which is what usually happens for most people. When a person is capable of assenting consistently and exclusively to *kataleptic* impressions, he has *episteme*: this is the steadfastness and firmness of mind which characterises *episteme*. The wise man is the man who stops having beliefs. He actually only has *katalepseis* (a plurality of instances of *katalepsis*). But only having *katalepseis* turns the state of *katalepsis* into one of knowledge and wisdom. ¹⁶

The Stoics are harshly criticised for their introduction of the intermediate state of *katalepsis*, most notably by the Academic Sceptics whose debates against the Stoics on this matter are recorded at length by Sextus Empiricus (*M*. 7. 150–262) and Cicero (*Acad*. I. 41–46, and *Acad*. II. 17–18, 145–146). The premiss for the critique is the Stoic commitment to a strict separation between the state of being wise (and thus having knowledge) and the opposite state of being a fool characterised by the lack of wisdom. The strict alternative

¹⁴ For the stability and solidity of knowledge, *episteme*, in contrast with wavering belief in Plato, see for instance Plato's Meno 98a-b with reference to the analogy with the statues of Daedalus which need to be tied down (*episteme*) otherwise they fly away (*doxa*). In Republic v-vii, the ontological framework in which being is distinguished from being-and-not-being is determined through the available modes of apprehension (knowledge and belief).

¹⁵ There is no common ground between belief and knowledge on the Platonic account which does not imply that we cannot have beliefs about the objects of knowledge but this is not the point there.

¹⁶ See S.E. M. 7. 157; Stob. Ecl. II. 7, 11 m, 106 f.

should not allow for any intermediate state. Hence – the Sceptic attack continues – what the Stoics call the intermediate state of *katalepsis* amounts to nothing other than a fluke true belief a fool can stumble upon by chance, by assenting to the right impression by chance. This therefore cannot alter the fool's continued state of belief. As for *katalepsis* being shared by the wise, the critique urges that, derived from assent for the right reason to the right impression (precisely thanks to the knowledge which characterises the state of the wise man's soul) what is designated as *katalepsis* in this case, cannot be distinguished from knowledge. ¹⁷ A further, distinct aspect of the critique developed by Academic Scepticism addresses the very premisses for the existence of *katalepsis* as resulting from assent to correspondingly termed *kataleptic* impressions. There are no plausible grounds, on this critique, to actually identify a specific *kataleptic* impression apt to induce a more secure assent leading to *katalepsis*. ¹⁸

The attacks on the notion of *katalepsis* range thus from its being superfluous to being too mysterious. From this perspective, disrupting the clear-cut opposition between belief and knowledge by the interposition of a third new state seems to create more problems than solutions. For one, the need to explain two bridges: between *doxa* and *katalepsis* and between *katalepsis* and *episteme* where before there was only one, between *doxa* and *episteme*. Another problem is the need to distinguish an *episteme* sort of knowledge from *katalepsis* which however also seems to be a sort of knowledge; both *episteme* and *katalepsis* being more than just weak beliefs.

But one main characteristic of this critique is that it holds fast to the traditional, fundamentally Platonic view of the radical opposition between knowledge and belief. It takes the Stoics to have incongruously inserted an additional element into an established schema. However, all indications rather tend to show that the Stoic innovation with *katalepsis* is meant to utterly change the terms of the epistemic schema. They re-arrange the provisos on which to ground the possibility of knowledge. The claim is that all there is to knowledge is *katalepsis* whereby the notion of *katalepsis* is meant to replace that of *episteme* as a third separate stage. In other words, *katalepsis* is not meant as a problematic middle state but as a new top state. Taking our cue here from Cicero in defence of the Stoics, what the Stoics introduce is a shift in the basic prerequisites for knowledge, and "to disregard it, is to make away with discriminating between what is knowable and what is unknowable" 19. In a similar anti-Sceptic stance Galen defends the Stoic notion²⁰ against Favorinus who is relaying the Sceptical critique: *katalepsis* is a basic notion, it is "what is known for certain" 21. And, in correspondence to the deflationist defence produced by Cicero, Galen says that it is just the case that some impressions are true (because we really do see, smell,

¹⁷ These are the terms of the debate with Arcesilaus summarised in S.E. M. 7. 153–155; see also Cicero's evocation of Arcesilaus at Acad. II. 67 and 77 over the blurriness of the border between *katalepsis* and belief. See Striker 1996b, 109f.

¹⁸ The specific impression is termed, in parallel to *katalepsis*, a *kataleptic* impression, see Cic. Acad. II. 77 and 99–100, and S.E. M. 7. 155–157. We shall return in more detail to the *kataleptic* impression at the end of the article bringing the further discussion of *empeiria* to bear directly on the Stoic account of it.

¹⁹ In Cic. Acad. II. 18, premissed by "id nos a Zenone definitum rectissime dicimus".

²⁰ Galen. Opt. Doc. I. 41, 15–17, defending what he calls the "Stoic word" *katalepton*.

²¹ See Galen, Opt. Doc. I. 42, 9-12: τὸ βεβαίως γνωστόν further expanded into τὸ καταλαμβάνεσθαι τοῦ βεβαίως γιγνώσχειν. I owe this reference and the insight that the Stoics are actually trying to marginalise the too connoted and ambiguous notion of episteme by promoting that of katalepsis to Professor Jonathan Barnes, in conversation.

and feel certain things) as opposed to thinking we do, as it happens in dreams.²² Both Cicero and Galen thus suggest to read the Stoics as not so much adding a further element to the discussion about knowledge, i. e. contrasting *katalepsis* with *episteme* (which is how the Sceptic critique reads them), but rather as establishing *katalepsis* as the working state for a basis for knowledge. This changes the approach quite radically and indeed has not been taken into account by the literature very clearly. For it effects a shift in the very notion of knowledge the Stoics are concerned with as now, an accessible state related to discrimination over empirical data.

The question is why do the Stoics not just stick to the term 'episteme' and load it with their account of what knowledge amounts to. Are they, as they are often criticised for doing, 23 merely inserting new terminology to say the same things other schools already said? Presumably not. Dethroning episteme as the sole state capable of accessing truths about the world suggests that the very approach to knowing something shifts with the introduction of the term 'katalepsis'. This is what both Cicero and Galen seem to be claiming against the Sceptical rejection of the notion.

The critique concerning terminology might tend to indicate that the Stoics, or some Stoics, went as far as to radically alter the usages of the terms in question. In particular, the promotion of the new term 'katalepsis' on this interpretation served to do away with the variety of connotations and ambiguities surrounding the term 'episteme'. In Aristotle for example, 'episteme' refers at times technically to a science, or a specifically contained body of knowledge, and at other times, distinct from that usage, to an overall state of knowledge or wisdom. 24 There are in effect a number of Stoic texts which seem to restrict the term 'episteme' to refer to a contained science. 25 The term 'katalepsis' could thus have been introduced in order to make a clear-cut distinction between knowledge as 'katalepsis' whilst reserving 'episteme' for a contained technical application. However, too many different texts - from equally trustworthy sources - report that the Stoics do hold to a notion of episteme as knowledge. What marks episteme in these texts from katalepsis is not that it is something separate from it (e.g. a contained science) but rather that it is a kind of katalepsis: episteme is a "firm katalepsis" (D.L. 7. 47). For the Stoics hold that "episteme is a good in itself", that is to say not at the service or for the sake of anything else. ²⁶ To speak of episteme in this way is clearly to treat the word 'episteme' as referring to knowledge and not to a specific science. It is the knowledge characteristic of the supreme state of the wise man.

A crucial aspect of the notion of *katalepsis* is that a person can reach a state of *katalepsis* from which he then can relapse into belief but that there is also a certain state brought about through *katalepsis* from which no relapse is possible any more. The latter state somehow needs to be distinguished from *katalepsis tout court*. And *episteme* does precisely that.

²² Galen. Opt. Doc. I. p42, cont.

²³ E.g. by Arcesilaus criticising Zeno for making mere "verbal alterations" to pre-established accounts, recorded in Cic. Acad. II. 16, but see also Cic. Acad. I. 41 about the novelty of the term 'katalepsis'.

²⁴ For an overview of the ambiguities of the usages of 'episteme', see Burnyeat 1981, 97.

²⁵ See D.L. 7. 42: on the science (episteme) of rhetoric, also ibidem talking about the science (episteme) of dialectic, as also at 7. 62; at 7. 47, freedom from precipitancy (ἀπροπτωσία) is a science (episteme), at 7. 92: courage is a science (episteme) and so on and so forth.

 $^{^{26}}$ D.L. 7. 98 records *episteme* as a ἁπλοῦν ἀγαθὸν also Stob. Ecl. II. 7. 5l, 2 as a "per se good".

Zeno is said to have used an analogy with four positions of the hand to exemplify the stages from reception of an impression (fingers spread wide open) to belief (fingers semi-closed), to *katalepsis* (a fist) and knowledge (hand over fist).²⁷ It is an analogy which shows both the centrality of *katalepsis* and the distinction between *katalepsis* and knowledge though knowledge merely fits onto *katalepsis* rather than constituting a completely separate state. The Stoics thus reset and adapt a notion of *episteme* to fit their notion of *katalepsis*, rather than dispel a terminological ambiguity with the use of '*episteme*'. The notion of *episteme* is re-tuned so as to be reliant on *katalepsis* but is not eliminated.

What is at stake is how to reach a state of *katalepsis*. The Stoics require us to accept that anyone can, and actually does sometimes grasp certain impressions as true. The introduction of an intermediate stage of *katalepsis* changes thus the dynamics between knowledge and belief.

The Sceptic critique focuses on *katalepsis* as a state of mind in and of itself, assessing its legitimacy and viability as an epistemic state which a person would be in. Having *katalepsis* is, on this interpretation, a parallel state to having knowledge. But the critique abstracts one piece from the puzzle, isolating it from the broader picture. None of the texts about *katalepsis* strictly reporting Stoic doctrine treat *katalepsis* in this manner, as a state isolated in and of itself. It appears from the relevant passages that the introduction of *katalepsis* by the Stoics is not so much to impose an additional epistemic state, artificially determined by its being a middle-ground between belief and knowledge. *Katalepsis* rather enables the Stoics to articulate a comparative grid which goes from the weakest to the strongest form of assent to impressions. It is fundamentally a grid designed to frame a movement, a progress from weak to strong, emphasising the possibility of such a progress. It is not a static grid, presenting a classification of mankind of which some belong in lower boxes, some in superior boxes and some in the middle. Rather, this grid of epistemic states is filtered through by the possibility of fluidity between the levels on the basis of the possibility to strengthen one's assent to impressions through *katalepsis*.

What fuels this possibility is the result of the more or less successful application of reason over experience which enables us in the first place to form conceptions, and once these are formed, to then apply them when giving our assent to impressions. Depending on how developed and precise our conceptions are, and hence how sturdy our reason is, we give our assent with more or less strength. It is reason and experience which make up the grid-coordinates which condition the eventual, or at least potential, progress a person can make from one epistemic level to another.

Experience and reason, on Stoic doctrine, are related in such a way that we do not have experience without reasoning over it in some way – most of the time in a flawed way such that we end up with flimsy beliefs rather than anything more stable. Yet this makes for a rather peculiar notion of experience: as always rationalised in contrast with other rival empiricist accounts, for instance the Epicureans whose trademark view is that experience is utterly severed from reason and precisely because of this, is a criterion for truth. ²⁸

Every stage of the progress through epistemic states (belief, *katalepsis*, knowledge), derives from the kind of assent a person gives to the impressions he receives. But at the same time, it is the epistemic state a person is in which determines the kind of assent he

²⁷ See Cic. Acad. II. 145.

²⁸ See Epicurus Her. 38 and 50; D.L. X. 31–32.

can give. On the one hand assenting to impressions puts our soul in a certain state and on the other hand it is the state our soul is in which determines the kind of assent we give to the impressions we receive. Again, on the one hand, it depends on the degree to which we are capable of rationalising over experience whether we get closer or further away from assenting such as to have *katalepsis*. On the other, it is up to us to exert ourselves in order to develop that capacity to reason on the basis of our experience – a capacity which consists in analysing received impressions with increasing precision so as to recognise the *kataleptic* impressions from other kinds. For the hallmark of assent to a *kataleptic* impression so as to result in *katalepsis*, is sensitivity to fine-grained differences between the true impressions and those that are deceptively similar but false.²⁹

Both experience and reason evolve over time allowing for moral progress. Moral progress is rational progress for the Stoics, given that the moral life consists in attaining the perfectly rational life. ³⁰ *Katalepsis* is less constant than either belief or knowledge. For it is sometimes attained by fools who mostly and repeatedly fall back onto belief, and once it does become constant it actually turns into knowledge. But precisely for these reasons, *katalepsis* underscores our moral and rational progress, and even guarantees it. For if indeed our most basic beliefs are formed on the basis of rationalised experience, at least some of our acts of assent will have the solidity characteristic of *katalepsis*, i. e. stronger than mere beliefs however basic the impression might be (e. g. [that this is my parent]). It is the accumulation and collection of such *katalepseis* which eventually lead to knowledge. And it is at least possible to begin accumulating them, given that we cannot *not* rationalise over the impressions we receive. What is more, we get at least the most basic ones right – those which indicate that we have overcome what the Stoics call our first impulse for self-preservation: when, that is, at the most basic level, we extend the impulsive first concern for preserving our lives to our first carers (e. g. to our parents). ³¹

The natural development of reason both enables us thus to rationalise over our experiences and furnishes the mind with the elements which enable us to assent more firmly to impressions – or fails to do so, through over-hastiness on our part which then produces wrong conceptions and disables our capacity to further distinguish true from false impressions. ³² It is thus necessary to examine in detail what the development of reason actually consists in. For reason is constituted by the conceptions which enable us to discriminate between our impressions. But at the same time, reason itself constructs these conceptions, for this is what reason consists in: namely reasoning over experience such as to produce conceptions – and getting better at it as our reasoning capacities develop over time. The conceptions in our minds are based on experience, *empeiria*. *Empeiria* itself is derived from particulars in the external world. Conceptions, the products and at the same time

²⁹ See S.E. M. 7. 252: a person who has katalepsis "is expertly attentive (τεχνικῶς προσβάλλει) to the difference in the impression"; the impression itself is characterised by its "technical (τεχνικῶς)" imprint at S.E. M. 7. 248. See also Cic. Acad. II. 19: we are driven to go closer to the objects we are impressed by until we are sure we can trust our impression, and at Acad. II. 30–31 and 86: praise of the human mind which has the technical capacity to grasp details such as to discern a true from a false impression.

³⁰ See Cic. Fin. iii. 21. On the correspondence between rationality and the good life, see Striker 1996c, 227 ff.

³¹ Cic. Fin. iii. 62–3; See also Hierocles in Stob. Ecl. IV. 27. 23, 14ff., on extending our primitive concern for ourselves (first impulse) to more engulfing circles of appropriation or *oikeiosis*: first to our parents and eventually further afield.

³² See Plut. Stoic. Rep. 1056E–F; Stob. Ecl. II. 7. 11 m, 110–112.

the constituents of reason are thus grounded in *empeiria* and are also the condition for knowledge.

The Stoics are committed to the theory of a natural development of reason: that is to say that they consider rationality as in-built along with everything else which makes up a human being. The difference is that reason develops rather than manifestly performs from day one like eyes or lungs do.³³ Crucially however, a being endowed with reason cannot *not* have reason arising within him. Arising and developing, reason necessarily becomes effective to the extent that, ultimately, for the Stoics, reason, the rational or commanding faculty (the *hegemonikon* for the Greeks, *principale* in Latin), comes to take control over the whole soul.³⁴ There is thus not a single act of the mind which does not originate from reason.³⁵

We are born, the Stoics say, endowed with perception such that we are from the first receptive of sense-data from the external world. ³⁶ It follows from this primitive state that, thanks to our capacity for perception, we first and foremost perceive ourselves and become aware of ourselves as distinct from any other object we perceive. ³⁷ This is the trigger for the first impulse for self-preservation the Stoics identify as the first motor for action in humans and animals alike – the impulse to care for one's constitution. ³⁸ Irrational beings will also display impulses to act towards their self-preservation, for, as Seneca states, each animal tends to preserve his own appropriate constitution.

This impulse is called "first" or "primitive" $(\pi\rho\omega\tau\eta \ \delta\rho\mu\dot{\eta}^{39})$ precisely because it is rapidly overruled yielding to new imperatives for which self-preservation might be at most a coincidental result but not the reason for action. It is the gradual implementation of reason in us which alters in this way our motivations to act. As impulse becomes rational, it becomes an act of assent to action: for all impulses of rational beings are acts of assent, whereas there is not even a word to call the impulses of irrational beings – they are pure impulses with no assent. ⁴⁰

In *Letter* 121. 14–18, Seneca bends the original intention behind the adjectival use of "first" into an adverbial "*primum*": *omne animal primum constitutioni suae conciliari*,

³³ In this, humans differ from gods if we follow the distinction suggested by Seneca Ep. 92. 27 between the "ratio consummata" of the gods and the "ratio consummabilis" of the humans: humans and gods are similar in that they have reason (*ratio*) but whereas with the gods reason is there, complete in itself, always present to itself, ratio in humans is perfectable which implies that it develops: thus perfect rationality can be achieved and indeed is to be achieved.

³⁴ See D.L. 7. 86; Cic. Fin. iii. 21. On the control of the commanding faculty for the Stoics over all other faculties (perceptive, nutritive etc.) see Ps-Plut. Plac. 903A–B, Calcidius (quoting Chrysippus) in Tim. 220. See also Seneca Ep.113. 23, echoed in Stob. Ecl. II. 7, 9b. On the commanding faculty being the centre of reception of impressions, assent, impulse and action: S.E. M. 7. 236, Plut. Stoic. Rep. 1037F, Stob. Ecl. II. 7, 9, 1 ff.

³⁵ See for instance Stob. Ecl. I. 49,33, 30–33: like an apple which has within it both sweet taste and sweet smell, the commanding faculty has in it impressions, assent, impulse and reasoning, all in one place.

³⁶ D.L. 7. 49, 52; Ps-Plut. Plac. 900B.

³⁷ D.L. 7. 85: τὴν αὐτοῦ σύστασιν καὶ τὴν ταύτης συνείδησιν.

³⁸ See D.L. 7. 85; Cic. Fin. iii. 16f.; Seneca Ep. 121. 14–18.

³⁹ D.L. 7. 85; Cic. Fin. iii. 17: principium ductum esse a se diligendo.

⁴⁰ On the nameless impulse belonging to irrational animals: Stob. Ecl. II. 7. 9, 5f. On the rational impulse as an act of the mind (φορὰν διανοίας ἐπί τι τῶν ἐν τῷ πράττειν), see Stob. Ecl. II. 7. 9, 7–9. And a few lines down, Stobaeus adds that "each impulse is an act of assent" (πάσας δὲ τὰς ὁρμὰς συγκαταθέσεις εἶναι), Stob. Ecl. II. 7. 9b, 1.

'every sentient being is attached first and foremost to its own constitution'. ⁴¹ On his reading, the first impulse is no longer destined to morph into something else. Rather Seneca transforms the notion of a first impulse into a primal notion apt to justify every action: first and foremost, at any given circumstance, a creature (rational or irrational) acts to preserve itself. A rational being, says Seneca will seek to preserve himself "as a rational being and not as an animal" not because he has come to consider that reason and rationality matter over and above anything to do with himself, but rather because rationality is what makes him what he is. The one thing to preserve will be his reason – the loss of which would be tantamount to his loss of identity. All other functions, his "animal" functions to echo the Senecan text, are indifferent with regard to the preservation of his identity as the rational person he is.

This interpretation breaks in many ways with orthodox Stoicism putting forward a view which rather resembles an introspective form of Aristotle's Function Argument: a human being for Seneca acts to preserve his reason because this is the characteristic human function, rather than – as on the Aristotelian account – acting so as to fulfil that function. ⁴² For Seneca, we never break free from that first impulse to preserve our constitution, only that our constitution changes: a child who is not yet rational can therefore not be impelled to preserve its non-existent rationality.

In our Greek sources but also in the Latin sources closer in time to Seneca, for instance Cicero, it rather seems that the first impulse is surpassed by concern for reason and acting in accordance with reason which diminishes greatly the importance, if it retains any at all, of the first impulse concerning oneself. The point the Stoic orthodoxy is making here is that reason is the sort of thing which once it is effective or operative directs a person to act according to notions which cancel out the very primitive need for self-preservation. Reason, in effect, sets out a rather different goal of life to attain. Seneca's clinging to first impulse as the motor for all one's actions throughout one's life is an idiosyncratic interpretation of both *oikeiosis* and the Stoic notion of reason and rationality.

It is not Seneca's heterodoxy which is our main concern here. But the interpretative shift he makes helps bring to light the contrast with the orthodox Stoic view. Namely that, on the orthodox view, it is precisely the development of rationality which draws one out of oneself, moving from distinguishing what is beneficial or harmful for oneself (first impulse) to what is good according to reason. This involves the acquisition of at least basic notions or conceptions about the world which grounds the possibility for every rational being to gain some basic knowledge about the world. The orthodox view implies that the truths which are there to be acknowledged, attained and made to constitute our knowledge consist in the non-centrality of the individual. For the individual is utterly subordinate to the

⁴¹ Contrast this with Cicero, more faithful to orthodoxy: prima est enim conciliatio hominis ad ea quae sunt secundum naturam, 'the first attachment of man is to those things which are according to nature', in Cic. Fin. iii.
21

⁴² Seneca can be ultimately understood here (on the basis of a rapprochement with his Ep. 76. 9f.) as appealing to a symbiosis between an individual's rationality and the reason which sustains the cosmos so that in urging a person to preserve their reason above all else, Seneca can be said to reconnect indirectly with orthodoxy, see Striker 1996c, 228 f. The Senecan move can also be taken as a further witness to a more introspective, self-centred shift in Stoicism heralded by Seneca which is the focus of more recent Senecan scholarship in full display in Bartsch & Wray (eds.) 2009, see in particular Gill 2009, 80, on Seneca's concern for a governing principle of unity in the soul, hence Gill's formula of a 'structured self', see also Gill 2006, 330 ff.

rational structure of the cosmos. Thanks to the conceptions and instances of *katalepsis* we eventually reach as our rationality develops, we come to understand that our own life, our own share in rationality is dependent on the rationality of the cosmos. It is the latter which is there to be known. In order to understand this, we have to acquire the right sort of *empeiria* from particulars so that we acquire the most precise conceptions of them. By considering that the individual is always at the centre of what he comes to know through reasoning, Seneca also alters the original Stoic notion of rationality and what knowledge one can aspire to gain. But orthodox Stoicism is committed to the view that it is one and the same reason which pervades the cosmos and each and every individual in it (D.L. 7. 139). In effect, developing one's reason comes down to grasping that all-pervasive reason. It is what underlies the fundamental aspects of Stoicism, from the ever outwardly extending circles of *oikeiosis* to the Chrysippean theory of interdependence of all things in the universe. ⁴³ That is why turning to the constituents of the cosmos is the path to knowledge.

From birth, an accumulation of sense-perceptions leaves impressions on our souls which we begin to record in a first basic form as *mnemai*, memories, or rather memory-traces described as "what is left in our mind when the object which created the impression is no longer present".

This first step is pure passivity. The Stoics identify this retentive capacity of the soul in correspondence with its capacity for perception. Thus, Chrysippus describes memory as a "stockpile of impressions", referring in this way to an indiscriminate hoarding of random impressions⁴⁵. More importantly still, there is a memory-trace for each and every object which has been perceived:

Οἱ Στωιχοί φασιν· ὅταν γεννηθῆ ὁ ἄνθρωπος, ἔχει τὸ ἡγεμονιχὸν μέρος τῆς ψυχῆς ὤσπερ χαρτίον εὐεργὸν εἰς ἀπογραφήν. εἰς τοῦτο μίαν ἐχάστην τῶν ἐννοιῶν ἐναπογράφεται. πρῶτος δὲ [ὁ] τῆς ἀναγραφῆς τρόπος ὁ διὰ τῶν αἰσθήσεων· αἰσθανόμενοι γάρ τινος οἰον λευχοῦ, ἀπελθόντος αὐτοῦ μνήμην ἔχουσιν· ὅταν δ΄ ὁμοειδεῖς πολλὰ μνῆμαι γένωνται, τότε φαμὲν ἔχειν ἐμπειρίαν· ἐμπειρία γάρ ἐστι τὸ τῶν ὁμοειδῶν ⟨φαντασιῶν⟩ πλῆθος. τῶν δ΄ ἐννοιῶν αἱ μὲν φυσιχῶς γίγνονται χατὰ τοὺς εἰρημένους τρόπους χαὶ ἀνεπιτεχνήτως, αἱ δ΄ ἤδη δι΄ ἡμετέρας διδασχαλίας χαὶ ἐπιμελείας· 46

When a man is born, the Stoics say, he has the commanding part of his soul like a sheet of paper ready for writing upon. On this he inscribes each one of his conceptions. The first method of inscription is through the senses. For when people perceive something, say white, they have a memory-trace of it once the thing itself has gone away. Once many similar memory-traces have come about, that is when we say we have an experience; for an experience is a plurality of similar kinds of impressions. Some conceptions arise naturally in the aforesaid ways and undesignedly, others through our own instruction and careful attention.

In the text there is an insistence on the singleness and particularity of each and every object leaving its individual memory-trace, as the emphatic double presence of the individuating

⁴³ On the Chrysippean theory of sympathy used to explain the pre-determined variety of human tendencies and characters based on interrelated antecedent causes contained within the cosmic logos or rationale, see Cic. Fat. 7–8, and more specifically on the necessity of the effects on one's character from antecedent causes Plut. Stoic. Rep. 1054C. See Bobzien 2005, 295.

⁴⁴ Ps-Plut. Plac. 900B, passage quoted in full below.

⁴⁵ See S.E. M. 7. 373: μνήμη, θησαυρισμός οὖσα φαντασιῶν.

⁴⁶ In Ps-Plut. Plac. 900B (= Aëtius 4. 11).

pronouns $\pi\nu\nu\sigma_{\zeta}$ and $\alpha\dot{\omega}\tau\sigma\ddot{\omega}$ mark out. This is all the more crucial given the distinction between this first purely receptive stage and the following stage which deals with the particularity and hence the plurality of these memory-traces. For the Stoics distinguish between the reception and retention of individual memory-traces and the mind's recognising similarities amongst the multitude: $\dot{\delta}\mu\omega\epsilon\iota\delta\epsilon\iota\zeta$ $\pi\sigma\lambda\lambda\alpha\iota$ $\mu\nu\eta\mu\alpha\iota$. It is one thing to retain and accumulate memory-traces, it is another to identify and group the multitude of random traces into sets of memory-traces similar one to another on the basis of similarity in the objects which produce them. This latter stage is what the Stoics call "experience", *empeiria*.

An experience, in the singular, covers a set of similar memory-traces; it is an open set which begins once there is more than one memory-trace: for a plurality, the Greek *plêthos*, starts at 1+n, and similarity begins with at least two samples to compare. Having been impressed by many objects (or indeed at least by two) which have (say) their being white in common, we possess a basic cluster of similar memory-traces of white. We then acquire the experience, the *empeiria*, of white. Transliterating 'empeiria' rather than using the customary translation as 'experience' appears to be less misleading for we begin to see that there is an idiosyncratic way of thinking of the notion of experience here. It belongs to the side of rationality, of regularity, rather than to the ups-and-downs, irregularities and contradictions of experience as experience is marked down by rival schools of thought: negatively by the Platonists, positively by the Epicureans. For Epicurus, the irregularity and rawness of our experience of sense-data guarantee that experience is untarnished by reason and hence most faithful to how things really are (supra fn. 28). For Plato, experience is firmly connected with life in the sensible world subject to change and variation. Hence wisdom (phronesis) and reason (logos) mark a total separation from the realm of experience. In the *Republic*, the philosopher is said to have the experience (*empeiria*) of all three kinds of pleasures (of gain, of honour and of wisdom, Rep. 582b9-11), but it is not the experience itself which makes him the best judge of which is the highest or the one true pleasure (namely that gained from the pursuit of truth) but the wisdom (phronesis) and reason he has which enable him to discriminate between his various experiences (διὰ λόγων [...] δεῖν κρίνεσθαι, Rep. 582d7).

The Stoic *empeiria* bears some striking points of resemblance to the notion of experience found in Aristotle in a shared anti-Platonic stance. Aristotle distinguishes experience from science (*episteme*) and skill (*techne*) in the first pages of the *Metaphysics* by tying down experience to particular *a posteriori* non-uniform cases – regularised according to general truths reached at through familiarity with the sensible world though not determined through explanation or demonstration (Frede 2002; Hasper & Yurdin 2014, 125 f.). Skill and science are, in contrast, directly concerned with the universal and the causes of things (*Met.* A. 1). But experience in *Posterior Analytics* B. 19 is described in almost mirror terms to the description the Stoics give. A single *empeiria* is formed on the basis of many memory traces involving a stable universal in the soul (*An.Post.* 100a4–6) and leads to the discovery of first principles and scientific knowledge. ⁴⁷ The parallel with the Aristotelian developmental account helps corroborate a fundamental aspect of the Stoic notion of rationality shared with Aristotle, namely that rationality consists in an in-built capacity to discover and come to acquire at least basic knowledge of the world. It can do this by reaching common

⁴⁷ Arist. An.Post. B. 19, 100a4–8. On this developmental view, see Barnes 1975, 260 f.

notions or principles based on some form of assimilation and appropriation of external data through experience (see Frede 1994, 53 ff.). On both accounts, *empeiria* marks one step up from raw sense-data, which leads to the possibility of generalisation and ordering over the randomness of the phenomena from the external world.

But there is yet a crucial difference in the Stoic understanding of experience. It is in effect the point on which hangs their entire theory of knowledge: namely that unlike in Aristotle, experience is not one stage towards knowledge which once gotten over, is left aside for the sake of the universal principles now reached. Rather for the Stoics, the way we gain experience through familiarity with particulars roots the very knowledge we gain to those particulars. The knowledge we can have, a *katalepsis* – however transitory – is thus a correct recognition of particulars which produce impressions through the intermediary of *empeiria*; the *empeiria* we have succeeded in creating for ourselves on the basis of similar impressions. There are thus no first principles to attain as in Aristotle. It is a different kind of knowledge which is there to be attained according to the Stoics.

In our source passage from the *Placita* recounting the development of reason, we move from the description of *empeiria* as the association of similar memory-traces, to a straight classification of conceptions (those arising naturally and those arising through instruction and careful attention), with no apparent explanation of how we get to conceptions from *empeiria*. ⁴⁹ Presumably it is not enough to have an *empeiria* to thereby acquire the conception of what the *empeiria* is of.

Two passages in particular from Cicero's *Lucullus*, belonging to a broader defence of Zeno's notion of *katalepsis*, relate a complex progression from memories of sense-perception to *katalepsis*. The texts are set out in more descriptive terms than our passage and can help fill in some of the gaps:

Atqui qualia sunt haec, quae sensibus percipi dicimus⁵⁰, talia secuntur ea, quae non sensibus ipsis percipi dicuntur, sed *quodam modo sensibus*, ut haec: 'illud est album, hoc dulce, canorum illud, hoc bene olens, hoc asperum.' *Animo iam haec tenemus comprehensa, non sensibus*. 'Ille' deinceps 'equus est, ille canis'. Cetera series deinde sequitur, maiora nectens, ut haec, quae quasi expletam rerum comprehensionem amplectuntur: 'si homo est, animal est mortale, rationis particeps'. Quo e genere nobis notitiae rerum imprimuntur, sine quibus nec intellegi quicquam nec quaeri disputarive potest. (*Acad.* II. 21)

Such are the things we claim are apprehended by the senses. The next set are just like them, though we do not claim that these are apprehended by the senses themselves but by the senses in a certain respect, e. g. 'this is white' 'this is sweet', 'this is melodious', 'this smells good', 'this is rough'. Our apprehension of this set now comes from the mind rather than the senses. Next comes: 'that is

⁴⁸ Or at best, experience will offer access to general truths by which a person can live a properly rational life but he will never thereby have universal knowledge of the things he might have discovered general truths about, see Hasper & Yurdin 2014, 131 f.

⁴⁹ Note in the text the surprising move to a plural "according to these methods" (κατὰ τοὺς εἰρημένους τρόπους) though effectively only one method has been mentioned: is there a lacuna in the text? Or could the doxographer have been merely careless, slipping into the plural because of the plurality of sense-impressions he just evoked in the previous sentence. No other text gives us the inkling of another method of imprint apart from the further methods recorded by the Placita doxographer himself, namely through (intellectual) effort, hence instruction and careful attention.

⁵⁰ These are affections caused to the body through our five senses as discussed in previous lines, Cic. Acad. II. 19–20.

horse', 'that is a dog'. Then we get the rest of the series with more complex connections such as to encapsulate what we might call a filled-out apprehension of things: e. g. 'if it is a human being, it is a mortal animal partaking in reason'. It is from this kind of apprehension that our conceptions of things get imprinted in us; without them there can be no understanding, no inquiry and no argumentation. (trs. Brittain 2006 with minor alterations)

Mens enim ipsa, quae sensuum fons est atque etiam ipsa sensus est, naturalem vim habet, quam intendit ad ea, quibus movetur. Itaque alia visa sic adripit, ut iis statim utatur, alia quasi recondit, e quibus memoria oritur. Cetera autem *similitudinibus construit, ex quibus* efficiuntur notitiae rerum, quas Graeci tum ἔννοιας, tum προλήψεις vocant. Eo cum accessit ratio argumentique conclusio rerumque innumerabilium multitudo, tum et perceptio eorum omnium apparet et eadem ratio perfecta his gradibus ad sapientiam pervenit. (*Acad.* II. 30)

For the mind which is the source of the senses and even itself is the senses,⁵¹ has a natural power which it directs at the things by which it is moved. Thus it seizes on some impressions for immediate use, whilst storing away others as the source of memory. But it organises the rest of our impressions by their similarities from which our conception of things come about (which the Greeks call *ennoiai* and sometimes *prolepseis*). After the addition of calculation, proof and the accumulation of countless truths about things, the grasp (*katalepsis*) of all those things becomes apparent and reason itself, now perfected through these stages, achieves wisdom. (trs. Brittain 2006 with minor alterations).

There are many points to raise concerning these two passages, we shall restrict ourselves here to those pertaining to the description of the move away from the reception of sense-data. There is no mention in either passage of a word for *empeiria* though both passages highlight a stage of mental activity which is not the formation of a conception but precedes it and takes place between sense reception and the production of conceptions: "animo iam haec tenemus" in the first passage, "similitudinibus construit, ex quibus ..." in the second. That Cicero does not have a corresponding concept word, corresponding to 'empeiria' in the Stoic framework, is an indication of the subtlety of the use the Greek Stoics put the word 'empeiria' to. Latin translations for 'experience' do not fit the Stoic notion here. Cicero makes a clear distinction between (i) experiencing sensations, the things which "sentiantur", i.e. which are or get perceived (in Acad. II. 20, two lines before passage 1 here), or sense-impressions which are put to use in the sense of enjoyed through experiencing them and which correspond to the first kind of sense-impressions distinguished in passage 2, and (ii) the stage at which memory-traces are somehow classified according to similarities. The subtlety of the notion of empeiria here is reflected by Cicero's cautious description of this stage as "apprehended not by the senses but by the senses in a certain respect". Cicero thus captures the step away from mere sense-perception which is involved in the process of rationalising over sense-perception. But he has no word for it. The addition from passage 2 which we get with regard to the precise nature of the "certain respect (quodam modo)" by which this first rationalising stage is attained, consist in its being "organised according to their similarities". The juxtaposition here bolsters the parallel reading with the *Placita* passage and guarantees that this is in effect the stage of *empeiria* we are concerned with.

⁵¹ See supra fn. 34.

Cicero describes the double standing *empeiria* holds by emphasising the proximity of this stage to sense-perceptions whilst already being the result of the workings of the mind over those perceptions. According to his description, *empeiria* is already couched in a basic propositional form ('this is white' or 'that is a horse') attributing the result of an association of sense-impressions, i. e. the *empeiria*, to a particular individual thing which exemplifies the content of that *empeiria*, i. e. the 'this' in 'this is white'. It is *empeiria* which Cicero says is the basis from which conceptions are formed by the mind's making more complex connections ("*maiora nectens*"). Presumably, at a further step, one *empeiria* gets connected to another, e. g. 'this is a horse' with 'this neighs' to form thus a conception of the form: 'horses neigh'.

A conception is a kind of rational impression which the Stoics call a 'noesis', a thought.⁵² They can thus be articulated in terms of something being the case, or being F.⁵³ This is the propositional content which all rational impressions have.⁵⁴ The further specificity of conceptions is their relation to *empeiria*. They are a step up from the association of memory-traces through similarity. They are thus generalisations over simple associations which, following Cicero, consist in connecting one generic term with another, or others, taking up the form of (say) 'man is a rational biped animal' (see S.E. M. 7. 238). Because of their generic character, conceptions are the kind of impressions which are stored and dormant in the mind ready to be activated when an external stimulus makes the mind react in the correct way. Their being thus stored reaffirms their lineage: from the kinds of impressions which leave memory-traces, they are the products of a mental ordering through *empeiria* which enables connections of greater complexity which end up as conceptions.

A conception is further awakened and applied in order to analyse an impression, that is to say to recognise it as true or false – giving or withholding assent, depending on the result of that analysis. Plutarch speaks of the conceptions "being set in motion" And indeed, from Cicero we have the description of the kind of motion in question namely: understanding, inquiring and reasoning. For example, if we get an impression of a certain object on two legs moving towards us, our conception of man gets activated so as to enable us to assent (or not) to the impression that a man is walking towards us. Thus, if what actually is coming towards us is a robot which only looks like a human, our conception of man as a rational biped should enable us to realise what the impression actually is of. Failing to stir the appropriate conceptions or having too rudimentary a conception of something, i. e. not enough connections between generic traits, explains why we give assent to the wrong impressions. Conversely, the role of conceptions as criteria of truth

⁵² Plut. Comm.Not. 1084F describing conceptions as a φαντασία τις. Rational impressions are thoughts: see D.L. 7. 49 and 51, Plut. Soll. An. 961C–D, Plut. Comm.Not. 1085A–B, Galen. Inst. Log. III. 3, Ps-Galen. Med.Def. 381. 12–13.

⁵³ As D.L. 7. 49 reports though all too succinctly: προηγεῖται γὰρ ἡ φαντασία, εἴθ' ἡ διάνοια ἐκλαλητικὴ ὑπάρχουσα, δ πάσχει ὑπὸ τῆς φαντασίας, τοῦτο ἐκφέρει λόγῳ, 'an impression arises and then thought which is articulate, articulates rationally that which has been imprinted'. See also S.E. M. 8. 70: a rational impression is one of which we can say what it is that we have an impression of.

⁵⁴ Impressions get "automatically translated" into propositional form to take up Striker's formula, cf. Striker 1996a, 84, but see also Annas 1992, 75: "perceiving is thinking". On the articulation of rational impressions see also Frede 1987, 154f., and Frede 1994, 57.

⁵⁵ See Plut. Soll. An. 961C–D: χινουμένας, also Galen. Inst. Log. III. 2–3, referring to conceptions (ἔννοιαι) as "being at rest". And Plut. Comm. Not. 1085A–B; Ps-Galen. Med. Def. 381.12–13. See Brittain 2005, 170 f.

(especially those derived naturally, from our perceptions, as advocated by Chrysippus in particular, see D.L. 7. 54⁵⁶) is neatly set out: for the correct activation of the appropriate conception guarantees a fully operative state of the soul, capable and ready to put to use the right conception.

An *empeiria* differs from a conception in the relation of *empeiria* to the external world. Conceptions are purely mental constructs derived from *empeiria*, capturing the complexity of features expected and required for something to be recognised as the thing it is. From the second Ciceronian passage in particular, it seems that it is the stage corresponding to empeiria which provides us with the first basic set of conceptions. Cicero refers to the Greek term 'prolepsis' for the latter which is also the term appearing in the Placita passage a few lines down from the extract given above. From the text, it then seems to be the case that these conceptions or preconceptions get further developed through more refined forms of reasoning: "after the addition of calculation, proof and accumulation of truths". These exercises of the mind correspond to the "instruction and careful attention" referred to in the *Placita* passage to describe another way of increasing our store of conceptions which are not gained naturally from sense-perception. The *Placita* passage suggests that these latter conceptions are distinct from the preconceptions, i.e. the conceptions acquired specifically on the basis of empeiria. But Cicero's presentation introduces a more nuanced colouring to the relation of conceptions at large and those more tightly tied to *empeiria*: the formula "after the addition of" suggests that the basis of all further reasoning are precisely those conceptions rooted through empeiria to sense-impressions. We know from more detailed accounts of what these forms of conceptual reasoning and inquiry are (by analogy, transposition, composition, from contraries etc.⁵⁷) that these methods rely on the basic conceptions which are formed "naturally" as D.L. refers to them. That they are indeed so rooted is the main point of attack rehearsed over and over for each kind of method in Sextus' long critique of the methods of conceptual thinking (S.E. M. 11. 40ff.): there can be no conceptualisations, on the Sceptic critique, because each method relies on basic conceptions formed from sense-impressions which need to be clear and distinct such as to be clearly true – but there are no such impressions, therefore there can be no further conceptual reasoning.

In reconsidering here the notion of *empeiria*, we can further recalibrate the Stoic position against the Sceptic critique anchored in the denial of the distinctiveness of the *kataleptic* impression. This special kind of impression is associated by the Stoics with *katalepsis* as the impression assent to which leads to *katalepsis*. What makes it distinctive according to the Stoics is that it arises:

ἀπὸ ὑπάρχοντος καὶ κατ' αὐτὸ τὸ ὑπάρχον ἐναπομεμαγμένη καὶ ἐναπεσγραφισμένη ὁποία οὐκ ἂν γένοιτο ἀπὸ μὴ ὑπάρχοντος 58

from a real thing and, in conformity with the real thing itself, stamped and imprinted such that it would never arise from something which were not the real thing

⁵⁶ Specifically, the "preconceptions" (prolepseis) naturally developed from perceptions in contrast to those acquired through instruction and careful attention as we see in our passage from Plac. 900B: ἐννοιῶν αἱ μὲν φυσικῶς [...] αἱ δ᾽ ἤδη δι᾽ ἡμετέρας διδασκαλίας καὶ ἐπιμελείας.

⁵⁷ See D.L. 7. 52-53; S.E. M. 11. 40ff.

⁵⁸ See S.E. M. 7. 248 and D.L. 7. 46. See also Cic. Acad. I. 42.

There are three requirements brought to bear on the distinctive reliability of the *kataleptic* impression: (i) its arising from (*apo*) a real thing, i. e. not something imagined by the person having it, (ii) its characteristic as the absolute perfect copy of what it is an impression of – this is the purport of the locution 'in conformity with' – and (iii) the guarantee that it is a unique impression of a unique particular thing such that no other impression of anything however closely similar will be exactly the same. The last clause is not supposed to add a further requirement but, as our sources report, was added by Zeno as an attempt to parry the Sceptical critique of there ever being an impression clear and distinct enough to be unique and hence *kataleptic* as the Stoics intend (S.E. M. 7. 252, 402, Cic. Acad. II. 77). This three part description has been many times interpreted and analysed in modern scholarship with views oscillating from an emphasis on the objective features of the *kataleptic* impression on the basis of an analysis of the purport of the expression 'the real thing' ('to huparchon') (Frede 1987, 169ff., and Frede 1999, 302f.), to greater prominence given to the state of the particular mind involved (Annas 1992, 83f., and more critically of the subsequent Stoic usage of the *kataleptic* impression as criterion for truth, Perin 2005).

A reappraisal of the role of *empeiria* tightens the relation between the two perspectives. For the basic rationalising stage of *empeiria* helps buttress the conditions for correctness of the *kataleptic* impression.

The insistence on the precision of the imprinting points to the convergence of two factors: (i) the reality of that of which we get an impression, marked by the preposition "from" correlating the impression with its originator (the real thing) and (ii) the exactness of the actual imprint marked by the impression being "in conformity with" the real thing. Indeed the Greek preposition used here, "kata" with its distributive connotation, emphatically drives home the idea of each and every most salient characteristic of the real thing being meticulously represented through the kataleptic impression. There is, what is more, a great insistence on the quality of the imprinting with the doublet "stamped and imprinted": the Greek correspondents are particularly suggestive of accuracy with the repeated prefix 'enapo-' emphasising the embeddedness of the impression. The upshot is that such exactitude cannot fade away easily. This feature anticipates and grounds the relative stability which is characteristic of katalepsis.

In order to discern the correctness of the origin of the impression a person needs to have a precise impression of it. It is the precision which guarantees the truthfulness and clarity of the impression. The correlation between the originator of the impression and the conformity with that originator underlies the very notion of the *kataleptic* impression. It is also the trigger which induces assent and a guarantee of *katalepsis*.

It is clear that the Stoics do not assume that this kind of correlation could only be available to an already perfected mind: for one, because the state of *katalepsis* subsequently arrived at is not, as we have seen, the sole prize of the already wise; and secondly, because the Stoics are committed to the view that any rational being in full possession of his faculties perceives, from birth, reality as it is – for such is the force of the innate endowment of perception in any sentient being. Were it not so, animals and humans alike could not survive as they would not perceive what is actually good or bad for their preservation given that at the start all they have to go by is perception.⁵⁹ A human being subsequently develops

⁵⁹ On perception as the constitutive channel to reality, see D.L. 7.52 on what perception (aisthesis) accesses from reality; see D.L. 7.86 on the role of perception for the first impulse and Seneca Ep. 121. 12 on the role of

the means to read this reality through empeiria as a first filter and then by appeal to the stock of conceptions he has formed on the basis of many such *empeiriai* (in the plural). That is to say that over the plethora of sense-data a person receives, empeiriai – which are the basic ordering of this sense-data – also get accumulated: we have the empeiria of white, and of blue, of soft, of featherless etc. We are able to recognise new sense-data as it relates to our already formed *empeiriai*: it either resembles some in some way, or is nothing like any of them in other ways. This stage of recognition translates into the quality of precision of the impressions we have. If we perceive something white, we are capable, thanks to our *empeiria* of white, of having the impression of something being white: this is the precision required for an impression to be in conformity with what it is an impression of. It follows that, the more additional features we can recognise thanks to our ever broadening empeiriai, the more complete and perfect our impression will get. As for the further conceptualisations made on the basis of associations between various empeiriai, this indeed constitutes the next step in the rational processing of sense-data and plays a crucial role when it comes to the kind of assent we give to the impression. But here we are focusing on the possibility of an impression in perfect conformity with what it is the impression of: e. g. a featherless biped with a beard. That our assent to this impression is further conditioned by a conception we might have of man as a featherless biped and furthermore of (say) Socrates as a man with a beard depends on the kind of conception we have formed of a human being and of Socrates in particular on the basis of elements gleaned through empeiria such as the empeiria of biped, featherless etc.

What is coming to the fore is the contribution of *empeiria* to the precision of the imprinting of an impression, and hence its contribution to the formation of a *kataleptic* impression. As we saw, the crucial aspect of the Stoic description of the *kataleptic* impression is the correlation between the originator of the impression and the correctness of the impression – the convergence between 'being from' and 'being in conformity with' the originator. Because *empeiria* itself is directly related to objects of the external world, whilst at the same the result of a basic process of rationalisation over sense-objects, *empeiria* is the key to the possibility of formation of *kataleptic* impressions. The originator of an impression is firmly anchored outside of the thinking agent just as (say) all the white things distinctly and separately belong to the external world but the *empeiria* of white belongs to a person's mind. The *empeiria* filters the sense-data perceived from the originator of the impression such that the impression is both in conformity with how things really are (in the external world) and a function of the rational processing of sense-data by the mind.

As we have seen, there is a basic cluster of *empeiriai* any human being comes to possess as his reason develops. However, a person may become more of an expert about the order of the world through a proper application of reason to the understanding of nature and the rationale which pervades it through and through. Expertise is a question of applied reason, but it also is a question of observation and sensitivity to what there is to perceive so as to reproduce it faithfully – this is what *empeiria* consists in fundamentally.

perception (sensus) as the go-between between an as yet irrational and ignorant animal or infant perceiving itself as distinct from "the other things" it perceives: Necesse est enim id sentiant per quod alia quoque sentiunt, 'it is necessary that (animals) perceive that through which they perceive the other things'. It is perception which determines the animal's behaviour towards these other things, enabling it to survive first and foremost by enabling it to discern itself as different from the other things in the world.

Thus expertise starts with rationalised experience, *empeiria*, the kind we have outlined in these pages. It guarantees the possibility of having at least a basic cluster of impressions which are clearly marked out from others as evidently true to reality, and thus, are *kataleptic*.

There is thus no *empeiria*, no experience on the Stoic understanding of the term, without reason and no *katalepsis*, no knowledge without experience. This lays out the basis for a rational empiricism which makes Stoic rationalism so peculiar and their theory of knowledge rooted to complex reasoning over sense-impressions. The wisdom of the wise man is thus the perfection of that form of reasoning having fructified all methods of conceptual thinking. In attaining such knowledge, the wise man also realises the goal of life, and can thus be said to live according to *empeiria*, having brought to bear all the potential of a rational empiricism.

Bibliography

Primary Sources

Aëtius. Plac. Aëtius. Placita. In: Diels, H. (ed.) 1879. *Doxographi Graeci*. Berlin: de Gruyter. Arist. An.Post. Aristotle. Analytica Posteriora. In: Ross, W. D. (ed.) 1949. *Aristotle's Prior and*

Posterior Analytics. Oxford: Clarendon.

Arist. Met. Aristotle. Metaphysica. Ross (ed.) 1924. Oxford: Clarendon.

Cal. Tim. Calcidius. Platonis Timaeus, Interprete Chalcidio, cum eiusdem commentario.

Wrobel (ed.) 1876. Leipzig: Teubner.

Cic. Acad. Cicero. Academica Posteriora – Academica Priora, (Academicorum reliquae

cum Lucullo). Plasberg (ed.). 1922. Leipzig: Teubner, repr. Stuttgart 1980.

Cic. Fat. Cicero. De Fato. In: Ax, W. (ed.) 1938. De Divinatione, De Fato, Timaeus.

Leipzig, repr. Stuttgart 1966.

Cic. Fin. Cicero. De finibus bonorum et malorum. Reynolds (ed.) 1998. Oxford: Claren-

don.

D.L. Diogenes Laertius: Diogenes Laertius: Lives of Eminent Philosophers. Cam-

bridge classical texts and commentaries 50. Dorandi (ed.) 2013. Cambridge:

Cambridge UP.

Epicurus Epicurus. Epicuro Opere. Arrighetti (ed.) 1973.Turin: Einaudi (2nd ed.). Galen Inst. Log. Galen. Institutio logica. Kalbfleisch (ed.) 1896. Leipzig: Teubner.

Guich Hall Bog. Guich. Hallotteller (ed.) 1976. Belphig. Teacher.

Galen PHP. Galen. De Placitis Hippocratis et Platonis. In: De Lacy, Ph. (ed.) 1978-

80. Galen on the Doctrines of Hippocrates and Plato. Edition, Translation and Commentary. Parts I–II. Corpus Medicorum Graecorum IV,1,2. Berlin:

Akademie.

Galen Opt. Doc. Galen. De optima doctrina. In: Marquardt, J. (ed.) 1884. Claudii Galenii Perga-

meni scripta minora. Vol. 1. Leipzig: Teubner.

Ps-Galen Def. Med. Ps-Galen. Definitiones medicae. In: Kühn, C. G. (ed.) 1830. Claudii Galeni

Opera Omnia. Vol. 19. Hildesheim: Olms, repr. 1965.

Plato Rep. Plato. Respublica. Slings (ed.) 2003. Oxford: Clarendon.

Plut. Adv. Col. Plutarch. Adversus Colotem. In: Einarson, B & De Lacy, P. H. (eds.) 1967.

Plutarch's Moralia. Vol. XIV. Cambridge, MA: Harvard UP.

Plut. Comm.Not. Plutarch. De Communibus Notitiis. In: Cherniss, H. (ed.) 1976. Plutarch's

Moralia. Vol. XIII.2. Cambridge, MA: Harvard UP.

Plut. Soll. An. Plutarch. De Sollertia Animalium. In: Hunbert, C. (ed.) 1954. Plutarchi moralia.

Vol. 6.1. Leipzig: Teubner.

Plut. Stoic. Rep. Plutarch. De Stoicorum Repugnantis, Plutarch's Moralia. Vol. XIII.2. Cam-

bridge, MA: Harvard UP.

Ps-Plut. Plac. Ps-Plutarch. Placita Philosophorum. In: Mau, J. (ed.) 1971. Plutarchi moralia.

Vol. V.2.1. Leipzig: Teubner.

Seneca Seneca. Epistulae Morales. Reynolds (ed.) 1965. Oxford: Clarendon.

S.E. PH. Sextus Empiricus. Pyrrhonei Hypotyposes. In: Mutschmann, H./Mau, J. (eds.)

1954–1956. Opera. Vol. 1. Leipzig: Teubner.

S.E. M. Sextus Empiricus. Adversus Mathematicos. In: Mutschmann, H./Mau, J. (eds.)

1955–1961. Opera. Vols. 2 & 3. Leipzig: Teubner.

Stob. Ecl. Stobaeus. Eclogae. In: Wachsmuth, C. (ed.) 1884. *Ioannis Stobaei Anthologii*

libri duo priores qui inscribi solent Eclogae physicae et ethicae. 2 Vols. Berlin:

Weidmannsche Buchhandlung, repr. 1974.

Secondary Literature

Annas, J. E. 1992. Hellenistic Philosophy of Mind. California: University of California Press.

Barnes, J. 1975. Aristotle's Posterior Analytics. Oxford: Oxford UP.

Bartsch, S./Wray, D. (eds.) 2009. Seneca and The Self. Cambridge: Cambridge UP.

Bobzien, S. 2005. Determinism and Freedom in Stoic Philosophy. Oxford: Oxford UP.

Brittain, C. 2005. Common Sense: Concepts, Definition, and Meaning In and Out of the Stoa: In: Frede, D./Inwood, B. (eds.). Language and Learning. Proceedings of the Ninth Symposium Hellenisticum. Cambridge: Cambridge UP, 164–209.

Brittain, C. (trs. & intr.) 2006. Cicero, On Academic Scepticism. Indianapolis: Hackett.

Burnyeat, M. F. 1981. Aristotle on Understanding Knowledge. In: Berti, E. (ed.) 1981. Aristotle on Science: The Posterior Analytics. Proceedings of the Eighth Symposium Aristotelicum. Padua: Editrice Antenore, 97–139.

Frede, M. 1987. Stoics and Skeptics on Clear and Distinct Impressions. In: Essays in Ancient Philosophy. Minneapolis: University of Minnesota Press, 151–178.

Frede, M. 1994. The Stoic Conception of Reason. In: Boudouris, K. (ed.). *Hellenistic Philosophy*. Vol. 2. Athens: International Center for Greek Philosophy and Culture, 50–63.

Frede, M. 1999. Stoic Epistemology. In: Algra, K./Barnes, J./Mansfeld, J./Schofield, M. (eds.). *The Cambridge History of Hellenistic Philosophy*. Cambridge: Cambridge UP, 295–322.

Frede, M. 2002. Aristotle's Rationalism. In: Frede, M./Striker, G. (eds.). Rationality in Greek Thought. Oxford: Oxford UP, 157–174.

Gill, C. 2006. The Structured Self in Hellenistic and Roman Thought. Oxford: Oxford UP.

Gill, C. 2009. Seneca and Selfhood. In: Bartsch, S./Wray, D. (eds.). Seneca and The Self. Cambridge: Cambridge UP, 65–83.

Hasper, P. S./Yurdin, J. 2014. Between Perception and Scientific Knowledge: Aristotle's Account of Experience. Oxford Studies in Ancient Philosophy 47, 119–150.

Meinwald, C. 2005. Ignorance and Opinion in Stoic Epistemology. *Phronesis* 50, 215–231.

Perrin, C. 2005. Stoic Epistemology and the Limits of Externalism. Ancient Philosophy 25, 383–403.

Striker, G. 1996. Essays on Hellenistic Epistemology and Ethics. Cambridge: Cambridge UP.

Striker, G. 1996a. Epicurus on the Truth of Sense Impression. In: *Essays on Hellenistic Epistemology and Ethics*. Cambridge: Cambridge UP, 77–91.

Striker, G. 1996b. Sceptical Strategies. In: Essays on Hellenistic Epistemology and Ethics. Cambridge: Cambridge UP, 92–115.

Striker, G. 1996c. Following Nature: A Study in Stoic Ethics. In: Essays on Hellenistic Epistemology and Ethics. Cambridge: Cambridge UP, 221–280.