3 Stoic Epistemology

Stoic Sages never make mistakes. Secure in their understanding of the providential structure of the world, which is identical with fate, which in turn is identical with the will of Zeus (DL VII 135, =SVF 2.580; Plutarch, *St. rep.* 1049f, 1056c = SVF 2.937; cf. 2.931, 2.1076), Sages order their lives in accordance with it, assimilating their will to the will of Zeus, living in accordance with nature, and so achieving the smooth flow of life, the *eurhoia biou* so devoutly to be wished for (DL VII 87, =SVF 3.4; Cicero, *Fin.* III 31, IV 14–15, =SVF 3.15, 3.13; cf. 3.4–9, 3.12–16).

It seems clear enough that if the Sage is to be anything more than an unattainable, regulative ideal (and that is a big 'if'), the Stoics need powerful reasons, in the form of a powerful epistemology, for supposing that such practical infallibility can ever actually be attainable. And even if the Sage is supposed only to be an ideal figure (and the Stoics were doubtful whether such a superhuman ethical cognizer ever had existed: Sextus, *M* IX 133, =54D LS; Alexander, *Fat.* 199.16, =SVF 3.658, =61N LS), still, for the ideal to function as anything more than a piece of remote wishful thinking, it had better be possible at least to approach that ideal; and the Stoics did indeed set great store by the notion of *prokopê*, moral and cognitive progress (Stobaeus V 906.18–907.5, =SVF 3.510, =59I LS).

But again, if we are to be confident that such an approach is possible, we need to be confident that we can, as a matter of fact, refine and perfect our understanding of the world, replacing our formerly false opinions with true ones. Even if that end is more modest than that of Sagehood, it still requires some serious epistemological underpinning of a sort that will necessarily open the Stoics to sceptical

attack. It is the purpose of this chapter to limn the origins of the Stoics' epistemology and to assess its resilience and to trace its development under sceptical fire.

Numenius, a first-century A.D. Platonist (reported in Eusebius' *Preparation for the Gospel*: XIV 6.13, =68G LS), wrote that 'both the doctrine of the cataleptic impression (*katalêptikê phantasia*) and its name, which he [i.e., Zeno of Citium, founder of the Stoic school] had been the first to discover, were highly regarded in Athens'.

But what, precisely, is this 'cataleptic impression'?[1] According to Diogenes Laertius, the Stoics held that

> there are two types of impression, one cataleptic, the other noncataleptic; the cataleptic, which they hold to be the criterion of matters, is that which comes from something existent and is in accordance with the existent thing itself, and has been stamped and imprinted (*enapesphragismenên kai enapomemagmenên*);[2] the noncataleptic either comes from something nonexistent, or if from something existent then not in accordance with the existent thing; and it is neither clear (*enargês*), nor distinct. (1: DL VII 46, =SVF 2.53, =40C LS; cf. DL VII 49–51, =SVF 2.52, 55, 61, =39A LS; *M* VII 248, =SVF 2.65, =40E LS)

So the Stoics do not hold that all perceptions are true, as notoriously do the Epicureans (DL X 31–2, =16B LS; Lucretius IV 469–521, =16A LS; Sextus, *M* VII 206–10, =16E LS; and see **11** below), whatever precisely that is supposed to mean.[3] A cataleptic impression,

[1] I transliterate the *katalêptikê* of *katalêptikê phantasia*, in preference to any of the several possible translations. *katalêptikê* is the verbal adjective from *katalambanein*, grasp or get a grip on, and it is the impression which gets a grip on reality. For this reason 'graspable impression', preferred by some, seems to get the causal sense wrong – it is not the impression which we can grasp, but rather the impression *with which* we can grasp: 'grasping' might be better, if it did not suggest greed. *katalambanein* is also used to mean 'apprehend', in the sense of apprehending a criminal; and this has suggested 'apprehensive impression'; but that, too, sits ill in English, with its obvious connotations of poltroonery. LS render it as 'cognitive impression', but that seems a little too strong, and to have unwanted connotations of internality. At all events, however we render it, it is a term of art – and its various definitions need always to be borne in mind. Indeed, 'impression' is perhaps an over-translation of *phantasia*, more literally to be rendered as 'appearance'; but that is now hallowed by modern critical usage.

[2] The literal sense of these complex passive participles is worth attention: *en* 'in' plus *apo* 'out of or from' prefixed to the perfect participles 'sealed' or 'stamped' and 'impressed' or ' wiped upon'; the combination of the prepositions in each case suggesting internal location of the affection and its external cause.

[3] For discussion of the doctrine and its interpretation, see Long and Sedley (1987) i, 83–6; Taylor (1980); Everson (1990b).

then, satisfies the following conditions:

CIi: it derives from an existent object;

CIii: it accurately represents that object;

and

CIiii: it is 'stamped and imprinted' on the sensoria.[4]

Taken together, CIi–iii represent Zeno's first definition (D^1) of the notion of a cataleptic impression. As regards CIi, 'many impressions strike us from what does not exist, as in the case of madmen, and these are not cataleptic' (*M* VII 249, =SVF 2.65, =40E LS). As for CIii, 'some are such that, although they come from an existent object, they do not represent that object, as in the case of the mad Orestes' (*ibid.*).[5] In the case of CIiii, they hold that 'it is stamped artistically with all the object's peculiar qualities (*idiômata*)' (*ibid.*), i.e., 'so that all the peculiar qualities of the objects represented are stamped artistically' (*M* VII 250, =SVF 2.65, =40E LS) – that is with the precision and attention to detail one expects from a craftsman.

But the idea of an impression itself still needs some further elucidation. CIiii goes some way toward specifying its mode of production and serves to distinguish it from a mere figment, a *phantasma*, which, according to Diocles of Magnesia, is 'a supposition of thought, such as occurs in dreams' (DL VII 50, =SVF 2.55, =39A(3) LS), a product of the imagination (*phantastikon*), 'an empty attraction, an affection (*pathos*) of the soul without an impressor (*phantaston*)' (Aëtius, IV 12.4, =SVF 2.54, =39B LS). Thus, an impression, as opposed to a figment, is actually imprinted on the percipient, in some causally suitable fashion, by the external object (i.e., both CIi and CIiii are satisfied). Indeed, according to Aëtius, it 'reveals both itself and what produced it'. But, of course, not every impression satisfies CIii; hence, not every impression is cataleptic.

[4] It is worth stressing that not all impressions are sense-impressions: some impressions will be purely intellectual in content (DL VII 51, =SVF 2.61, =39A LS), such as our notion of God; furthermore, other texts give as the content of impressions such conditionals as 'if it is day, the sun is not above the earth' (an example of an 'unpersuasive impression'), and 'undecidable propositions' such as 'the number of stars is even' (*M* VII 243–4, =SVF 2.65, =39G LS). But, given the Stoics' empiricism, sensory impressions are the most important.

[5] The case of Orestes, who supposes that his sister Electra is one of the Furies pursuing him to avenge his murder of his mother (Euripides, *Orestes* 256–64), was a commonplace of these epistemological debates: *M* VII 244–5, VII 259, VIII 57, VIII 63, VIII 67.

Diogenes, in line with the implications of CIiii, defines an impression as

an imprinting (*tupôsis*) on the soul, the name having been appropriately borrowed from the imprints made by the seal in wax. (**2**: DL VII 45; cf. VII 50, =SVF 2.55, =39A(3) LS; and **4** below)

But how literally this image is to be taken was itself a matter for dispute among the Stoics themselves. Zeno, followed by Cleanthes, took it at face value (no doubt influenced by the 'wax-block model' of Plato's *Theaetetus*: 191c–195a). But Chrysippus took issue with this, on the grounds that a wax block can hold at most one impression. Any subsequent impressing ruins the original and renders the accumulation of impressions impossible, which in turn would preclude memory and skill (*technê*, defined by the Stoics as a 'system of jointly exercised impressions': *M* I 75, II 10, VII 109, etc.). For this reason, he preferred the neutral (and explanatorily unhelpful) term *heteroiôsis*, or alteration (*M* VII 230, =SVF 1.58; VII 227–30, VII 372–3, =SVF 2.56).

Chrysippus' insistence on the importance of absorbing multiple impressions is, however, well founded. For the Stoics do indeed make such accumulations of impressions central to their account of concept-formation:

the Stoics say: when a man is born, he has the controlling (*hêgemonikon*) part of his soul like paper well prepared for writing on. On this he inscribes (*enapographetai*)[6] each one of his conceptions (*ennoiai*). The first kind of inscription is that by way of the senses. For in sensing something as white, they have a memory of it when it has gone away. And when many memories of the same type have occurred, then we say that we have experience (*empeiria*), since experience is a multitude of impressions similar in type. Of the conceptions, some occur naturally by means of the aforementioned modalities and without conscious effort, while others come about by our instruction and attention. These latter are called conceptions only, but the former are called preconceptions (*prolêpseis*) as well . . . A concept (*ennoêma*) is an image (*phantasma*)[7] in the mind of a rational animal; for when the image comes to the rational soul, it is called a concept, taking its name

[6] Note again the combination of '*en*' and '*apo*': 'writing-on-out of'.

[7] Note here that Aëtius does not reserve *phantasma* for a mere figment, as he does in the passage immediately following (IV 12.1–5), and as does Diocles of Magnesia: DL VII 50.

from the mind (*nous*). For this reason, what comes to irrational animals are images only; while those which come to us and to the gods are generically images but specifically concepts. (3: Aëtius IV 11.1–6, =SVF 2.83, =39E LS; cf. Cicero, *Acad.* II 20–2, II 30–1)

That report clearly echoes in some respects the sketchy account of concept-formation offered by Aristotle at *Post. An.* II 19 and *Meta.* I 1, where perceptions result in memory, and then (in man) in *empeiria*, and finally, for the fortunate, in technical ability and knowledge (compare here the Stoic definition of *technê* as a 'system of jointly exercised impressions'), in which the raw content of the preconceptions (*prolêpseis*: a term also used, in a roughly similar sense, by the Epicureans: DL X 33, =17D LS) is spelled out and given articulate conceptual shape.

Moreover, it follows Aristotle in being broadly empiricist in flavour (there is no room for Platonic innate ideas in the neonate: rather, it is a perfect Lockean *tabula rasa*) and also, in my view, in its causal emphasis. Concepts are not acquired by some rational process of inductive inference; rather, they are simply built up in the soul by a suitable accretion of perceptual impressions:

> conception is a kind of impression, and impression is an imprint on the soul . . . they [sc. the Stoics] define conceptions as a kind of stored-away thoughts, memories as steady and stable imprints, while they fix scientific understandings (*epistêmai*) as possessing complete unchangeability and firmness. (**4**: Plutarch, *Comm. not.* 47, 1084f–1085a, =SVF 2.847, =39F LS; cf. Cicero, *Acad.* I 41, =SVF 1.60–1; II 145, =SVF 1.66, =41A LS)

Further conceptual machinery is developed, again in good empiricist fashion (the empiricist of record here being Hume: *Enquiry Concerning Human Understanding*, Section II):

> of the things we conceive, some are conceived by confrontation (*periptôsis*), some by similarity (*homoiotês*), some by analogy (*analogia*), some by transposition (*metathesis*), some by composition (*sunthesis*), and some by opposition (*enantiôsis*). (**5**: DL VII 53, =SVF 2.87, =39D LS; cf. *M* VIII 58–60)

This too derives from Diocles of Magnesia; the succeeding lines flesh it out. Sense objects are conceived by confrontation; similarity leads us to form an image of Socrates on the basis of a likeness of him; analogy helps us to form concepts by augmentation or diminution, and to conceive of the centre of the earth by analogy with other

spheres whose structures we can directly investigate. Transposition allows us to imagine 'eyes on the chest', composition such monstrosities as centaurs, opposition concepts like death (DL VII 53, =SVF 2.87, =39D LS). And even this list is not exhaustive:

> furthermore, some things are conceived by transition (*metabasis*), like meanings (*lekta*) and place; good and bad are conceived naturally (*phusikôs*);[8] and some things by privation (*sterêsis*), like the handless. (**6**: DL VII 53, =SVF 2.87, =39D LS)

Moreover, Sextus ascribes to them the following soundly empiricist slogan: 'every conceiving (*noêsis*) occurs either from perception (*aisthêsis*) or not without perception, that is to say either from an encounter or not without an encounter' (*M* VIII 56, =SVF 2.88): *nil in intellectu quod non prius in sensibus*. This also is a recognizable extension (or perhaps reinterpretation) of a well-known Aristotelian dictum: thinking is either imagination (*phantasia*) or not without imagination (*DeAnima* I 1, 403a8–9; III 7, 431a16–17); Aristotle's sense of *phantasia* is not the Stoics' one of an impression – but that makes the borrowing (and the reinterpretation) all the more pointed.

So the cataleptic impression does not yet amount to knowledge. In fact, Zeno

> placed apprehension [*comprehensio*: Cicero's rendering of the Greek *katalêpsis*] between knowledge and ignorance, numbering it neither among the good things nor the bad, but holding that it was trustworthy on its own. For this reason he ascribed reliability to the senses, because, as I said earlier, apprehension produced in the senses seemed to him to be both true and faithful, not because it apprehended everything in the object, but because it omitted nothing that might confront it, and because nature had provided it as a sort of yardstick for scientific understanding (*scientia*) and as the source of itself from which subsequently the conceptions of things were imprinted in the mind, and from which not only first principles but also certain broader roads for the discovery of reason were opened up. But error, rashness, ignorance, opinion, and suspicion, and in a word everything inconsistent with firm and stable assent, he disassociated from virtue and wisdom. (**7:** Cicero, *Acad.* I 42, =SVF 1.60, =41B LS)

[8] This is the closest the Stoics get to allowing innate conceptual machinery; what they have in mind is their notion of *oikeiôsis* or appropriation, the natural, instinctual drive of animals to seek out what is advantageous to them: see Brunschwig (1986); and Hankinson (1997), 191–2, 198.

Sextus concurs:

they [sc. the Stoics] say that there are three of them interrelated to each other, knowledge, opinion, with apprehension lying between the two of them; and of these knowledge is the secure and firm apprehension unalterable by reason, opinion is weak [and false][9] assent, while apprehension is intermediate between these, being assent to a cataleptic impression. According to these people, a cataleptic impression is one which is true and such that it could not be false. (**8**: *M* VII 150–2, =41C LS)

Assent to a cataleptic impression, or *katalêpsis*, is not yet knowledge, which must be more stable and structured (see **4** above; Zeno compared an impression to an open palm, assent to a slight curling of the fingers, *katalêpsis* to the hand clenched in a fist, and knowledge to that fist grasped tightly in the other hand: *Acad.* II 145, =SVF 1.66, =41A LS). But it is better than mere opinion, which they define as 'assent to what is not apprehended' (*M* VII 156), and which no true Sage will ever tolerate (Stobaeus, II 111.18–112.8, =41G LS; and see **10** below); indeed, as **7** suggests, there is no real distinction between opinion and ignorance. Opinion may happen to be true – but merely happening to be true is not good enough, at least for anyone with pretensions to put their actions on a soundly virtuous footing.

The impressions must be assented to before they can function as sources of impulse (in the case of impressions involving evaluations of things) or of apprehension. According to Cicero, this insistence on the mediation of assent[10] is one of Zeno's innovations:

to these things, which are impressions and received, as it were, by the senses, he adds the assent of the mind, which he holds to be located within us and voluntary. (**9**: Cicero, *Acad.* I 40, =SVF 1.61, =40B LS)

The cataleptic impression merely presents itself as worthy of endorsement; it is still up to the mind whether to accept its credentials.

But what precisely are those credentials? If the cataleptic impression is to be (at any rate partially; there was subsequent disagreement in the school: DL VII 54, =SVF 2.105, =40A LS) the Stoic criterion of truth, we had better, one might think, be able to recognize it is as such. On the face of it, it doesn't look as though it will be enough simply to say that a cataleptic impression is one that meets

[9] The words in brackets are almost certainly a copyist's error: see Maconi (1988), 240 n. 26; Hankinson (1998c), Ch. V, n. 13.

[10] Which is also crucial to Stoic action-theory: see Inwood (1985).

conditions CIi–iii: for it to be criterial, the cognizer must know that he cognizes. But where is the source for such a guarantee? The last sentence of **1** suggests that a cataleptic impression will be marked by its clarity and distinctness – but those notions themselves are no more clear and distinct here than they are in Descartes' more famous, and famously opaque, deployment of them.

The sceptical point is relatively simply put: If clarity and distinctness are internal characteristics of the impressions themselves, then what reason do we have for supposing that, simply in virtue of these phenomenal features, they are telling us the truth (i.e., that CIi–iii are satisfied)? Alternatively, if these terms refer to some objective, external fact about the impression's provenance (it really does come from a real object in the appropriate manner), how are we to recognize that it has them? The last sentence of **8** hints at an attempted answer: A cataleptic impression is (CIiv) such that it could not be false. But that simply reformulates the problem: How can we know when CIiv is satisfied?

It is, then, not surprising that the sceptical Academy of Arcesilaus (c. 315–240 B.C.) found ample scope for deploying its weapons of mass dogma-destruction in this context; and it is likely that CIiv was invoked by the Stoics as the first stage in their counterattack against the sceptical onslaught.

Arcesilaus became head of the Academy in 272 B.C., but had no doubt been plying his particular version of the Socratic refuter's trade for some time prior to that. Although ready to take issue with any positive doctrine (that, indeed, was his method: assert any proposition *p* and Arcesilaus will argue for not-*p*: DL IV 37; *Index Academicus* 20.2–4; Cicero, *Fin.* II 2, V 10, =68J–K LS),[11] the sources make him out as particularly engaged with Stoicism, perhaps because the Stoics were offering the most philosophically interesting and attractive doctrines (we need not accept Numenius' claim that he attacked Zeno out of jealousy of his fame: the fame itself would be spur enough).

[11] I will not here take sides on the vexed question of whether Arcesilaus, or his successors in the sceptical Academy, propounded any positive doctrines over and above their commitment to universal refutation (in Arcesilaus' case) and argument *pro* and *contra* (in that of Carneades); although I am inclined to suppose that they did (see Hankinson [1998c], Chs. V and VI; and forthcoming).

For the next two hundred years, the philosophical destinies of both the Stoic and the Academic schools are intimately intertwined. Chrysippus (c. 280–205 B.C.) sought to defend and rehabilitate Stoic doctrines damaged by sceptical argument: 'if Chrysippus had not existed, neither would the Stoa', ran a later Stoic slogan (DL VII 183, =SVF 2.6), which Carneades pointedly adopted, suitably amended: 'if Chrysippus had not existed, neither would I' (DL IV 62). Most of the remainder of this chapter will attempt to tease out this symbiotic history of dialectical interaction.

Arcesilaus, Cicero writes,

(1) perhaps asked Zeno what would happen if the Sage could not apprehend anything, and if it was also the mark of the Sage not to form opinions. (2) Zeno, I imagine, replied that he [i.e., the Sage] would not form opinions because he could apprehend something. (3) What sort of thing? An impression, I suppose. (4) What sort of impression? An impression that was impressed, sealed, and moulded from something which is, just as it is. (5) Arcesilaus then asked if this held even if there were a true impression exactly the same in form as a false one. (6) Here Zeno was acute enough to see that if an impression proceeding from something existent was such that there could be an impression of something non-existent of exactly the same form, then no impression could be apprehended. (7) Arcesilaus agreed that this addition to the definition was justified, since one could not apprehend an impression if a true one were such as a false one could be. (8) However he argued forcefully in order to show that no impression of something existent was such that there could not be an impression of something non-existent of the same form. (**10**: *Acad.* II 77, =SVF 1.59, =40D LS)

Sextus fills this out a little:

(1) they added 'of such a type as could not come from something non-existent' because the Academics did not suppose, as the Stoics did, that an impression could not be found in all respects similar to it. (2) For the Stoics assert that he who has the apprehensive impression fastens on the objective difference of things with the skill of a craftsman, since an impression of this kind has a special characteristic of its own compared with other impressions, like horned serpents as compared with all other serpents; (3) while the Academics hold that a false impression could be found that was indistinguishable (*aparallaktos*) from the apprehensive one. (**11**: *M* VII 252, =SVF 2.65, =40E LS; cf. *M* VII 152, VII 163, VII 248, VII 416, VII 426)

Thus, under pressure from Arcesilaus, Zeno modifies definition D^1 by the addition of a new clause CIv 'of such a type as could not come from something non-existent' (cf. DL VII 50), which is presumably a further specification of CIiv. Arcesilaus' challenge is clear enough: Even if we grant, for the sake of argument, that there are impressions meeting conditions CIi–iii, as long as it is possible that, for any impression *I* which satisfies CIi–iii, there can be another impression I^* which is indistinguishable from it in terms of its contours, and yet which does not satisfy the definition (it comes from some other object, or from no object at all, being a mere figment), then the Stoics' definition of the cataleptic impression cannot be criterial. We can never know, simply by inspecting the impression itself, whether or not it meets the conditions.[12]

Cicero, speaking as an Academic sceptic, summarises:

> there are four general premisses which conclude to the position that nothing can be known, apprehended, or comprehended, around which the whole debate centres: [A](i) that some false impression exists; (ii) that this cannot be apprehended; (iii) that in the case of impressions among which there is no difference it is not possible that some of them can be apprehended while others cannot; (iv) that there is no true impression deriving from the senses to which there does not correspond another impression which does not differ from it and cannot be apprehended. Of these four, everybody admits (ii) and (iii); Epicurus does not grant (i), but you [sc. the Stoics and their followers] with whom we are arguing allow this too; the whole conflict concerns (iv). (**12**: *Acad.* II 83, =40J LS [part]; cf. II 40–1)

[A] is the Academics' argument. The Epicureans reject Ai, and with it the rest of the argument. The Stoics accept Ai–iii, but reject Aiv. But how are they to do so?

The Academic method of supporting Aiv was by example: there are myriad cases of people being deceived into thinking they are seeing one of a pair of identical twins, when in fact they are seeing the other; and no one can tell two sufficiently similar eggs apart (*M* VII 409–10; *Acad.* II 20, II 5–6, II 58–9, II 84–6). But if this is so, consider a particular case of veridical impression forming – I see one of two identical twins (Castor, say), and assent to the impression (as it happens correct) that it is Castor. But for all I can tell from simply

[12] These and subsequent issues are dealt with in more detail in Hankinson (1997), 168–83.

inspecting the impression, it *might* have been Pollux (this can, of course, be true even when I have no idea that Castor has an identical twin; indeed, it is precisely under those circumstances that I might rashly commit myself to its being Castor); so Aiv is justified. As Cicero puts it, 'there was no mark to discern a true impression from a false one' (*Acad.* II 84; cf. II 33–4).

The Stoics fight back: 'you say that there is no such degree of similitude in the nature of things' (*Acad.* II 84). It is a consequence of the Stoics' Leibnizian metaphysics that no two things can be exactly alike (see, e.g., Plutarch, *Comm. not.* 1077c–e, =28O LS),[13] and that is supposedly true for impressions as well. Moreover, as we saw, a cataleptic impression is supposed to be one which 'artistically reproduces the peculiar qualities (*idiômata*) of its object' (*M* VII 248, 250, =SVF 2.65, =40E LS).

But the Academics are unimpressed:

> let us grant that: there certainly *seems* as though there is, and so it will deceive the sense; but if one such similitude is deceptive, everything will be thrown into doubt. For, with the removal of that appropriate criterion of recognition, even if the one you see is the same as the one you think you see, you will not make that judgment, as you say you ought, by means of a mark (*nota*) which is such that no false one could be of the same kind. (**13**: *Acad.* II 84, =40J LS [part])

Sextus, arguing against the Stoic criterion at *M* VII 402–35, seeks first to show that false impressions can be found that do not differ from true ones 'in respect of the clear and intense characteristic (*idiôma*)', and then that false impressions can be found that do not differ from true ones 'in respect of stamp and imprint' (i.e., their internal contours: in Descartes' sense, they are not distinct).

But the Stoics here will retort that cataleptic impressions accurately represent the distinguishing characteristics, the *idiômata*, of the object (*M* VII 250–1); the object's particular *idiômata* directly produce the *idiôma* of the particular type of cataleptic impression (*M* VII 252). Thus, cataleptic impressions are made so by the essential

[13] The reason, roughly, is that particular properties are the determinants of identity, hence, if qualitatively identical attributes were instantiated in distinct spatiotemporal substrates, the same thing would, absurdly, exist in distinct places. Plutarch remarks, dismissively, that it's harder to accept that there have been no distinct but indiscernible items than it is to reject the metaphysics that gives rise to such a conclusion.

natures of the object they represent, which in turn entails that cataleptic impressions of the same object will share content.[14]

But the issue between the Stoics and their opponents is precisely whether, and if so how, two distinct impressions may share contents. A little more precision is needed. Let us treat an impression as a particular perceptual-event token – so defined, every impression is *sui generis*, and no impression can recur. But surely impressions of the same type can recur – the issue between the schools is how and under what circumstances this should be said to happen. Let us now characterize the *internal content* (C_I) of an impression I as involving its representational structure.[15] We can now say that the set S of impressions $\{I_1, I_2, I_3, \ldots I_n\}$, where the C_I of all the I_i's is indiscernible, is a set of impressions of the same type.

The issue between Stoic and sceptic can now be sharply posed: Can there be a set S of type-identical, internal content-sharing impressions, which is nonetheless such that not all of the I's are impressions of the same object? If the answer is 'yes', the sceptics are vindicated; if not, the Stoics live to fight another day. But even if the answer is 'no', the sceptics will still retort that what matters are not sets like S, where the impressions are as a matter of fact indiscernible with respect to internal content; rather, all that is at issue is whether there can be a set S^*, where the impressions are indistinguishable to the individual whose impressions there are – if there can, then the Stoics are still in trouble (*Acad.* II 85, =40J LS, and text **8**).

And yet, the Stoics will reply, that is not enough to make out the sceptical case. The world is full of fools, poor cognizers, who are chock-full of sets of impressions like S^*; but that just shows that none of their impressions (or at least none of the ones which fall into such sets) are cataleptic. The Stoics, after all, do not require

[14] I do not mean to suggest that the impression brings you face to face, as it were, with the internal, essential nature of the thing – after all, the impression itself reproduces only what 'confronts' it. But it is because the thing is the (particular) thing that it is; i.e., because of its essential individuality, that it will, for the Stoics, reveal in its impression a unique phenomenal face.

[15] I put things this way, since content had better not be individuated simply by the phenomenological nature of the impression, otherwise my impression of you at noon in a good light will differ in content from my impression of you in the evening in a dim one; I leave things this vague, since precision is difficult to achieve in this area, and, at least in this case, is not (I think) requisite for clarity. For a modern attempt to make similar distinctions, see Goldman (1977).

that everyone be capable of such feats of discernment – only that the cognitively progressive should be.

There now appears to be something of a standoff. The sceptics are committed, after all (at any rate, for the sake of the argument), to Aiv; and that seems rather a strong claim. Is it really plausible to suppose that absolutely every true impression might have an indistinguishably similar false congener? Surely, if I'm wide awake and it's broad daylight, it is simply idle to suppose that the impression I'm now receiving might not be one of my computer. It won't be enough, if this is right, simply to point to the existence of cases of delusion; rather, it has to be the case that we might all be deluded about absolutely anything.[16] And yet, it seems that the sceptics need this to ward off the Stoics' claim that it is only in regard to some impressions that they suppose that the no-false-siblings condition applies.

On the other hand, the Stoics still apparently owe us an account of how the paradigm criterial cases of cataleptic impression can be recognized as such by their subjects. It clearly will not be enough to say that in these cases the subjects are certain that their impressions meet all the conditions CIi–v, since subjective certainty on its own is not, for good sceptical reasons, an infallible guide; many people are certain of things that turn out false. But if there is a special kind of internal certainty, then the Stoics owe us an account of what it is like, and how we can infallibly recognize it as such when we have it.

It is worth pointing out here that they do not need to claim that no one can be mistaken about an impression's cataleptic status; nor do they even need to claim (as in fact they did not: see **15**) that no one in receipt of a cataleptic impression can fail to recognize it as such and assent to it.

This is an important distinction, often overlooked in sceptical argument: It is one thing to hold (i) that you can falsely suppose yourself to be in a certain condition *C* when you are not; quite another to claim (ii) that when you are in *C*, you can falsely suppose that you are not. For at least some values of *C*, (i) seems clearly possible, but (ii) clearly (or at any rate arguably) not. At least, the mere fact that

[16] Not, note, that everybody might be deluded about absolutely everything (i.e., $\Diamond(x)(p)$(if x supposes that p, then $\neg p$) – the sceptics do not need that very strong possibility of global delusion to generate their claim – rather, anybody might be deluded about anything $(\neg(\exists x)(\exists p)\neg\Diamond(x$ supposes that p, and $\neg p)$; but the claim is still strong enough, perhaps too strong to be intrinsically plausible.

type (i) conditions sometimes – perhaps even regularly – hold does not in itself have any tendency to show that type (ii) cases must also be likely to hold. Consider 'being awake' as a substituend for *C*: the fact that I can falsely suppose myself to be awake when I'm not (i.e., when I'm dreaming) does not show that I can falsely suppose myself not to be awake when I am. All they need is for there to be some cases where cataleptic impressions are had, are recognized as such, and assented to, and that in *those* cases there is no room for doubt.

It is for this reason precisely that the Academics sought to make out that there was absolutely no impression that met condition CIv. To this end, they employed examples the types of which were to become stocks-in-trade of later epistemological argument. The Stoics stressed the motivational force of clear and distinct impressions (their Humean force and vivacity, if you like), but the Academics were not impressed:

> so if impressions are cataleptic to the extent to which they draw us on to assent and to adjoin to them the corresponding action, then since false ones are also of such a kind, we must say that non-cataleptic impressions are indistinguishable (*aparallaktoi*) from the cataleptic. Furthermore, the hero [sc. Heracles] grasped the impression from his own children that they were the children of Eurystheus in the same way as from the arrows ⟨that they were arrows⟩.[17] So since both moved him equally, it must be conceded that the one is indistinguishable from the other. (**14**: *M* VII 405–7; cf. *M* VIII 67, *Acad.* II 38, II 90; Plutarch, *Col.* 1121e, 1122c)

Sextus is discussing the case of the madness of Heracles in which he slew his own children mistaking them for those of his enemy Eurystheus. Heracles' (false, and hence evidently non-cataleptic) impression that the children before him are those of his enemy, Sextus suggests (almost certainly here, as elsewhere, relying on originally Academic arguments), differs not at all in terms of internal or motivational characteristics from the perfectly clear and distinct impression he has of his arrows; but one of them is false – so, although he might have had a veridical impression of Eurystheus' children, he could not have had one which met CIv; hence, he can have had no cataleptic impression of anything.

Here again the Stoics may reply that, although Heracles perhaps supposed his impression to be cataleptic, it wasn't; and it is no part of their doctrine that every apparently cataleptic impression must be

[17] Accepting Heintz's plausible supplement '*hôs toxôn*'.

one. So the standoff continues. The Academics, in effect, must claim that no matter how 'good' the impression seems to be, it might still be false; the Stoics must hold that every case of a delusive impression will, on closer inspection, be found to fall short in respect of the clarity and distinctness requisite for genuine *katalêpsis*. And it is hard to see how either side can make their case by pursuing these types of argument.

At this point, we should consider an alternative possibility, raised by Frede (1983) in an influential article. On Frede's view, what distinguishes the cataleptic impression is not some internal marker of infallibility, by means of which it can be recognized for what it is; rather, what marks it out is a causal feature of its causal origin, in virtue of which it has a particularly motivating force.

The claim, then, is that there are certain impressions which do arise in the appropriate way, and just because they do, they have a greater tendency to earn our assent: 'it seems that the differentiating mark of cognitive impressions is a causal feature rather than a phenomenological character to be detected by introspection' (Frede, 1983, 85). Clause CIv would now refer to this causal feature (as would Cicero's '*nota*': see **13**); and Frede points to the causal flavour of the first sentence of **14**, and similar passages (see also **17**).

The problem with this interpretation is that, if correct, it renders much Academic criticism beside the point.[18] Lucullus, the spokesman for Antiochean Stoicizing epistemology in Cicero's *Academica*, repeatedly insists that we must know individual facts, and know that we know them, in order to explain our ability to get around in the world (*Acad.* II 23–6, II 27–9, II 30–2, II 33–6, II 37–9). Moreover, it would make the criterion something that we could possess without being aware that we possess it, which, although not fatal to the view, at least seems to run against the general thrust of the Stoic conception of wisdom and even of approaching wisdom.

We shall return to this point later. But whatever we think about the causal suggestion, it is clear that the Stoics were forced into another strategic retreat under the weight of sceptical fire:

whereas the older Stoics declare that this cataleptic impression is the criterion of truth, the more recent ones added the clause 'provided that there is no obstacle (*enstêma*)'. For there are times when a cataleptic impression

[18] And as Annas (1990), 195 n. 25, points out, if this is right 'it is hard to see how the Stoic-sceptic debate lasted as long as it did'.

occurs, yet it is incredible (*apistos*) because of the external circumstances. (**15**: Sextus, *M* VII 253–4, =40K LS; cf. **17**)

The suitable mythological cases here are those of Admetus, being presented by Heracles with his wife Alcestis brought back from the dead, and Menelaus being confronted by the real Helen at the house of Proteus, after he has left the phantom Helen – whom he believes to be the real one – onboard his ship. Both received impressions that met the conditions for being cataleptic (*M* VII 254–5, =40K LS), yet neither believed them, for perfectly good reasons:

> Admetus reasoned that Alcestis was dead, and the dead do not rise again, while certain demons do wander about from time to time; and Menelaus reflected that he had left Helen under guard on the ship, and that it was not implausible (*apithanon*) that what he had found at Pharos was not Helen but some supernatural phantom. (**16**: *M* VII 256, =40K LS; cf. *M* VII 180; *PH* I 228)

The Stoic response is simple:

> the cataleptic impression is not unconditionally the criterion of truth, but only when there is no obstacle to it. For in this latter case, being evident and striking, takes hold of us, as they say, practically by the hair and drags us to assent. (**17**: Sextus, *M* VII 257; cf. **8**)

In other words, we can fail to realize that a cataleptic impression is cataleptic, not in virtue of any deficiency in the impression itself (it still meets conditions CIi–v), but rather because the force of other commitments we have is such as to make us reject even the clear evidence of the senses.

At *M* VII 424 (=40L LS), Sextus says that, according to the Stoics, five things need to 'concur' in order for the impression to command assent: the sense organ, the object perceived, the environment, the manner, and the intellect; if any one of these fails, then it will not do so: 'hence some held that the cataleptic impression is not a criterion in all cases, but only when there is no obstacle to it'.

But for the criterion to function transparently for us, we need to know that those conditions do indeed concur: and how can we do that in the face of familiar sceptical objections? The Menelaus case (**16**) is particularly *à propos* here, since Menelaus is doubly deceived, mistaking a noncataleptic impression for a cataleptic one and vice versa. Just what is going wrong in the case of his original acceptance

of the fake Helen as genuine? He is not, presumably, out of his mind or sensorily deranged (although he is deluded), and the only thing wrong with the object (in terms of its physical characteristics) is that it is not the right one. Not surprisingly, Sextus complains that the notions of cataleptic impression and of real object are interdefined, allowing us no independent purchase on either (*M* VII 426).

But presumably, as the Alcestis case shows, the idea is that the existence of other deeply held beliefs makes it impossible to assent to the given impression. And other sources do indeed suggest that one way in which impressions commend themselves to us is in terms of their fit with other impressions and other beliefs. Now, this criterion, as a matter of practicality, is clearly defeasible – the question is, are the Stoics right to insist that with suitable practice and application, we can make ourselves into better cognizers (cf. *Acad.* II 20, II 56–8, II 86)?

The important thing is that the Stoics are still committed to truth. Intriguingly, Carneades the Academic made use of the Alcestis case in developing his own epistemology of plausibility.[19] Impressions can be merely plausible (i.e., *prima facie* persuasive); plausible and tested (*diexôdeumenai*); or plausible, tested, and unreversed (*aperispastoi*). They are tested by comparison with the reports of other sense modalities (e.g., touching it to see if it feels solid as well as looking solid) and by improving the conditions of the original impression (e.g., getting closer, turning on the light): *M* VII 158–75, =69DE LS; *PH* I 227–9. What Carneades does, effectively, is to allow[20] that persuasiveness, suitably tested for confirmation and consistency, is a perfectly workable guide to acceptance and action; what he rejects is that it needs any metaphysical underpinning by reference to the truth, or that it is sufficient for knowledge.

So far, we concentrated on the cataleptic impression as the Stoic criterion of truth. But a text of Diogenes gives evidence of disagreement within the school on the subject of the criterion:

> they say that the cataleptic impression is the criterion of truth . . . ; so says Chrysippus in Book II of his *Physics*, and Antipater and Apollodorus. Boethus

[19] Whether he did so in his own right or merely as part of the dialectical battle with the Stoics is a question beyond the scope of this inquiry, although I hold to the former interpretation: Hankinson (1998c), Chs. V and VI; Hankinson (forthcoming); but see also Allen (1994 and 1997).

[20] Again either in his own voice, or on behalf of the Stoics.

admits more criteria: intellect and sensation and desire and scientific understanding. And Chrysippus, contradicting himself in the first book of his *On Reason*, says that sensation and preconception are criteria (preconception being a natural concept of the universal). And some of the older Stoics admit right reason (*orthos logos*) as a criterion, as Posidonius says in his *On the Criterion* (**18**: DL VII 54, =SVF 2.105, 1.631 =40A LS, =Fr 42 EK)

This short report has prompted much critical discussion,[21] and it is by no means clear how reliable it is. But the conclusion seems inescapable that there was at least some debate in the school about the nature of the criterion that probably went back at least to Chrysippus and, if the vague Posidonian reference in the last sentence is taken seriously, perhaps earlier still.[22]

The situation is further muddied by the protean nature of the notion of a criterion itself. Sextus distinguishes three main senses of the term (agent, instrument, and mechanism), and proceeds to show that dogmatic disputes about all of them render the notion inapprehensible (*PH* II 18–79). In *M* VII 29, he first distinguishes two generic types of criterion (of action and of truth); he then subdivides the latter into three species (general, special or technical, and particular: *M* VII 31–3), the last of which, 'the rational criteria', are then treated according to the divisions of *PH* II 21 (*M* VII 34–7); and all of the rest of *M* VII is concerned with destructive criteriology.

Two things stand out from text **18**, however. First, it seems that some Stoics, at any rate, were prepared to allow reason, in one form or another, a criterial role. The idea that both the senses and the intellect are criterial in some sense was to become a commonplace,[23] and is prominent in Cicero's presentation of Antiochus' Stoicizing epistemology in *Acad.* But reason is not presented as an independent criterion: rather, it goes to work on material already supplied by the senses, in proper empiricist fashion (II 19–20, II 31, II 43–4, II 45).

And this brings us to the second point. Chrysippus brings in preconception as a further criterion. But preconception is precisely

[21] See, e.g., Pohlenz (1938); Annas (1980); Kidd (1989).

[22] Kidd (1989), 143–5, argues that Posidonius' ascription of the right reason criterion to the 'older Stoics' is mistaken.

[23] Sextus (*M* VII 217–18) fathers it on the Peripatetics, in particular Theophrastus, and although that attribution is often questioned, I agree with Long (1988), 199, n. 59, that there is no obvious reason why it should be.

the pre-theoretical, indeed even pre-articulate, 'natural' conceptualizing of a universal (e.g., 'whiteness' or 'animal'): they 'occur naturally . . . and without conscious effort (see **3**)'. The point is that, for Chrysippus at least, all the criterial work is being done prior to any intellectual unpacking we may do of the concepts so derived. This appears to be at odds with the suggestion of **18** that other Stoics saw a more fundamental role for reason.

But at bottom, this dispute may amount to no more than a disagreement over the proper scope of the notion of a criterion. Should it be restricted to what is foundational, the bedrock upon which the rest of the epistemic structure is to be erected? Or can it be stretched to include the mechanisms by which that edifice is to be constructed? As we have seen from Sextus, the Greek notion of a criterion is certainly elastic enough to serve either function; and, if one adopts the general Stoic position, then in order for one to arrive at the final understanding of things on the basis of deductions and abstractions from one's impressions and preconceptions, then one's equipment for making such moves had better be in proper working order:

> hence the mind utilizes the senses, and creates the technical abilities (*artes*) as secondary senses, as it were, and strengthens philosophy itself to the point where it creates virtue, from which thing alone the whole of life can be made appropriate. (**19**: Cicero, *Acad.* II 31)

Although the speaker here is the Antiochean Lucullus, there is no reason to doubt that this was also the view of contemporary Stoicism.

But there is, of course, one other function the mind or reason may accomplish in the area of the cataleptic impression. Once you allow that it will function as the criterion of truth only when there is no overriding obstacle to its being accepted as such (**15**, **17**), then specifically mental operations of comparing and contrasting the content of the candidate impression with other impressions and with other commitments come into play. Of course, as the examples show, this sometimes leads us to reject impressions that are in fact cataleptic, misled by mistaken further beliefs. But it is also reasonable to suppose that such a process will also, and perhaps rather more frequently, force us to reject initially convincing impressions which are not in fact cataleptic, on the grounds of their inconcinnity with our other commitments.

If this is right, then it is tempting to suppose that later Stoics at any rate, after absorbing heavy sceptical punishment, sought to make coherence among a set of mental contents (beliefs, impressions, memories, conceptions) in some sense criterial. Annas (1980) goes as far as to call this the 'coherence view' of the Stoic criterion, which she detects in the Stoic texts, and which she contrasts with what she calls (rather unhappily) the 'correspondence view'; namely, the idea that individual cataleptic impressions, because of their direct representative connection with reality, are on their own criterial.

Annas allows that the term 'correspondence' is not particularly felicitous here; and it is worth stressing that the Stoics (like all the ancients) are firmly committed to a correspondence theory of truth: propositions are true just in case they mirror actual states of affairs. There is no hint in them, or in any other ancient theorist for that matter, of the view that coherence is itself sufficient for – indeed, constitutive of – truth. By the same token, the most they can possibly espouse is a coherence theory of knowledge, or perhaps rather of justification – but of course such a theory is perfectly compatible with a correspondence theory of truth.

But did the Stoics actually hold any such theory? There is little or no direct evidence to suggest that they did. Those who argue for it do so on the basis of general features of Stoic metaphysics, stressing in particular their providential determinism and their belief in the sympathetic interconnectedness of everything. And of course what the Stoic sage accomplishes, by bringing his nature into perfect accord with the structure of Nature as a whole, and by having only desires which are, in the ineluctable course of things, capable of realization (and hence in accord with the will of Zeus, Fate itself), is an understanding of the total structure of that Nature (which is where we came in).

But that fact does not in itself tell in favour of the Stoics' admitting considerations of coherence into their account of knowledge, understanding, or justification, other than in the trivial sense that total understanding, *epistêmê*, of things, the hand grasped around the closed fist, will be of a totality of facts which is at least mutually coherent.

One might also here invoke the Stoic conception of demonstration as a type of inference to the best explanation, designed to lead

us from phenomenal facts to their hidden explanations (*PH* II 142, II 169–70, II 179).[24] The world is such that it will guide the diligent and practised inquirer from evident facts, by means of logically impeccable inferences, to the non-perceptible states of affairs that must obtain if the phenomena are to be as they are. This is the epistemology of the *sêmeion endeiktikon*, the indicative sign, a notion that not surprisingly also came under heavy and sustained sceptical fire (*PH* II 97–133; *M* VIII 141–299).[25]

The Stoics argued, for example, that the evident fact of sweating was enough to show that the skin was perforated with invisible pores (*PH* II 140; *M* VIII 306; DL IX 89); this inference is buttressed, among other things, by the axiom that nothing physical can penetrate a solid physical body (*M* VIII 309). But all this shows is that we need to invoke other aspects of our physical picture of the world (in this case, one supposedly secured by *a priori* reason alone) in order to make the appropriate inferences, not that the fact that they all hang together is itself a reason for supposing them to be true.

But one other text needs to be considered in this context:

> the action of Sphaerus, a colleague of Chrysippus' as pupil of Cleanthes, was not without wit: having been summoned to Alexandria by King Ptolemy, on arrival there, he was presented at dinner on one occasion with birds made of wax and when he stretched out his hands to grasp them, he was charged by the King with having assented to something false. But he cleverly replied that he had not assented to the claim that they were birds, but rather that it was reasonable (*eulogon*) that they were birds; for the cataleptic impression differs from the reasonable one, in that the former is infallible, while the reasonable may turn out otherwise. (**20**: Athenaeus, VIII 354e, =SVF 1.624; cf. DL VII 177, =SVF 1.625, =40A LS)[26]

As **20** indicates, Sphaerus was an early Stoic: and this is the only text which provides some support for Posidonius' claim that the early

[24] On this, see Barnes (1980); and also Brunschwig (1980).

[25] Aenesidemus, who refounded Pyrrhonism in disgust at the increasingly dogmatic tendencies of the Academy under Philo and Antiochus, argued, in one of his eight modes against the purveyors of causal explanation (*PH* I 180–6), that no set of phenomena could entail a unique explanation (*PH* I 181), anticipating Duhem and Quine on the underdetermination of theory by data.

[26] The report in Diogenes is close enough verbally to show that they both derive from a common source – however, in Diogenes' version, Sphaerus is presented with wax pomegranates rather than birds; nothing of course of significance turns on this difference.

Stoics employed right reason as a partial criterion (see **18**). The story was clearly well known in later antiquity, although that of course does not vouch for its accuracy. But tales of this sort, while in one sense clearly apocryphal, are often trustworthy (after some discounting for sectarian bias) regarding the philosophical point they are supposed to illustrate. And so, with some reservations, I am prepared to accept that **20** does illustrate a genuine Stoic manoeuvre.

At first sight, the retreat to the reasonable may seem to be more of a capitulation than a strategic withdrawal; it certainly appears to abandon the claim that any (first-order) impression can be in and of itself criterial, self-warrantingly true, and acceptable. In this, the move parallels that made by the Stoics in the practical arena, when confronted with Arcesilaus' argument to the effect that, since on the Stoics' own account the sage has no mere opinions, and since the cataleptic impression is unavailable or, at any rate, cannot infallibly reveal itself as such, then the sage ought to suspend judgment (*M* VII 151–7, =41C LS).

The Stoics respond, in part, by saying that all of the desires, impulses, and beliefs about the future of the Stoic in progress toward sagehood will be hedged around with a mental 'reservation', *hupexairesis* (Stobaeus II 115.5–9, =SVF 3.564, =65W LS; Seneca, *Ben.* IV 34, =SVF 2.565): I want to go to the market today only if God wills it so.[27] Similarly, they make use of the notion of the reasonable, *eulogon*, in action contexts. Philodemus reports Diogenes of Babylon, the Stoic contemporary of Carneades, as saying:

> it is sufficient, concerning these things and those which derive from experience, for us to be convinced in accordance with the reasonable, just as when we set sail in summer we are convinced we will arrive safely. (**21**: Philodemus, *Sign.* 7.32–8, =42J LS)

Only the sage will get everything correct all of the time on the basis of proper understanding – his actions will be righteous ones (*katorthômata*). By contrast, someone who is only progressing will perform *kathêkonta*, fitting actions, which are defined as 'being consequential in life, something which, when done, has a reasonable justification'[28] (Stobaeus, II 85.13–86.4, =SVF 3.494, =59A LS; cf. DL VII 107, =SVF 3.493).

[27] The subject of *hupexairesis* is difficult and controversial: see Inwood (1985) 119–126, 165–175, 210–215; Brennan 2000; Brunschwig forthcoming.

[28] Or perhaps 'defence': *apologia*.

Arcesilaus also deployed this criterion of *ex post facto* reasonable justification, in his account of how someone who suspends judgment about everything can nonetheless go on living, and thus evade the '*apraxia* argument' (*M* VII 158, =69B LS).[29] Interestingly, he describes such actions as *katorthômata*, the Stoics' term for the perfect actions of the sage, which will not need any such defence. It is possible that *katorthôma* had not yet acquired its technical Stoic sense at the time of Arcesilaus' argument (see Ioppolo [1981], 147–51). But perhaps Arcesilaus' language is deliberately pointed: such reasoned actions are, in the nature of things, the best we can hope to come up with, but they are still sufficient for ordinary life.[30]

In any event, the Stoic will now apparently act on the basis of what seems reasonable, knowing that such actions may turn out to be fruitless and the beliefs associated with them false. As good Stoics, they will accept that result with equanimity – the universe could not have gone any differently anyway. There is no room for regret in the Stoic universe (cf. Seneca, *Ben.* IV 34, =SVF 3.565).

One further feature of **20** deserves notice. Sphaerus did not assent to the impression 'those are birds'; but he allegedly agreed that he assented to something; namely, that it was reasonable that the things were real birds. Since he assented, *that* content ('it is reasonable to suppose that those are birds') must take the form of a cataleptic impression: it is this which meets conditions CIi–v, and which bears its nature on its sleeve (although can it really be said to represent an object?). But of course the embedded content is fallible, indeed false.

It is easy to characterize this retreat to second-order contents as fraudulent, a way of getting infallibility on the cheap. Moreover, the more such concessions the Stoics make, the harder it becomes to distinguish them from the sceptics, while the post-Carneadean Academy under Philo and Antiochus apparently became too dogmatic in tone for hardliners like Aenesidemus. It is not an accident that the Academy ceases to exist as a practising school at some time around the 80s B.C.,[31] when Philo produces his new epistemology (Cicero, *Acad.* II 18), and Antiochus reacts violently against it.

[29] For the '*apraxia* argument', to the effect that a sceptic, having no beliefs, will be rendered unable to act, see Plutarch, *Col.* 1122a–f, =69A LS; see also Hankinson (1998c), 87–9. See Ch. 7, Section 5, Frede, this volume.

[30] See also Maconi, 1988; Hankinson (1998c), 86–91.

[31] For the later history of the Academy, see in particular Glucker (1978) and Barnes (1989).

This is not the place to assess Philo's epistemological innovations:[32] but it is clear from Cicero that he rejected the Stoic cataleptic criterion, while maintaining that knowledge was possible. It was this that scandalized Antiochus, who held that knowledge could be guaranteed only by accepting the Stoic criterion, which in turn suggests that this was still standard Stoic doctrine in his day.

The question, of course, is what, precisely, does this doctrine now amount to? Antiochus still holds to all of CIi–v; Philo rejects CIv, but claims we may still know things. Antiochus argues that, unless there are cataleptic impressions, there cannot be certainty in the arts and sciences, as there evidently is. Indeed, he retails a form of naturalized epistemology. The Stoics were wont to appeal to the natural instincts of all creatures for their own preservation as an indication of the providential structure of the world that of *oikeiôsis*, appropriation, the seeking out of what is in fact suited to one's particular constitution (cf. DL VII 85–6; Seneca *Ep.* 121.6–15; Hierocles *Elements of Ethics*, 1.34–2.9). Antiochus himself argues (*Acad.* II 24–5) that we need cataleptic impressions in order to act, or we will not be able to initiate actions on the basis of impulses (*hormai*) in accordance with our own natures:

> that which moves someone must first be seen and believed in by him, which cannot be done if the object of vision cannot be distinguished from a false one. But how can the mind be moved to appetition if the object of vision is not perceived as being in accordance with its nature or foreign to it? (**22**: *Acad.* II 25)

Appeals to nature also pepper Antiochus' syncretist, but heavily Stoicizing ethics, reported in Cicero, *Fin.* V 9–74 (see V 24–6, V 27, V 31, V 33, V 34–7, V 39–40, V 41–3, V 44, V 46–7, V 55, V 58–9, V 61, V 66). At V 36, the senses are extolled as being naturally capable of perceiving their objects, while

> Nature . . . perfected the mind with its remaining requirements just as it did the body: for it adorned it with senses suited to the perception of things, requiring little or no assistance for their verification. (**23**: *Fin.* V 59)

All of this would be equally at home in the Peripatetic tradition; but then so, as we saw earlier (see **3**), would much of the traditional Stoic epistemology have been.

[32] See Barnes (1989); Hankinson (1997), 183–96; (1998c), 116–20; Striker (1997); Brittain 2001.

This picture is reinforced in *Acad.*: the senses are as good as we could desire (II 19, a claim later controverted by Cicero: II 81–2), and can be sharpened with practice (II 20). They generate the common conceptions (*koinai ennoiai*), the general concepts in virtue of which we order our universe (II 21–2) first by abstracting general properties, such as whiteness and sweetness, from particular instances; then combining them to produce nominal concepts of substances, such as man and horse; and finally proceeding therefrom to their real definitions, which are the source of all scientific inquiry (see **3** and **4**). But

> if there were such false notions, or ones impressed upon the mind by impressions such as could not be distinguished from true ones, how could we make any use of them? And how could we tell what was consistent with any particular thing and what inconsistent with it? (**24**: *Acad.* II 22)

Memory too would fall, and the whole of scientific knowledge (*ibid.* II 22).

So our natural capacities entail that we have cataleptic impressions, a position Antiochus sticks to, as presumably did contemporary Stoics, against all sceptical objections, even while having allowed that we may mistake non-cataleptic impressions for cataleptic ones and, even more damagingly, vice versa (see **16** and **17**). There will still be cases when all of the circumstances are favourable and their cataleptic quality shines through: we will then know on the basis of them, and know that we know them.

This is precisely what Philo denies. If I am right, he accepts that we can know things, and that to know something is for us (a) to believe it, for it (b) to be true, and for us (c) to stand in the right cognitive relation to it. But that is all. These impressions need not – indeed, cannot – be such as to meet CIv. All that matters is that (a)–(c) are somehow satisfied: we can never know for sure that they are. Philo, then, is an externalist as well as a reliabilist. Numenius writes:

> but as time went by and his *epochê* began to fade as a result of ordinary life, he no longer remained firm in his convictions about these things, but the clarity (*enargeia*) and agreement (*homologia*) of his experiences turned him around. (**25**: in Eusebius, *Pr. ev.* XIV 9.2)

Although Numenius' hostility is evident, the testimony is clear enough. Philo became impressed by the stability of his perceptual experience, its generally mutually confirmatory tendencies

(*homologia*); this disposes him to suppose that some – perhaps very many, perhaps even the majority – of his sense impressions are true, and satisfy condition (a)–(c) on knowledge. Of course, he can never know for sure which of them are true – and this is what gets up Antiochus' nose. Only if we can be absolutely certain, for some set of impressions, that they reveal the truth, he thinks, are we entitled to claim knowledge. This latter, I take it, formed the non-negotiable core to the Stoic notion of the cataleptic impression – one which they were not, even under the most stringent sceptical attack, prepared to abandon.