

Epistemic Luck in Stoicism

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The Stoics understood knowledge (ἐπιστήμη) as ‘apprehension’ (κατάληψις) characterized by exceptionally strong and stable assent (Stob. ii 111,18-112,8 = LS 41 H). In turn, they defined apprehension as assent to a special kind of representational mental state, which they called the ‘apprehensive appearance’ (φαντασία καταληπτική; SE *M* vii 151 = LS 41 C₄; *M* xi 182; Olympiod. *In Plat. Gorg.* 12.1 = LS 42 A). The latter is able to play its central role in apprehension due to having a number of desirable epistemic properties. One such property is that the apprehensive appearance represents accurately and comprehensively the object that caused it, which is why the appearance is true. Another, by far the most debated both between the Stoics and their critics and among contemporary scholars, is that it is ‘such that it would not become false’ (SE *M* vii 152), or, in other words, that its representational content is somehow guaranteed not to be false. However, it seems that the Stoics also attributed to the apprehensive appearance one more important property that has received far less attention—insusceptibility to epistemic luck.¹ The

¹ By ‘epistemic luck’ in this essay I will refer to the phenomenon which is in contemporary literature sometimes more precisely called ‘veritic luck’, i.e. cases when a subject’s representational mental state is true due to luck. Although other kinds of luck can be considered at least in some sense epistemic (cf. e.g. Pritchard 2005, 133-41), veritic luck is arguably the most interesting, controversial, and widely discussed phenomenon referred to by this name.

crucial piece of evidence suggesting this is Sextus Empiricus' report according to which the Stoics held that appearances which are true merely 'externally and by chance' (ἔξωθεν καὶ ἐκ τύχης) cannot be apprehensive and hence, by extension, cannot lead to knowledge. Sextus also informs us that, as an example of such an appearance, the Stoics used one that occurs to people in certain deranged mental states, although unfortunately he does not say exactly what kind of appearance they had in mind. I shall argue here that Sextus is probably alluding to what the Stoics classified as an 'empty' (διάκενος) appearance or imagination, a representational state which at the time of being entertained is not caused by the impact of a present external object on our senses, but is produced internally by the soul itself. I shall propose an explanation why the Stoics thought that when such appearances are true, they are so merely by chance. The explanation will center on their understanding of chance as 'a cause hidden from human reasoning', and their view that 'empty' appearances or imaginations are mental states that, instead of revealing the causes of their representational contents, leave them hidden from us.

Let us begin our discussion by analyzing in detail the passage crucial for our case. In a section of his book *Against the Logicians*, *M* vii 242-60, Sextus Empiricus gives us a relatively detailed account of how the Stoics understood appearances (φαντασίαι) and classified them into different categories. After explaining the division of appearances into true and false, Sextus says in *M* vii 247-8:

[247] τῶν δὲ ἀληθῶν αἱ μὲν εἰσι καταληπτικαὶ αἱ δὲ οὐ, οὐ καταληπτικαὶ μὲν αἱ προσπίπτουσαί τισι κατὰ πάθος· μυρίοι γὰρ φρενιτίζοντες καὶ μελαγχολῶντες ἀληθῆ μὲν ἔλκουσι φαντασίαν, οὐ καταληπτικὴν δὲ ἀλλ' ἔξωθεν καὶ ἐκ τύχης οὕτω συμπεσοῦσαν, ὅθεν οὐδὲ διαβεβαιοῦνται περὶ αὐτῆς πολλάκις, οὐδὲ συγκατατίθενται αὐτῇ. [248]

καταληπτική δέ ἐστὶν ἢ ἀπὸ ὑπάρχοντος καὶ κατ' αὐτὸ τὸ ὑπάρχον ἐναπομεμαγμένη καὶ ἐναπεσφραγισμένη, ὅποια οὐκ ἂν γένοιτο ἀπὸ μὴ ὑπάρχοντος.

[247] Among true [appearances] some are apprehensive and some are not; the not apprehensive ones are those that strike people in [a state of] affection. For countless phrenitics and melancholics draw an appearance that is true, yet not apprehensive but occurring in this way externally and by chance, hence they are often not confident about it and do not assent to it. [248] The apprehensive [appearance] is one that is from what is present, and molded and sealed in accordance with that present thing itself, such that it would not come about from what is not present.

According to Sextus, the Stoics divided true appearances into two categories, those that are and those that aren't apprehensive. As an example of the latter, the Stoics used an appearance that occurs to people in abnormal mental states like melancholy and phrenitis,² although Sextus doesn't mention exactly the kind of appearance in question. He further says that although the Stoics allowed that such an appearance can be true, they considered it non-apprehensive because it is true merely 'externally and by chance' (ἔξωθεν καὶ ἐκ τύχης).³ Sextus then proceeds to talk about true

² In ancient medicine, phrenitis (φρένιτις) and melancholy (μελαγχολία) were commonly discussed forms of mental derangement. Although different medical texts vary in how they define these conditions, in general phrenitis was considered to be caused by excess yellow bile and is accompanied by fever, while melancholy was thought to be caused by excess black bile and occurs without fever.

³ Long and Sedley (LS 40 E₂) translate the relevant sentence in the following way: 'For very large numbers of people who are deranged or melancholic take in an impression which is true but non-cognitive, and arises purely externally and fortuitously, so that they often do not respond to it positively and do not assent to it.' They seem to take the phrase

appearances that are apprehensive and, after citing the standard Stoic definition of the apprehensive appearance in 248, he goes on to discuss the latter at some length in the remainder of the section of the book dedicated to the Stoics.

Although short and cryptic, Sextus' remark about true non-apprehensive appearances in *M* vii 247 is potentially quite significant because it constitutes evidence, however meager, that the Stoics were aware of the problem of epistemic luck. Namely, since they defined knowledge as a particular kind of assent to an apprehensive appearance, this awareness can be inferred from the fact that they denied that appearances that are true merely 'externally and by chance' can be apprehensive and lead to knowledge. This means that they held that in order to be apprehensive, an appearance must not only be true, but also such that its truth is not the result of luck. Two important things are unclear in Sextus' report, however. First, given that the Stoics divided appearances into different categories based on various criteria, what exactly is the type of the true non-apprehensive appearance to which Sextus is alluding here? Second, in what sense precisely did they think that this appearance is true 'externally and by chance'? Without answers to these

ἔξωθεν καὶ ἐκ τύχης to modify the participle συμπεσοῦσαν, conveying the sense that the true non-apprehensive appearance (or 'impression' in their translation) happens to arise accidentally from something external. While possible, this reading seems problematic because it renders the adverb οὕτω ('in this way') practically superfluous. On the contrary, it seems more likely that οὕτω was inserted here to make a reference back to a feature that was attributed to the appearance earlier in the sentence, such as 'not apprehensive' (οὐ καταληπτικὴν) or 'true' (ἀληθῆ). The contrastive sense of ἀλλ' ('but') further suggests that ἔξωθεν καὶ ἐκ τύχης refers not to οὐ καταληπτικὴν but to ἀληθῆ. This reading finds some independent support in the occurrences of ἐκ τύχης and similar expressions in reference to ἀληθῆς that are attested in a number of texts, such as *SE M* vii 51; Galen *Meth. med.* X.11 K; Ptolemy *Tetr.* i 2.6; cf. also, *Plac.* ii 5.97 where Galen distinguishes between speaking the truth in accordance with knowledge (κατ' ἐπιστήμην) and in accordance with chance (κατὰ τύχην).

questions, it is difficult to elucidate what might have motivated the Stoics to exclude from apprehension and knowledge the kind of epistemic luck that is the subject of our focus here, and how exactly they thought the apprehensive appearance manages to avoid this sort of luck.⁴

Sadly, no surviving Stoic text addresses these questions directly, as it is too often the case. I nevertheless believe that we can reconstruct the answers based on the information which is preserved in extant sources, although this endeavor will inevitably involve at least some degree of speculation. Since in Sextus' report quoted above the appearance in question is classified as non-apprehensive, the best place to start is the Stoic definition of the apprehensive appearance mentioned in section 248, according to which an appearance must meet the following three conditions in order to be apprehensive: it has to be (C1) from what is present, (C2) molded and sealed in accordance with that present object, and (C3) such that it would not originate in what is not present.⁵ More precisely, the first condition (C1) requires that the apprehensive appearance is

⁴ To be clear, the claim being made here is that the Stoics exclude from both apprehension and knowledge that which we have earlier identified more narrowly as veritic luck (see n. 1 above). But that doesn't mean that their position was the same for all kinds of luck that may be considered epistemic. For instance, the Stoics thought that a key difference between apprehension (*κατάληψις*) and knowledge (*ἐπιστήμη*) is that while even the foolish people can acquire the former by simply assenting to an apprehensive appearance for whatever reason, only the beliefs of the epistemically perfect Sage have the coherence, systematicity, and firmness required by the latter (cf. *SE M* vii 151; *Cic. Acad.* i 42; *Stob.* ii 111,18-112,8 W = LS 41 G). It is thus possible that for the Stoics many or even all cases of apprehension acquired by the foolish are the result of luck, but this kind of luck would then be doxastic and not veritic.

⁵ The definition is also referenced in several other extant texts, e.g. *SE M* vii 402, 410, 426; *PH* ii 4; *DL* vii 50; *Cic. Acad.* ii 18. 'From what is present' is my translation of the phrase *ἀπὸ ὑπάρχοντος* in the definition. The participle *ὑπαρχον*, derived from the verb *ὑπάρχειν*, has proven difficult to render into English since the Stoics used *ὑπάρχειν* in several different senses (cf. Long 1971: 89). Because of this, the scholars have traditionally been divided into two camps, those who advocate a veridical reading according to which *ἀπὸ ὑπάρχοντος* amounts to the condition that the

caused by an object that is spatiotemporally present for the subject entertaining the appearance, while (C2) requires that it must represent that object accurately and comprehensively. Meeting both C1 and C2 ensures that the appearance is true. According to our sources, the final condition (C3) was added in response to the objection raised by the critics of Stoic epistemology from the Academy who argued that if an appearance which is caused by a present object and is in accordance with that object could causally originate in something else, then the appearance is not apprehensive (SE *M* vii 252; Cic. *Acad.* ii 77). Apparently, the intuition behind the objection was that the apprehensive appearance should somehow guarantee that it is caused by the object that it represents not only in the actual situation in which it is entertained, but also in all possible situations. It seems that the Stoics believed that such a guarantee lies in the representational properties of being ‘clear,’ ‘distinct’ or ‘thoroughly imprinted,’ ‘strong,’ ‘plain,’ ‘striking,’ and ‘persuasive,’ in respect to which they held the apprehensive appearance to be superior to non-apprehensive ones.⁶ This implies that C3 was introduced as a modal requirement aimed at ensuring

apprehensive appearance is true (e.g. Frede 1983, Sedley 2002), and those who defend a (standard) causal reading according to which ἀπὸ ὑπάρχοντος means that the apprehensive appearance must be caused by a real object (e.g. Rist 1969, 136-7; Hankinson 2003; Nawar 2014). Recently, a third option in the form of a modified causal reading has been independently proposed and defended by Togni 2006, Stojanović 2019, and Caston (forthcoming). The reasons why I adopt the latter interpretation, according to which Zeno intended ἀπὸ ὑπάρχοντος to mean that the apprehensive appearance is caused not by a real external object *simpliciter*, but one that is spatiotemporally present for the person entertaining the appearance, have been discussed in detail in Stojanović 2019.

⁶ For the apprehensive appearance’s being ‘distinct’ or ‘thoroughly imprinted’ (ἔκτυπος), cf. DL vii 46; for ‘clear’ (τρανής): DL vii 46 and SE *M* vii 258; ‘strong’ (σοφοδρός), ‘plain’ (ἐναργής), ‘striking’ (πληκτική), ‘persuasive’ (πιθανή): SE *M* vii 257-8, and Alex. *Aphr. De an.* 71,5-21. Appearances that are caused by a present external object but represent it in a ‘mixed-up’ (συγκεχυμένως) way or are ‘faint’ (ἀμυδρά) are mentioned in SE *M* vii 171-2.

that an appearance which represents some object *O* clearly, distinctly, strikingly, etc. would not causally originate in something that is not *O*, thereby guaranteeing that *O* is indeed its origin. On the other hand, an appearance which represents *O* but is ‘faint,’ ‘mixed-up,’ neither clear nor distinct, etc. could originate in something that is not *O*, which is why it cannot provide this guarantee and thus is not apprehensive. Based on this, there seem to be two possible reasons why the true appearance Sextus is alluding to in *M* vii 247 is not apprehensive: either it is an appearance that accurately depicts an existing object which is not present and is not causing the appearance at the time it is entertained, or it is an appearance which is caused by a present object and which accurately depicts that object but does so faintly, not clearly or distinctly.⁷

I believe that there are several strong, although admittedly not conclusive, reasons to think that the appearance in question is of the former rather than the latter kind. The first reason is related to the way the Stoics understood mental disorders and their effects on appearances in general, and specifically in the case of melancholy and phrenitis, ‘affections’ that are explicitly mentioned in *M* vii 247. The ability of certain diseases and medical conditions to render appearances faint was a well-recognized fact in the philosophical and medical discussions of the time. For example, in addition to situational factors such as the small size of the perceived object or its great distance from the perceiver which can affect even healthy subjects, Carneades mentions weakness of eyesight (ἀσθένεια ὄψεως) as a medical condition which can cause an appearance to be faint (SE

⁷ It should be noted here that the latter of the two options is viable only if one assumes what Gisela Striker (1997, 226) has called the ‘strong’ interpretation of the definition of the apprehensive appearance, according to which the Stoics held that C3 is a requirement logically independent from C1 and C2. Whether this interpretation accurately reflects the actual Stoic position is itself unclear. The matter is also not helped by the sparsity in the surviving sources of Stoic examples of appearances that satisfy C1 and C2 but fail to meet C3.

M vii 171). In the same vein, Galen (*Caus. Symp.* VII.104K; *Diff. symp.* VII.56K) cites dimness of vision (ἀμβλυωπία) and hardness of hearing (βαρυηκοΐα). In fact, in an attempt to systematize different types of symptoms according to the type of damage that can be inflicted on the psychic function (ψυχική ἐνέργεια)—which covers both the sensory (αἰσθητική) as well as the ‘leading’ or ‘governing’ (ἡγεμονική) function, where the latter further includes the ‘appearance-making’ (φανταστική) and the ‘thinking’ (διανοητική) functions—Galen distinguishes between three types of damages, those that lead to complete loss of the function in question, those that lead to its reduction, and those that lead to its defectiveness.⁸ In the context of this tripartite distinction, faint or weak perception is classified under the type of damage associated with reduced function (cf. *Diff. symp.* VII.56-8; *Caus. symp.* VII.104; 124). However, the three main types of ‘mental derangement’ (παρὰφροσύνη)—phrenitis, melancholy, and mania (μανία)—are associated with a different category of damage, one which involves *defective* function of the leading part of the soul (*Sym. caus.* VII.202-4K).⁹ The symptoms in this category do not involve faint appearances, but those that are ‘misprinted’ (παρὰτυπωτικά, *Diff. symp.* VII.56) and those that involve ‘phantasms’ (φαντάσματα), representations of things that are not actually present (Galen *Diff. symp.* VII.60-1; *Loc. aff.* VII.225-8). Thus, according to Galen, phrenitis and melancholy are not among the medical conditions that involve reduced functions of the soul, which is the category where faint

⁸ For the tripartite classification of damages of the sensory function see *Diff. symp.* VII.55-6 K, and for the same classification in relation to the leading function see VII.60-2 K and *Caus. symp.* VII.200-4 K.

⁹ Cf. also *Diff. symp.* VII.60-2 K; Galen adds here that παρὰφροσύνη can cause defects in both the ‘appearance-making’ (φανταστική) and the ‘thinking’ (διανοητική) function of the soul. When it comes to damages which cause deficient or reduced functions of the soul—the category where faint or weak perception belongs—Galen mentions a different range of mental conditions: coma (κῶμα), lethargy (ληθαργία), dullness (μωρία), dementia (μώρωσις; *Diff. symp.* VII.60 K), and numbness (νάρκη) of reasoning or memory (*Caus. symp.* VII.201 K).

perception belongs. Unfortunately, we do not have detailed evidence on the Stoics' understanding of the effects of mental disorders on appearances, but what we do have suggests that their position was very similar to that of Galen. According to Sextus, the Stoics too believed that mental derangements like mania and melancholy can cause misprinted as well as appearances involving phantasms (*M* viii 67). They apparently even formulated a precise definition the difference between the two: the former include appearances which are caused by present objects but misrepresent those objects, while the latter include appearances which are not immediately caused by present objects but are, at the time they are entertained, completely made up by the soul, which is why the Stoics classified them as 'empty' appearances or imaginations.¹⁰ Additionally, as far as I can see none of the examples in extant texts that are related to phrenitis, melancholy, and mania that are of possible Stoic origin suggest that these conditions can cause faint appearances.¹¹ Thus, the fact that the true non-apprehensive appearance Sextus is alluding to in *M* vii 247 occurs under the influence of melancholy or phrenitis makes it more likely that this is a case of an 'empty' appearance or imagination rather than of faint perception.

¹⁰ For the Stoic use of the terms 'empty' (διάκενος or κενή) and 'misprinted' (παρατυπωτική) in reference to an appearance, see SE *M* viii 67 and P.Berol. inv. 16545 (reconstructed in Backhouse 2000), as well as Cicero's Latin translation *visum inane* in *Acad.* 2.47-54 and 88-90. Some Stoics including Chrysippus also used the expressions 'empty drawing' (διάκενος ἐλκυσμός) and 'imagination' (φανταστικόν) to refer to the same representational mental state (cf. SE *M* vii 241-5 and esp. Aetius 4.12, which is quoted and discussed in detail below).

¹¹ See, for example, for phrenitis: SE *PH* i 101 and ii 52 (phrenitis); for melancholy: DL vii 118 and 127, *Simpl. In Ar. Cat.* 402, Aetius iv 12.1-6; for mania: *M* vii 61-3, 88, 245, 404-7, viii 18, 57, 67, DL vii 118; for derangement (παρὰφροσύνη): Plutarch *Comm. not.* 1067E. None of these places seems to involve true appearances that are faint; rather, they all appear to be cases of appearances that are either misprinted or empty.

Secondly, Sextus says the appearance in question is of the kind that people ‘draw’ (ἔλκουσι) in the state of phrenitis or melancholy. The verb ἔλκειν in the active voice was often used in reference to empty appearances or imaginations by ancient authors, including the Stoics. The most prominent Stoic case of this usage is attested in the summary of Chrysippus’ distinction between perceptual appearance and imagination (φανταστικόν) in Aetius iv 12.4-5 (cited and discussed further below), which suggests that Chrysippus understood imagination as a mental process in which we draw or conjure up a phantasm (φάντασμα) from our mind, and thought that it typically occurs in people suffering from melancholia and mania.¹²

Thirdly, the Stoics were aware that, in addition to cases in which people in normal mental states fail to assent to appearances that are apprehensive and cases in which those in abnormal mental states assent to appearances that are not apprehensive, there are also cases in which people in abnormal mental states like madness or in dreams entertain empty appearances and fail to assent to them, just as Sextus describes at the end of *M* vii 247. One such case mentioned by Cicero in *Acad.* ii 52 and 89 is taken from Ennius’ tragedy *Alcmaeon*, where after starting to go insane for murdering his own mother, Alcmaeon imagines that the Furies are chasing him but does not believe it, which is almost certainly Cicero’s homage to the common Stoic illustration involving Orestes and the Furies (cf. Aetius iv 12.1-6 cited and discussed below; SE *M* viii 67).¹³

¹² For a detailed discussion of the significance of the use of ἔλκειν in the active voice in reference to imaginations in Aetius iv 12.1-6, see Stojanović 2020a.

¹³ This point is significant because one of the main objections the Academics raised against the apprehensive appearance relied precisely on examples in which subjects in abnormal mental states assent to empty appearances mistakenly taking them to be appearances caused by present external objects (e.g. SE *M* vii 403–4). If such cases were the only ones considered by the Stoics, the possibility that the appearance Sextus is talking about in *M* vii 247 is empty would be less likely because of his remark that mentally deranged people usually don’t assent to this kind of

Finally, although a vast majority of examples found in the extant sources on their epistemology and psychology are of empty appearances or imaginations that are false, there is no doubt that the Stoics thought that such appearances can sometimes be true.¹⁴ In fact, they endorsed and defended one important discipline in which empty appearances or imaginations that are true played a key role—divinatory prediction of future. According to our sources, the Stoics distinguished between two forms of divination: ‘artificial’ or ‘technical’, and ‘natural’ or ‘non-technical.’¹⁵ The former deals with predictions of future events based on reasoning and conjecture from prolonged and repeated empirical observation of divinatory signs (animal entrails, bird movements, astronomical and meteorological phenomena, etc.) and their connection with subsequent events. The latter, on the other hand, relies on predictions obtained through divinely inspired dreams and deranged mental states—that is, through divinely inspired empty appearances or imaginations. Our sources report that the Stoics believed that accurate predictions of future

appearance. However, the fact that the Stoics also discussed examples of empty appearances which are not assented to eliminates this problem.

¹⁴ The Stoics understood the truth of appearances as ultimately depending on agreement between the appearance and the reality it represents (cf. e.g. SE *M* vii 244), so there is nothing that is in principle preventing empty appearances from being true (*contra* Ahonen 2014, 119). According to the Stoics, the correspondence between a true appearance and what is represented is not a simple and straightforward one; in fact, being true is strictly speaking a property of incorporeal ἀξιώματα or propositions (SE *M* viii 74), so an appearance is true not directly but in virtue of the truth of the proposition accompanying the appearance (SE *M* viii 10; cf. Shields 1993). In turn, a proposition is true if and only if it accurately reflects the object it refers to and its current properties (cf. DL vii 65).

¹⁵ Ps.-Plut. *Vit. Hom.* ii 2592-7; Cic. *Div.* i 11-2; 34; 70-2; 109-110; 127-9; 2.26-7. The distinction seems to originate from Plato *Phaedr.* 244a8-d5.

events can be acquired not only through ‘technical’ but also through ‘natural’ divination.¹⁶ For instance, in his work *On Divination*, Cicero says that Chrysippus wrote several works on natural divination and even suggests that he was the first Stoic to offer a systematic account of this form of divinatory prediction (*Div.* i 6). Chrysippus apparently collected examples of veridical prophetic dreams (Cic. *Div.* ii 134; cf. i 56-7), and offered a theory on how to interpret them (*ibid.* i 39; ii 130). More pertinently for our discussion, he also collected numerous examples of accurate oracles (*Div.* i 37; ii 115), which were classified under ‘prophecies through furor’ (*vaticinationum per furorem*), which result from divine impulse and inspiration (*Div.* i 34; cf. i 66-7; ii 108). The Latin *furore* here is probably Cicero’s translation of Greek μελαγχολία in the sense this notion is used by the Stoics (cf. Cic. *Tusc.* iii 8-11), suggesting that the Stoics thought that melancholics can accurately predict future events.¹⁷ One example of such prophecy through furor, probably discussed by Chrysippus in his work on oracles, is the famous prediction of the Pythian priestess at Delphi given to king Croesus that if he crosses the Halys River, a mighty kingdom will be overthrown; encouraged by the prophecy, Croesus crossed Halys and attacked Persia, and indeed

¹⁶ The chief source in this context is Cicero: e.g. *Acad.* ii 107; *Div.* i 6; i 34 (= LS 42 C); i 117-8 (= LS 42 E); i 126; ii 115; ii 144-5. But see also SE *M* ix 132; Stob. *Ecl.* ii 114,16-21 W.; Aetius v 1.1; DL vii 149. For an explanation of how the Stoics understood the truth of appearances about future, see e.g. Bobzien 1998, 65-71.

¹⁷ The idea that certain people can correctly predict the future due to their manic or melancholic temperament has had a long history and respectable philosophical pedigree; for example, it is attested in Plato’s *Phaedrus* 244a-d, as well as in the work *Problemata* 954a21-40 which belongs to the Aristotelian tradition. The same idea is also acknowledged within the medical tradition, for example by Rufus of Ephesus, a first century B.C. physician who wrote about it in his *On Melancholy* (cf. fragment 35 in Pormann 2008, 47).

overthrew a great kingdom—his own (Cic. *Div.* i 37; ii 115-6).¹⁸ When it comes to phrenitis, I am not aware of any texts explicitly relating it to divination, but there are passages in Sextus which strongly suggest a link between the two. For example, in *PH* i 101 Sextus says that those suffering from phrenitis and who are divinely inspired believe that they hear spirits speaking to them, while regular people do not. Along the same line, in *PH* ii 52 he says that those who are divinely possessed or those who are suffering from phrenitis think that they hear others talking to them when we do not hear anything. According to the Stoics, divination is knowledge of signs provided to us by the gods or spirits and among its several methods it includes divine possession.¹⁹ It is thus quite likely that, in addition to melancholy, Chrysippus and other Stoics also counted phrenitis among the abnormal mental states involved in accurate predictions of natural divination. All this suggests not only that the true non-apprehensive appearance entertained under the influence of phrenitis or melancholy that Sextus is alluding to in *M* vii 247 could be an imagination that is an accurate prediction of natural divination, but also that the epistemological questions related to the status of divination as a science could have been at least part of what motivated the Stoics to think about the problem of epistemic luck.²⁰

¹⁸ Another example that can also be attributed to Chrysippus is hinted at in the final sentence of Aetius iv 12 in Ps.-Plutarch's summary (*Placita* 900D-901A) which is quoted in full and discussed below.

¹⁹ For characterizing divination as knowledge of signs provided by gods and spirits, see Stob. ii 67,16-19 W; this was apparently one of the official Stoic definitions of divination, probably originating with Chrysippus (cf. Cic. *Div.* ii 130). For divine possession (θεοληπτική) as one of the methods of divination acknowledged by the Stoics, see SE *M* ix 132.

²⁰ For a more detailed discussion of the epistemological status of divination within Stoicism, the significance of the Stoic understanding of the distinction between technical and non-technical (or natural) divination, and the potential role of the problem of epistemic luck in that context, see Stojanović 2020b.

After discussing the type of true appearance alluded to by Sextus in *M* vii 247, our next task is to try to determine the meaning of the phrase ἔξωθεν καὶ ἐκ τύχης in this context, which will help us understand how exactly the Stoics thought that this sort of appearance is and the apprehensive appearance isn't true by chance. So far, the most elaborate attempt to interpret this phrase has been made by Engberg-Pedersen (1990, 157-61). According to him, the Stoics thought that entertaining an apprehensive appearance involves a process in which the subject's mind conceptually articulates the appearance's representational content by drawing from the subject's past knowledge and experience of similar objects until an exact match is reached (*ibid.* 159-60). Based on this, Engberg-Pedersen proposes that 'externally' and 'by chance' in *M* vii 247 correspond respectively to the expressions 'to attend' (ἐπιβάλλειν) and 'technically' (τεχνικῶς) in *M* vii 251-2, and interprets the difference between the appearance that is apprehensive and the one that is true but not apprehensive in the following way:

Whereas the frenzied person will bring in this knowledge only haphazardly ("by chance"), so that his *phantasia* will seem to come *more* "from the outside", the sane adult will bring to bear much more of his previous knowledge in attending technically to the given situation. His response, therefore, will not be haphazard, but technical. And his *phantasia* will not be so much "from the outside", but a result of his comprehensive understanding of the situation (from within, as it were). The basic difference, then, between the reaction of the frenzied person and that of the sane adult is that the former does not *integrate* the present situation with his previous knowledge (or if he does, then only rudimentarily), whereas the latter does. (Engberg-Pedersen 1990, 161)

In other words, according to Engberg-Pedersen, a true non-apprehensive appearance is true by chance because it does not grasp with sufficient detail and comprehensiveness that which marks off the object that caused the appearance from other objects and makes it what it is, while it is

‘external’ in the sense that the content of the appearance is coming outside of the subject’s previous experience and knowledge.

There are at least three problems with this interpretation. First, Engberg-Pedersen offers no independent textual evidence, found either in Stoic sources or elsewhere, that ἔξωθεν was indeed used in the sense of something outside of someone’s previous experience. Without such evidence, his rather idiosyncratic interpretation of the term in this context remains highly speculative and unpersuasive. Second, the proposal according to which an appearance is true by chance because it does not capture that which makes the object distinctive does not seem to apply to appearances that do capture the distinctiveness of their objects but are still epistemically lucky in the sense relevant for our discussion. For instance, if Theon is dreaming that Dion is standing by, and Dion is indeed standing by, it seems possible to say that the truth of Theon’s appearance would be the result of chance even if it captured Dion’s distinctiveness.²¹ Finally, and in my view most importantly, Engberg-Pedersen does not explain how his reading of ἐκ τύχης in *SE M* vii 247 is supposed to relate to the Stoic concept of chance. Namely, several sources consistently report that the Stoics subscribed to a somewhat peculiar notion of chance, defined as ‘a cause hidden [ἄδηλον] from human reasoning.’²² Presumably, the motivation for this approach to chance was their belief

²¹ My example here is a variation on the one reported in *SE M* vii 244-5 where a person has an empty appearance entertained in a dream that Dion is standing by. According to Sextus, the Stoics used the original example as an illustration of an appearance that is simultaneously true and false, true in so far as Dion indeed exists but false in so far as Dion is not actually standing by. The context of the example suggests that if Dion had indeed been there, the dreamer’s appearance would have been true (without simultaneously being false). For a more detailed reconstruction of the original example, see Stojanović (2019: 157–8).

²² *Aet.* i 29.7 = *Ps.-Plut. Epit.* 885C = *Stob.* i 92,14-16 W; Alexander of Aphr. *Mant.* 179,6; *Fat.* 174,2; *Simpl. In Ar. phys.* 333,1-9.

that since every event is fated—or, in other words, wholly determined by the prior causes—objectively or metaphysically speaking nothing happens by chance in the sense of happening without a prior cause. Because of this, things can be said to occur by chance only if that means that these things, although fully causally determined, have causes that are hidden from us. In other words, according to the Stoics, chance exists exclusively as understood in terms of subjective or cognitive inaccessibility of causes.²³ However, Engberg-Pedersen does not elucidate how hidden causes are involved in the cases of having an appearance that is true but fails to capture the distinctiveness of its object. Because of this, a better interpretation of the phrase ‘externally and by chance’ is needed.

In developing such an interpretation, the first thing to note is that the adverb ‘externally’ occurs in extant texts together with the expressions ‘by chance’ (ἐκ τύχης), ‘in accordance with chance’ (κατὰ τύχην), or ‘from chance’ (ἀπὸ τύχης) frequently enough to suggest the possibility that in this combination it had a specific, perhaps even idiomatic sense.²⁴ Unfortunately, except for *M* vii 247, the combination appears in no other extant Stoic text, so we are forced to look elsewhere for shedding some light on its meaning in this context. Now, ἔξωθεν does figure in the account of chance found in the Aristotelian tradition. For example, in the discussion of chance in book ii of *Physics* Aristotle says that an event which occurs ‘from chance’ (ἀπὸ τύχης) has an ‘outside’ (ἔξω) cause.²⁵ While explicating this idea in his commentary on Aristotle, Simplicius uses ἔξωθεν instead of ἔξω and provides further clarification: ἔξωθεν in this context indicates a

²³ Indeed, the Stoics were criticized for this kind of subjectivism by Alexander of Aphrodisias (*Mant.* 179,6-10).

²⁴ For some examples see the texts cited in n. 26 below.

²⁵ 197b18-20 and 35-6; more precisely, Aristotle is here talking about spontaneity (τὸ αὐτόματον) and not about chance (τύχη), but for him the latter is the subcategory of the former (cf. 197a36-7).

cause which is outside the nature of the thing involved in the chance event (*In Ar. Phys.* 352,28-9). For instance, if a tripod is thrown and spontaneously falls on its legs so as to provide a seat, the cause of the tripod's falling so as to provide a seat is external to the nature of the tripod. Now, since phrases that combine ἔξωθεν with ἐκ τύχης or κατὰ τύχην occur in a number of non-Aristotelian texts, it seems that ἔξωθεν had the general sense of a 'cause outside the nature of the thing' even in contexts that were not necessarily loaded with connotations specific to Aristotelian theories of chance and causes.²⁶ It is thus possible that ἔξωθεν has the same basic idiomatic sense in *SE M* vii 247. If so, then perhaps for the Stoics that meant that in those rare cases when an empty appearance turns out true by chance, this is due to causes that are external to the nature of such an appearance.²⁷ Indeed, a view like this would not be unexpected since whatever cognitive role the Stoics assigned to imaginations or empty appearances, it is safe to say that they did not consider the nature of these representational states to be suitable for the discovery of truth about the external world. On the contrary, our sources are clear that this role was in general reserved for perceptual

²⁶ For instance, ἔξωθεν in combination with ἐκ τύχης or κατὰ τύχην is attested in medical texts like Galen *Adv. Jul.* XVIIa 249-50K, *Hipp. Epid.* 996-7; Paulus Aeg. *Epit. med.* 3.76.1; Stephanus *In Gal. ther. Glauc.* 1.285, where it refers to the causes external to the nature of a disease or to the patient in general which produce beneficial or harmful effects by chance.

²⁷ There is some evidence that this idea figured in the debates about the epistemological status and validity of divination. In *Div.* ii 108 Cicero says that when the eyes perceive something correctly that is due to nature and the faculty of sensation (*natura atque sensu*), but when the soul does the same in a dreaming or prophesizing state, that is due to luck and chance (*fortuna atque casu*). Based on the context, it seems that this might have been an objection the Academics used against Cratippus, whom Cicero classifies as a Peripatetic (*Div.* i 5), but it is quite possible that the same idea was shared by the Stoics.

appearances which are caused by present external objects, and in particular for apprehensive appearances which are a special subclass of the latter.

This brings us to ἐκ τύχης. As we saw above, the Stoic understanding of chance suggests that something occurs ἐκ τύχης if its cause is not directly cognitively accessible to us, or in their words, if it is ‘hidden’ (ἄδηλον) from us. If we apply this to *M* vii 247, it follows that the non-apprehensive appearance Sextus is alluding to is true by chance because some kind of cause related to its being true is hidden from us. Most likely, the cause in question is the one that makes the representational content of the appearance agree with the object represented by the appearance.²⁸ Since according to the Stoics the cause of an appearance’s content is either equal to or at least a necessary component of what’s causing this agreement, we can treat the former as the cause of the appearance’s being true. Accordingly, this would mean that the non-apprehensive appearance in *M* vii 247 is true by chance because the cause of its content is hidden from the subject entertaining the appearance.

Are there reasons to think that a view like this was held by (at least some) members of the Stoa? I believe that there are. Recall that we have argued above that in *M* vii 247 Sextus is probably

²⁸ Eusebius reports that Chrysippus’ argument that the predictive success of divinatory knowledge (μαντική ἐπιστήμη) proves that everything occurs according to fate was criticized by Diogenianus in the following way: ‘For that some things turn out according to the plain predictions of the diviners would be a sign not of the existence of divinatory knowledge, but of the chance concurrence [τυχικῶς συμπίπτειν] of the predicted events which agree with the predictions—a thing which gives us no indication of any knowledge’ (*Praep. evang.* 4.3.3). Similarly, Cicero implies in *Div.* ii 52 that the advocates of divination must demonstrate that the agreement between a prophecy and the event it predicts is not the result of chance. This suggests that the one of the key issues in the dispute between the Stoics and their critics regarding the existence of divinatory knowledge was whether or not in cases when the content of a divinatory prediction happens to agree (συμπίπτειν) with the predicted event this agreement is the result of chance.

alluding to what the Stoics would call an ‘empty’ appearance or imagination. Here is a summary of Chrysippus’ understanding of empty appearances or imaginations preserved in Aetius iv 12.1-6:

[1] Chrysippus says that the following four [things] differ from each other. Appearance is an affection arising in the soul, revealing itself and that which has made it. For example, when through sight we observe the white [of a thing], the affection is what is engendered in the soul through vision; and this affection enables us to say that there is something underlying white which activates us. And similarly for touch and smell. [2] Appearance gets its name from ‘light’; for just as light reveals itself as well as the other things encompassed in it, so too appearance reveals itself and that which has made it. [3] Apparent object is that which makes the appearance; the white [of a thing] or the cold [of a thing], or anything capable of activating the soul, is an apparent object. [4] Imagination is an empty drawing, an affection in the soul that comes about from no apparent object, as in the case of people who fight with shadows and punch at thin air. For an appearance has some underlying apparent object, while imagination has none. [5] Phantasm is that which we draw in the empty drawing of imagination. It occurs in people who are melancholic and mad. At any rate, when Orestes in the tragedy says ‘Mother, I beg you, do not set upon me those bloody-looking, dragon-shaped girls! They, they are attacking me!’, he says this as a madman, and sees no one, but merely thinks that he does. [6] That is why Electra says to him ‘Stay, poor wretch, peacefully in your bed; for you see none of those things you think you clearly know.’ And similarly Theoclymenus in Homer.²⁹

²⁹ My translation follows Long and Sedley’s edition of Ps.-Plutarch’s (*Plac.* 900D-901A) version of Aetius iv 12 in LS 2.239, 39B, with one additional emendation, reading δ ἐφελκόμεθα instead of ἐφ’ ὃ ἐλκόμεθα in the first sentence of [5]. For a detailed defense of this emendation, see Stojanović 2020a. The main claims I defend here, however, do not essentially depend on the accuracy of this translation nor the proposed emendation to Aetius’s text.

According to this, Chrysippus made a sharp distinction between an imagination (φανταστικόν) and a perceptual appearance (φαντασία), and thought that they differ in two main ways.³⁰ The first difference is in the causal origin of these two representational mental states. A perceptual appearance is an ‘affection’ (πάθος) in the soul caused by an ‘apparent object’ (φανταστόν), and the latter is defined as ‘that which produced’ (τὸ πεποιηκός) the appearance, referring to an external corporeal object with its qualities (e.g. a white or cold object) capable of activating our soul through its sense organs. On the other hand, an imagination is an affection in the soul which arises in the absence of a corresponding external object. It is defined as an ‘empty drawing’ (διάκενος ἔλκυσμός) because it consists in pulling from our mind a ‘phantasm’ (φάντασμα), a mere ‘supposition of thought’ (δόκησις διανοίας, DL vii 50), something that at the time the imagination

³⁰ Chrysippus’ use of φαντασία exclusively in reference to perceptual appearances in this passage is idiosyncratic. Our main sources on Stoicism or even the later members of the Stoic school do not follow Chrysippus in this. Authors like Sextus Empiricus, Cicero, Plutarch, Nemesius, etc., regularly portray the Stoics as talking about ‘empty φαντασίαι’ and use the word φαντασία to refer also to psychic states entertained in dreams, madness, etc. which according to Chrysippus’ distinction in Aetius would be classified as imaginations. Perhaps this broad use of φαντασία was adopted into Stoic terminology around the time of Antipater of Tarsus, as PBeorl inv. 16545 suggests (see Backhouse 2000; I am grateful to the anonymous referee for this suggestion). We should, therefore, assume that Chrysippus’ point was probably to emphasize that although both psychic states that are, as well as those that aren’t caused by external objects can loosely be called φαντασίαι, only the former should be taken as φαντασίαι in the strict sense of the word.

is entertained is completely the product of our mind.³¹ The causal origin of an imagination is thus not in the object which it represents, but in the soul itself.³²

The second difference is not as explicit, but is still strongly implied in the text. According to Aetius, Chrysippus claimed that just like light makes visible both itself and the things encompassed by it, a perceptual appearance has the ability to ‘reveal’ (ἐνδείκνυσθαι) both itself and the object that caused it.³³ To understand the import of this claim for our present discussion, I believe it would be useful to view it in the context of the subjectivism of the so-called Cyrenaic school since it seems that Chrysippus’ position was at least to some extent motivated by the latter. Namely, in *M* vii 191-4, a section that bears some striking terminological parallels to Aetius’ iv 12, Sextus says that the Cyrenaics held that while we do have access to ‘affections’ (πάθη) or

³¹ Perhaps this is why a phantasm was called by the Stoics a ‘re-imprint’ (ἀνατύπωμα, DL vii 61 = LS 30C₂). For an elaborate defense of the interpretation that for Chrysippus imagination essentially involves pulling a phantasm from the mind, see Stojanović 2020a.

³² Cf. the following sentence from Sextus’ report on the Stoics’ theory of appearances in *M* vii 241: ‘Appearance is produced either by the external things or by the affections in us [τῶν ἐν ἡμῖν παθῶν] (which is quite more properly called by them an ‘empty drawing’).’ (Unlike Chrysippus, Sextus takes ‘empty drawings’ or imaginations to be a species of the genus of φαντασία that includes all representational mental states, as we have explained in n. 30 above.)

³³ Cf. SE *M* vii 161-3, where perceptual appearance is repeatedly characterized as having the ability to reveal both itself and the external object that caused it. Although the context is Sextus’ report on Carneades’ argument against perception as a criterion of truth, the view is probably adopted from Chrysippus since appearance is defined as an ‘alteration’ (ἀλλοίωσις; cf. SE *M* vii 229-30). The same theme is echoed again in SE *M* vii 442: ‘light appears capable of uncovering not only other things but itself too’ (τὸ φῶς οὐ μόνον τῶν ἄλλων ἀλλὰ καὶ ἑαυτοῦ ἐκκαλυπτικὸν φαίνεται). It is clear from the context that the unnamed ‘dogmatists’ to which Sextus attributes these words are in fact the Stoics. Note that another Stoic technical term, ἐκκαλυπτικόν, occurs here instead of ἐνδεικνύμενον; on the relationship between these two terms, see n. 35 below.

representational states which occur in our soul, we are unable to grasp that which is actually causing them and their contents. For example, while we can say that we are ‘being whitened’—i.e. affected in a way as though from a white object—we cannot say whether that which activated our soul and caused the representation is indeed a white object or something else. From this, the Cyrenaics concluded that each representational state ‘reveals’ (ἐνδείκνυται) to us nothing more than itself. In other words, instead of revealing them, all our representational states without exception leave their causes hidden (ἄδηλα) from us.³⁴ Chrysippus’ claim that at least one class of representational mental states, perceptual appearances, are capable of revealing their causes seems to be a direct reaction to the Cyrenaic position. According to Aetius, he thought that when we receive a perceptual appearance of a white external object, the appearance ‘enables us to say that there is something underlying white which activates us.’ In other words, perceptual appearances provide us with direct cognitive access not only to the representations of objects as the Cyrenaics argued, but also to the actual external objects that have caused these representations by interacting with our senses. A key feature of a perceptual appearance according to Chrysippus, therefore, is its ability to reveal the cause of its representational content.

Furthermore, I think that we can safely conclude that Chrysippus also held that, in contrast to a perceptual appearance that directly reveals the cause of its content, imagination leaves the cause if its content hidden. Several things suggest this. First, if the idea that perceptual appearances are special because they can reveal their causes was indeed formulated by Chrysippus in reaction to the views of the Cyrenaics, then it is plausible that he agreed with them that other

³⁴ Cf. Anon. *In Plat. Theaet.* 65.29-36: ‘The Cyrenaics say that only the affections are apprehensible, while the external things are inapprehensible. For, they say, I apprehend that I am being burnt, but whether the fire is caustic is hidden [ἄδηλον].’

representational mental states, such as imaginations, do leave their causes hidden. Second, ἐνδείκνυσθαι was a technical term generally used by the Stoics to refer to gaining access to something that is hidden (ἄδηλον). For instance, this is the sense the verb and its cognates have in the Stoic theory of sign-inference when they refer to the ability of signs to reveal things that are hidden, as in the case of the observable sweat being a sign which reveals the existence of invisible pores on the skin.³⁵ Finally, it seems that one of Chrysippus' main points, implied by his distinction between an impressor and a phantasm, was that an imagination differs from a perceptual appearance in that it does not represent 'that which produced it' (τὸ πεποιηκός). An imagination is not only a representational state caused solely by the soul's internal processes, but one which does not reveal these processes to us as the cause of its representational content. Chrysippus' example with Orestes illustrates this quite nicely: while imagining that the Furies are attacking him, Orestes is completely unaware that the representation of the Furies is produced by his own deranged mind and not by the Furies. The actual cause of his representation of the Furies thus remains hidden from Orestes.

It is important to note one more element in Aetius' summary. After Orestes, who seems to serve as an example of imagination caused by mental derangement that involves no divine intervention, the text ends by briefly mentioning Theoclymenus as the second illustration of imagination used by Chrysippus in this context. Theoclymenus is a prophet who plays the role of a supporting character in Homer's *Odyssey*, and the reference in Aetius is most likely to *Od.*

³⁵ SE *M* viii 143. In addition to ἐνδείκνυσθαι, the verb ἐκκαλύπτειν and its cognates also feature prominently in the Stoic theory of signs and have the same meaning of uncovering that which is hidden (SE *PH* ii 135, 143; *M* viii 314, 385, 422). This relevant because like ἐνδείκνυσθαι, ἐκκαλύπτειν too was used by the Stoics in the metaphor comparing perceptual appearances with light; see n. 33 above.

20.350-7³⁶ where, during the banquet attended by Penelope's suitors, he falls into a trance and has a vision based on which he prophesizes that the suitors will all be dead by the end of the night.³⁷ Theoclymenus' prophecy later turns out to be true. The fact that Chrysippus used this example in the context of his discussion of imagination suggests two things of relevance for our discussion. First, it further supports our hypothesis that the Stoics were concerned about the epistemological role of imagination in divination. Second, it implies that in Chrysippus' view there is no difference between ordinary and divinely inspired imaginations in terms of causal origin and revelatory ability, which implies that the interpretation of the Stoics' approach to epistemic luck defended here should apply universally to all true imaginations or 'empty' appearances.

Let us now return to the passage crucial for our case. Namely, if the above analysis of Aetius iv 12 is correct, it promises to illuminate Sextus' cryptic words in *M* vii 247. It suggests that the Stoics (or at least Chrysippus and those who followed him closely on this) thought that when imaginations are true, they are so by chance because empty appearances or imaginations are not the sort of representational states that have the ability to reveal the cause of its content, thereby leaving the cause of their being true hidden from us. To use the example mentioned above, if I am imagining in a dream that Dion is alive and Dion is indeed alive, my imagination would be true merely by chance because my soul's dreaming state, which by causing its content is causing my

³⁶ Interestingly, the same lines from the *Odyssey* are referred to by Plato (*Ion* 538e-539a) and by Porphyry (*Hom. quest. Iliad.* ad 24.221,46-52) as an example of Homer's treatment of divinatory practice.

³⁷ Homer is not explicit about Theoclymenus' mental state, but according to the anonymous scholium *ad Od.* 20.356 in Dindorf 1855, 694, his prophecy is entertained 'under some kind of divine inspiration' (ὕπο τινοῦ ἐνθουσιασμοῦ). Furthermore, an alternative summary of Aetius iv 12 found in Ps.-Galen's *Hist. phil.* 93 says that, like Orestes, Theoclymenus was in the state of temporary melancholy, suggesting that Chrysippus perhaps thought so too.

imagination to be true, is not revealed to me but remains hidden. Since Aetius' summary suggests that divinely inspired imaginations were understood no differently than the regular ones, the same explanation applies to imaginations involved in the predictions of natural divination, which, as I have argued above, are probably the non-apprehensive true appearances Sextus is alluding to in *M* vii 247. Accordingly, to use Chrysippus' example, Theoclymenus' prophecy would be true merely by chance because the real cause of its content and thus of its being true, Theoclymenus' soul in a divinely inspired deranged state, is not revealed but instead remains hidden from Theoclymenus.

If all this is correct, then it follows that the Stoics thought that the anti-luck requirement for apprehension and (by extension) knowledge is met by the existence of a causal relationship between a true appearance and the object represented by the appearance. Such relationship ensures that when a mental state represents an external object truthfully, this is not the result of chance because the cause of its truth is revealed to the subject and not left hidden. The same analysis can explain why the Stoics would have thought that the apprehensive appearance is not true by chance—it is a special kind of mental state which not only represents an external object accurately but also has content that is caused by the very object it represents and thus directly reveals that cause to us. This is probably why the Stoics thought that the Sage is 'invulnerable to chance' (ὕπὸ τῆς τύχης ἀήττητός, Themis. *Or.* 32.358b), since as an ideal person who assents only to apprehensive appearances, the Sage is able to gain direct cognitive access to the web of causes of which the world around him or her is composed.³⁸

³⁸ For interpreting Themistius' claim about the Sage in terms of the latter's superior access to causes, see Brouwer 2011, 118 and Hahmann 2019, 186-7.

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