

Misprinted Representations in Stoicism

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Abstract: This paper deals with the Stoic concept of misprinted representation (φαντασία παρατυπωτική), which has received little attention compared to other concepts of Stoic epistemology and philosophy of mind. I aim at showing that a better understanding of this concept is important for grasping some elements of the Stoic account of mental representations that have been ignored or misunderstood in modern Stoic scholarship. First, by clarifying the status of the misprinted representation as a genuine representation, we can understand what it means (and does not mean) to say, from the Stoic point of view, that the intentional object of a representation is the external object that caused it. Second, by understanding this issue, we obtain some resources to deal with the ambiguity of the preposition *ἀπό* in the definition of cognitive representation. Thus, the concept of misprinted representation proves to be important for appropriately understanding the Stoic concepts of representation and cognitive representation.

Keywords: Stoic epistemology, Stoic philosophy of mind, phantasia, phantasia kataleptike, mental representations

Introduction

The Stoics maintain that a representation (φαντασία) is a mental state through which external objects appear (φαίνομαι) immediately to our awareness (Aetius *Placit.* 4.12.1–6 = T3).¹ However, only a special kind of representation could provide us with knowledge of

¹ To be accurate, only perceptual representations (φαντασῖαι αἰσθητικαί) provide us with awareness of external objects. Nevertheless, the Stoics considered that perceptual representations are the representations

the external world: the cognitive representation (φαντασία καταληπτική). Cognitive representations can play this epistemological role because they are the only ones that allow us to grasp external objects in such a way that we can establish with accuracy and certainty facts about them (Cicero *Acad.* 1.41; *SE M.* 7.247–8 = *SVF* 1.60; 2.65).² Given the importance of the cognitive representation, the Stoics were concerned with clearly distinguishing it from other kinds of epistemologically defective mental states. On the one hand, they distinguished it from the imagination (φανταστικόν), the mental state involved in dreams and hallucinations and through which nothing external appears to our awareness; on the other hand, they distinguished it from the so-called misprinted representation (φαντασία παρατυπωτική), a kind of representation through which external objects appear other than they really are.

As the cornerstone of Stoic epistemology, the concept of cognitive representation has been extensively discussed in modern Stoic scholarship.³ Despite this, these discussions seem to consider that a careful analysis of the concept of misprinted representation is irrelevant to elucidating the distinctive nature of the cognitive representation. The same situation occurs regarding the Stoic concept of representation itself. Although this concept has recently attracted attention from scholars, they do not include an analysis of the misprinted representation.⁴ In contrast, modern scholars have thoroughly studied the Stoic concept of imagination. Unlike misprinted representations, imaginations are considered important for understanding not only the concept of cognitive representation but also the Stoic account of mental representations.⁵

par excellence. The other kinds of representations are analyzed in terms of their account of perceptual representations. Indeed, the Stoics typically used the term φαντασία without further qualification to refer solely to perceptual representations. Throughout this paper, I follow this Stoic usage. Now, I follow Caston's reasons (*forthcoming*) for translating 'φαντασία' as 'representation'.

² In this paper, I will provide references to *Stoicorum Veterum Fragmenta* (SVF) when available.

³ See Frede (1983 and 1999), Annas (1990), Sedley (2002), Reed (2002), Togni (2006), Nawar (2014), Shogry (2018 and 2021), and Stojanović (2019). Although most of them recognize (explicitly or implicitly) that cognitive representations are different from misprinted representations, they do not offer analyses concerning the distinctive nature of the misprinted representation.

⁴ E.g., Harven (2019), Shogry (2019), Caston (*forthcoming*), and Veres and Macheck (*forthcoming*). Although they are interested in elucidating certain features of the Stoic concept of representation, their analyses are focused on issues not necessarily related to the concept of misprinted representation.

⁵ On the Stoic concept of imagination, see Reed (2002), Stojanović (2020), and Caston (*forthcoming*).

This paper aims at showing that a better understanding of the concept of misprinted representation is important for grasping some elements of the Stoic account of mental representations that have been ignored or misunderstood in modern scholarship. To this aim, I seek to elucidate the distinctive nature of the misprinted representation. In the first section, I examine the main passages that discuss this concept. Based on this examination, I advance my account of what it means to say that a representation is misprinted. In the second section, I set out the Stoic distinction between representations and imaginations. After discussing some problems regarding the place of the misprinted representation within this distinction, I argue that misprinted representations are genuine representations despite inaccurately representing their intentional object. In the last section, I turn to the concept of cognitive representation. Here I show that the insights obtained so far can help us to deal with one of the most controversial issues in modern Stoic scholarship: the definition of cognitive representation.

1. What is a Misprinted Representation?

The main passages that discuss the Stoic concept of misprinted representation are found in Sextus Empiricus' critical review of Stoic epistemology. In this review, misprinted representations are characterized as defective representations that do not meet the requirements for being cognitive representations:

T1. Sextus Empiricus *Adversus Mathematicos* 8.67–8 (tr. Bett, modified)

[The Stoics] have agreed that some representations are empty, such as the ones that struck Orestes from the Furies, and that others are misprinted – the ones that are from external objects, but not in accordance with those external objects, like the ones that happened to Heracles in his madness; they were from his own children, but were as if from those of Eurystheus. For it came about from the children, who were external objects, but not in accordance with those external objects; for he did not see the children as his own, but says “There, one of Eurystheus’ youngsters dies; He has fallen to me, paying for his father’s enmity.” And since this is so, representations become indistinguishable, and the Stoics are not able to say which are in truth cognitive and come about from external objects and in

accordance with those external objects, and which are not like this, as we showed earlier at greater length.

T2. Sextus Empiricus *Adversus Mathematicos* 7.249 (SVF 2.65) (tr. Bett, modified)

The first [attribute of the cognitive representation] is its coming about from what is present; for many representations [i.e., the empty ones] strike us from what is not present, as in the case of crazy people, and these would not be cognitive. Second, its being from what is present and in accordance with that present thing; for again, some [i.e., the misprinted ones] are from what is present, yet do not resemble that present thing, as we showed a little earlier in the case of Orestes in his madness. For he drew in a representation from what is present, Electra, but not in accordance with that present thing; for he believed her to be one of the Furies, and so pushes her away as she approaches eager to take care of him, saying “Leave off! You are one of my Furies.”

According to these texts, a cognitive representation meets (at least) two requirements. First, it is caused by an external object. Second, it accurately represents the external object that caused it. A misprinted representation is defective because it does not meet the second requirement. Although caused by an external object, a misprinted representation inaccurately represents it. Thus, this kind of representation represents external objects as having properties they do not have or lacking properties they do have. In any case, the external object appears to our awareness other than it really is⁶.

As suggested by the previous texts, illusions are misprinted representations *par excellence*.⁷ They present two illustrative examples. In the first example, Orestes has a misprinted

⁶ Another Stoic passage that discusses the concept of misprinted representation is Antipater’s fragment PBerol inv. 16545. Although this fragment presents a relatively later Stoic view, it takes the same line as T1 and T2. According to Backhouse’s (2002) reconstruction, the passage says that “... of representations which come about from something some are in accordance with the existing things and convey the hallmark of those objects, others are misdepicted. We call the latter ‘misprinted’ (παρατυπωτικάς) ...” Again, misprinted representations are defined as those that inaccurately represent the object from which they come about.

⁷ Here I follow Smith’s (2002) definition of illusion and hallucination. Thus, by ‘illusion’ I mean “any perceptual situation in which a physical object is actually perceived, but in which that object perceptually appears other than it really is” (23). In contrast, by ‘hallucination’ I mean a perceptual situation “where the subject seems to perceive a physical object, but where there is in reality no physical object which is the one he seems to perceive” (191). Thus, “in illusion, although a physical object appears other than it actually is, that very object is really perceived; in hallucination, “that” physical object does not exist” (191).

representation caused by his sister Electra that inaccurately represents her as being one of the Furies. This example does not provide details of how Electra appears to Orestes' awareness as being one of the Furies. As I argue in the next section, she appears so because she appears as having the characteristic features of the Furies (e.g., snaky hair and bloody-looking body). In the second example, Heracles has a misprinted representation caused by his children that inaccurately represents them as being those of Eurystheus. In this example, Heracles' children appear to his awareness as having the characteristic features of Eurystheus' children (e.g., their facial features).

A word of caution about the first example is important here. The example of a misprinted representation in text T2 (also in T6 below) is quite different from the example of an empty representation in text T1 (also in T3 below). These are two different examples with the same characters. Although both are about Orestes and the Furies, each example illustrates a different kind of epistemologically defective mental state. In T2, Orestes has a representation caused by an external object: his sister Electra. However, since this representation is misprinted, she appears to Orestes' awareness as being one of the Furies. In contrast, the example in T1 is about a representational mental state that is caused by no external object. Hence, the Furies that appear to Orestes' awareness in T1 are just figments of his mind. In other words, the example of T1 is a case of hallucination, and the example of T2 is a case of illusion.⁸ In the next section, I will return to the example in T1 and say more about the nature of the so-called empty representations.

The Stoic usage of the term 'misprinted' sheds light on why some representations inaccurately represent the external object that caused them. This term takes us to Zeno's definition of representation. According to the founder of the Stoic school, a representation is an impression on the soul (τύπωσις ἐν ψυχῇ). This definition is based on the following analogy. Just like seal rings cause impressions on the wax that depict them, external objects cause representations in the soul that (somehow) represent them (DL 7.46 = SVF 2.53). Although there was controversy around the exact meaning of the analogy among Zeno's successors (SE *M.* 7.228–31 = SVF 2.56), all ancient Stoics agreed that representations

⁸ See the previous footnote.

result from the causal interaction between external objects and the soul⁹. Moreover, they acknowledged that failures could take place in this causal interaction. These failures are what account for the fact that misprinted representations are inaccurate representations of the external objects that cause them. When the seal ring is misprinted on the wax, the resulting impression incorrectly depicts the ring. Likewise, when a representation has a defective causal history, it inaccurately represents the external object that caused it.

This is evident in the previous examples. Orestes and Heracles have misprinted representations because they are mentally deranged. Due to their mental conditions, the external objects were incorrectly printed on the soul. Of course, mental derangements are not the only conditions that produce misprinted representations. Conditions in the sense-organs and the environment also cause representations to have defective causal histories¹⁰. Thus, we can conclude that to say that a representation is misprinted means that it has a defective causal history. Furthermore, its defective causal history explains why it inaccurately represents the external object that caused it. This suggests that the representations that accurately represent the external object that caused them (i.e., cognitive representations) do so because they have an appropriate causal history.¹¹

⁹ The causal interaction that results in a representation constitutes a complex process consisting of several steps. The starting point is the affection (*πάθος*) produced by the causal influence of external objects on the sense-organs. This affection, which contains information about the sensory properties of these objects, also extends to the portion of the soul that lies in the sense-organs. Since the soul is distributed throughout the body, the affection can travel from the sense-organs to the heart. Here the commanding part (*ἡγεμονικόν*) of the soul—or mind (*διάνοια*)—is located. When the affection reaches the heart, the mind is responsible for judging and understanding the information conveyed by it. From these activities, the mind finally produces a representation. Thanks to this representation, the subject becomes aware of the external object that causally interacts with her perceptual apparatus. On this process, see Aetius *Placit.* 4.21.1–4 (SVF 2.836), Calcidius 220–1 (SVF 2.879), DL 7.52 (SVF 2.71), and Plotinus *Enn.* 4.2.2; 4.7.7 (SVF 2.858).

¹⁰ The Stoics mention five conditions for a representation to be successfully produced: the sense-organ (*αἰσθητήριον*), the perceptual object (*αἰσθητήριον*), the place (*τόπος*), the manner (*πῶς*), and the mind (*διάνοια*) (SE *M.* 7.424 = SVF 2.68). Regarding the last condition, some scholars have shown (Shogry 2021; Veres and Macheck *forthcoming*) that not only must the mind be in good condition (e.g., not deranged), but it must also possess the relevant discriminatory capacities that allow it to grasp the properties of the external object. This means that the mind's discriminatory capacities are part of what constitutes the causal history of a representation. Thus, the conditions for a representation to be successfully produced are not all external to the mind.

¹¹ This is why some scholars remark that the cognitive representation possesses an appropriate causal history (Frede 1983, 71–84; Nawar 2014; and Shogry 2018).

2. Misprinted Representations within the Distinction between Representations and Imaginations

In this section, I set out the Stoic distinction between representations and imaginations. After explaining what this distinction is about, I show that there are some challenges when we intend to place the misprinted representation within this distinction. I develop a solution to address these challenges according to which the misprinted representation is a genuine representation. This solution allows us to grasp certain features of the Stoic concept of representation that have been ignored by modern Stoic scholarship and which are related to what it means to say that a representation has an external object as its intentional object.

2.1 *The Distinction between Representations and Imaginations*

According to the Stoics, representations are mental states that provide us with awareness of external objects. However, they recognized that there is another kind of representational mental state which provides us with awareness of entities that are not external objects. These are the mental states involved in dreams and hallucinations. The Stoics called them imaginations and clearly distinguished them from representations:

T3. Aetius *Placit.* 4.12.1–6 (SVF 2.54) (tr. Long and Sedley, modified)

Chrysippus says that the following four things are different. Representation is an affection occurring in the soul, which reveals itself and its cause. Thus, when through sight we observe something white, the affection is what is engendered in the soul through vision; and this affection enables us to say that there is a white object which activates us. The same applies for touch and smell. The word representation is derived from ‘light’; for just as the light reveals itself and whatever else it includes in its range, so a representation reveals itself and its cause. Represented object is that which produces a representation: e.g., something white or cold or everything capable of activating the soul. Imagination is an empty drawing, an affection in the soul which arises from no represented object, as when someone fights with shadows and strikes his hands against thin air; for a representation has some underlying represented object, but imagination has none. Figment is that which [we

draw]¹² 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, snake-shaped girls! They, they are attacking me!”, he says this as a madman, and sees nothing, but merely thinks that he does. 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 observe.”

This text attributes a twofold distinction to Chrysippus, the third head of the Stoic school. On the one hand, the aforementioned distinction between the representation (φαντασία) and the imagination (φανταστικόν). On the other hand, the distinction between the represented object (φανταστών) and the figment (φάντασμα). Let us examine these distinctions in detail.

The distinction between representations and imaginations sharply contrasts with the loose use of the term ‘representation’ in the Stoic sources. According to this loose use, the imagination is a species of representation that is called “empty representation” or “false representation” (SE *M.* 8.67; 7.241; 8.56–60 = SVF 2.64; 2.68). Against this loose use, Chrysippus proposed to use the term ‘φαντασία’ (representation) to refer only to the representational mental states resulting from the causal interaction between external objects and the perceptual apparatus. Accordingly, he took the term ‘φανταστικόν’ (imagination) to refer to the representational mental states that arise without the causal influence of external objects on the perceptual apparatus¹³. The basis of this terminological refinement is a disjunctive view of perceptual representations.¹⁴

¹² I agree with Stojanović (2020) that the definitions of imagination and figment should be interpreted in light of Nemesius 55,21–2. In this text, the expression ὃ ἐλκόμεθα (that to which we are attracted) in T3 has been replaced by ὃ ἐφέλκομεν (that which we draw). Thus, the characterization of imaginations as διάκενος ἔλκυσμός means that they are empty drawings instead of empty attractions. Nevertheless, the rejection of this suggestion does not affect my analysis of the misprinted representation.

¹³ In the times of Chrysippus, the term ‘φανταστικόν’ was part of the philosophical jargon. Aristotle used that term for the capacity to produce representational mental states (*De Anima* 432a 31; *Insomn.* 459a16–17). In contrast, Chrysippus used it for a specific kind of representational mental state.

¹⁴ Reed (2002), Vasiliou (2019), and Caston (*forthcoming*) have pointed out the presence of certain disjunctive elements in Stoicism. However, they disagree about how central these elements are and what kind of disjunctivism the Stoics hold.

In general, disjunctive views of perception argue that veridical perceptions and hallucinations are mental states of different kinds because they mentally differ in some significant respect.¹⁵ This means that these mental states do not share a common genus, so they must be disjunctively analyzed as divided into two different genera. In the same vein, Chrysippus argues that representations and imaginations are different kinds of mental states. Accordingly, he offers an analysis of these mental states that emphasizes what makes them different enough to constitute two separate genera. As can be seen in T3, this difference is grounded on the fact that they result from completely different causal processes.

As mentioned in the previous section, representations result from the causal interaction between external objects and the soul. This explains why the Stoics defined representations as impressions on the soul. As suggested by the analogy of the seal ring and the wax, it is necessary that an external object act as an impressor in order for a representation to be printed on the soul. Unlike the representation, the imagination arises without the causal influence of an external object on the perceptual apparatus. Imaginations are caused by the mind itself. More precisely, they result from its capacity to draw figments by manipulating the content of previously acquired representations (SE *M.* 8.56–60 = SVF 2.88). Since figments are not existent entities, the Stoics defined the imagination as an empty drawing (διάκενος ἔλκυσμός).¹⁶

The distinction between represented objects and figments is also part of Chrysippean disjunctivism. The idea behind this distinction is that the intentional objects of representations and imaginations are also different in kind. By intentional objects, I mean the entities that appear to our awareness when we experience a representational mental state. Thus, the entities that appear to our awareness when we experience a representation are different in kind from those that appear when we experience an imagination. On the one hand, represented objects are the intentional objects of representations. They are the

¹⁵ Disjunctivists disagree on which respect is significant. Indeed, different responses to this issue give rise to different forms of disjunctivism. On this topic, see Soteriou 2020.

¹⁶ In the next section, I will return to the formation of imaginations and make more remarks about it.

external objects that cause representations by interacting with the perceptual apparatus of a subject. This means that the intentional object and the cause of a representation are one and the same thing. This is why Chrysippus says that representations reveal (i.e., make us aware of) their cause. On the other hand, figments are the intentional objects of imaginations. Unlike represented objects, figments are not the cause of imaginations. They are non-existent and purely mental entities.¹⁷ As such, they cannot causally interact with the soul to produce any representational mental state. As I said before, the mind itself is the cause of imaginations. Although figments are mental entities, the mind and its figments are different entities. Therefore, unlike representations, the cause and the intentional object of imaginations come apart.

Texts T1 and T3 offer the same example of an imagination and its figment. In this example, Orestes is in a hallucinatory state that causes him to experience an imagination of a Fury. In this case, the Fury, a mythological creature, is not the cause of the imagination. It is a non-existent and purely mental entity that appears to Orestes' awareness when experiencing that imagination. For the most part, the Stoic sources mention fictional entities as examples of figments. Besides the Furies, they mention winged humans (*M.* 8.56–60 = T7), Charybdis, and centaurs (PBerol inv. 16545; DL 7.52–3 = SVF 2.87). However, the sources also mention an example of a non-fictional entity that is a figment (*M.* 7.244–5 = T6). In this example, someone is experiencing an imagination during sleep (i.e., a dream). In this imagination, Dion, who is a live person, appears to her awareness as standing right there. Presumably, the subject did not have in her memory a representation of Dion standing right there, so her mind must have taken previously experienced representations of Dion and her room to produce the imagination. Accordingly, what appears to her awareness is not the real Dion but a figment that resembles Dion, so to speak. Thus, non-fictional entities can be figments when they are not the direct cause of a representational mental state.¹⁸

¹⁷ The ontological status of figments is a controversial issue I do not seek to discuss here. On this issue, see Long and Sedley (1987, 163–5), Caston (1999), Salles (2011), and Boeri and Salles (2014, 32–3).

¹⁸ Unfortunately, our sources do not tell us the difference between imaginations and memories. For the Stoics, memories are stored representations that the subject can recall when needed (*Placit.* 4.11.1–2 = SVF 2.83; Cic. *Acad.* 2.30). This means that memories are representations and, as such, their intentional objects are the external objects that originally caused the stored representations. In contrast, imaginations are composed from scratch by manipulating the content of previously acquired representations. This means that their intentional

2.2 *The Problem with Misprinted Representations*

Now let us turn to the case of misprinted representations. Since text T3 does not explicitly mention them, it is not clear whether they are representations or imaginations. The very fact that the Stoics called them representations is not conclusive as they also loosely say that imaginations are representations. Furthermore, placing misprinted representations within the distinction between representations and imaginations faces some challenges. This is because misprinted representations seem to share distinctive properties of both representations and imaginations. Let me spell out this problem.

On the one hand, it is evident that misprinted representations are representations. They result from the causal influence of external objects on the soul. Their formation process is, then, the same as that of any other representation. Therefore, they are impressions on the soul. What is peculiar about misprinted representations is that some failures take place in their formation process. This is what makes them *misprinted* impressions on the soul. At any rate, their formation does not require that the mind draw figments by manipulating the content of previously acquired representations.

But, on the other hand, misprinted representations seem to have figments as their intentional objects. According to the example in T2, Orestes has a misprinted representation caused by his sister Electra that inaccurately represents her as being one of the (three) Furies. The example also states that Orestes thinks that the thing in front of him is the Fury and, consequently, he screams and pushes his sister away. This behavior suggests that the thing that appears to Orestes' awareness is the Fury, not Electra. In fact, it would be odd to claim that he reacts like that when Electra appears to his awareness. Thus, Orestes' misprinted representation is caused by Electra, but a Fury is its intentional object.

objects, even when they are non-fictional entities, are figments. I thank an anonymous reviewer for bringing this issue to my attention.

In accordance with the above, misprinted representations seem to be hybrid mental states. Like representations, they are caused by external objects. Like imaginations, their intentional objects are figments. However, this conclusion is troublesome. The idea of hybrid mental states threatens the legitimacy of the distinction between representations and imaginations. Moreover, we have no evidence that the Stoics considered the existence of mental states that are half representations and half imaginations. To deal with this issue, I will show that misprinted representations are not hybrid mental states. In what follows, I will argue that they are representations and that, hence, the entity that appears to our awareness when we experience a misprinted representation is the external object that caused it.

The problematic aspect of misprinted representations is that they make external objects appear to our awareness other than they really are. In turn, this causes us to mistake external objects for things that are not present or even existent. This fact makes it reasonable to ask whether their intentional objects are either external objects or figments. Indeed, based on this problematic aspect, the members of another Hellenistic school, the Cyrenaics, argue that misprinted representations do not make us aware of the external object that caused them:

T4. Sextus Empiricus *Adversus Mathematicos* 7.192–4 (tr. Bett, modified)

[The Cyrenaics say that] the person with vertigo or with jaundice is activated yellowly by everything, and the person with ophthalmia is reddened, and the person who presses on his eye is activated as if by two things, and the mad person sees Thebes double and imagines the sun double, and in all these cases, that they are affected in this way (for example, they are yellowed or reddened or doubled) is true, but that the thing that activates them is yellow or reddish or double is thought to be false. And so, too, it is most reasonable to hold that that we are not able to grasp anything more than our own affections ... For the affection that happens in us reveals to us nothing more than itself. Hence in fact (if we must tell the truth) only the affection appears to us; the external thing that produces the affection is perhaps an existent thing, but it does not appear to us.

This text presents the Cyrenaic argument for the conclusion that no representation makes us aware of the external object that caused it. The starting point of the argument is the fact that external objects appear to us other than they really are when we suffer from abnormal conditions. This is clearly the case of misprinted representations. From this fact, they conclude that what is most reasonable (εὐλογώτατον) to hold is that the only thing that appears to our awareness is the affection produced by the external object. In the Stoic terminology, we are only aware of experiencing a representation.

Even if the Stoics reject the general conclusion¹⁹, the Cyrenaic argument still highlights the problems of holding that misprinted representations make us aware of the external object that caused them. Indeed, if the thing that appears to our awareness through a misprinted representation looks different from the external object that caused it, the thing that appears is not that external object. Since the Cyrenaics were not committed to Chrysippus' twofold distinction, they did not say that the thing that appears to our awareness is a figment. But in the Stoic framework, if that thing is not the external object that caused the misprinted representation, it has to be a figment. The assumption that seems to be behind this reasoning is that, for an external object to be the thing that appears to our awareness, it needs to appear as it really is. I do not think that the Stoics accepted that assumption.

2.3 Misprinted Representations as Genuine Representations

To be fair, extreme examples elicit the intuition that the intentional object of a misprinted representation is not the external object that caused it but what we think appears to us. For instance, the intentional object of Orestes' misprinted representation seems to be what he thinks appears to his awareness: the Fury. Nevertheless, less extreme examples do not elicit that intuition. Let us consider the following example. Iphigenia experiences a misprinted representation caused by her sister Electra that inaccurately represents her as having black hair. Since Electra has red hair, Iphigenia thinks that her sister dyed her hair. Unlike the

¹⁹ We have no evidence of a dispute between the Stoics and the Cyrenaics about this issue. However, this dispute could have occurred given the chronology, the similarity of their concerns, and, especially, the shared philosophical jargon. For instance, the verb ἐνδεικνύναι (to reveal), which is at the heart of the dispute, appears in both T3 and T4 despite being from two independent sources.

previous one, this example elicits the intuition that the intentional object of Iphigenia's misprinted representation is the external object that caused it. The issue with this misprinted representation is that it makes Iphigenia aware of Electra, but with a property that she does not have. But, at any rate, what appears to her awareness is Electra herself, not a figment that looks exactly like Electra but with black hair.

Examples like the previous one show that external objects are the intentional objects of the representations they cause, even if these objects appear to one's awareness other than they really are. Thus, misprinted representations make us aware of the external object that caused them, but, since they are misprinted, they make us aware of this object with properties it does not have. Extreme examples must be interpreted in the same way. The entity that appears to Orestes' awareness is the external object that caused his misprinted representation: Electra. However, she appears as having some of the characteristic features of the Furies (e.g., snaky hair and bloody-looking body). The fact that she appears as having properties that she does not have does not imply that she is not the thing that appears to Orestes' awareness. As the external object that causes Orestes' misprinted representation, she is its intentional object. In this way, we preserve a distinctive feature of the Stoic concept of representation, namely that the cause and the intentional object of a representation are the same. This feature is what differentiates representations from imaginations, whose cause and intentional object diverge.

There is still an issue to be discussed. Namely, what accounts for Orestes' behavior? According to the view I have defended here, he does not scream and push his sister away because one of the Furies (i.e., a figment) appears to his awareness. Rather, what accounts for Orestes' behavior is that he forms the false belief that the thing that appears to him is one of the Furies. Since his misprinted representation inaccurately represents Electra as being one of the Furies, assenting to it causes Orestes to believe that the Fury is in front of him. Two passages suggest that this interpretation agrees with the Stoic position. The first one is the previously cited text T2. According to it, Orestes "believed (*ὑπελάμβανεν*) her [i.e., Electra] to be one of the Furies." The other one is the following text:

T5. Sextus Empiricus, *Adversus Mathematicos* 7.170²⁰

... [a representation] from what is present but disagreeing with the present thing, and not in accordance with that present thing, such as the one from Electra that struck Orestes. He, by holding the opinion (δοξάζοντι) that she is one of the furies, says “Leave off! You are one of my Furies.”

These texts claim that Orestes *believes* and *opines* that Electra is one of the Furies due to his misprinted representation. The verbs used in both texts refer to the Stoic concepts of opinion (δόξα) and belief (ὀπίσθησις). While a belief is any assertive mental state resulting from an act of assent to a representation, an opinion is a belief resulting from an act of assent to a non-cognitive representation.²¹ The fact that these concepts characterize Orestes’ epistemic situation when experiencing a misprinted representation suggests that his mistake lies at the level of assent (or judgment) and not at the representational level. In other words, the mistake is not that Orestes’ misprinted representation picks out the incorrect intentional object as a result of its defective causal history. The mistake is that Orestes makes an incorrect judgment about the identity of the thing that appears to his awareness because his representation inaccurately represents it.²² This situation does not happen in Iphigenia’s

²⁰ Bett (2005, 36), following Heintz’ edition, considers this text an ill-advised gloss. With Bury (1935, 92–3), who follows Bekker’s edition, I retain it. Although the passage discusses Academic views, we can use it as evidence for Stoicism. This is because the Academics borrowed Stoic theses and concepts to develop their own views, which in turn were critical reactions to the Stoic views. Indeed, Bett excises this passage because it closely resembles text T2 and, hence, seems to present Stoic views. On the Academic usage of Stoic theses and concepts, see Pineda (2018). If the reader still finds it problematic, the other text (T2) is sufficient evidence to support my proposal.

²¹ On these concepts, see Moss and Schwab (2019, 24–5), and Vogt (2012, 160–6).

²² An anonymous reviewer raised the following objection to my interpretation. Since assenting is to take as true the propositional content that is already embodied in a representation itself, it is hard to see what the relevant proposition would be other than “One of the Furies is attacking me.” This means that the intentional object would seem to be a Fury, not Electra. Now, I have intentionally avoided discussing the Stoic theory of mental content. Although the possession of propositional content is a distinctive feature of the Stoic concept of representation, the nature of this feature is a highly controversial issue (Harven 2019, Shogry 2019, Caston *forthcoming*). For this reason, I do not think that discussing this complex issue can be fruitful for understanding the nature of misprinted representations. We could respond to the objection by arguing that the relevant proposition of Orestes’ misprinted representation can have other forms that do not take the Fury as its intentional object. For instance, the definite proposition “This thing (in front of me) is one of the Furies and is attacking me” or the indefinite proposition “Something is one the Furies and is attacking me” (*M.* 8.96–8 = SVF 2.205). But again, further work on the nature of mental content is needed to properly raise and address the objection.

example because her misprinted representation is less inaccurate. Thus, she can form correct identity judgments. Despite this, since her representation is misprinted, she forms false beliefs about one of Electra's proprieties (i.e., her hair color).

According to my interpretation, the Stoics reject the assumption that an external object needs to be accurately represented for it to be the thing that appears to our awareness. Instead, they hold that causing a representation is a sufficient and necessary condition for an external object to be its intentional object. Accordingly, a representational mental state does not need to be "well-printed" to count as a representation. It is sufficient that it result from the causal interaction between external objects and the soul. Therefore, misprinted representations are representations. Their intentional objects, the things that appear to our awareness when experiencing them, are the external objects that cause them. They are not odd mental states that have figments as their intentional objects despite being caused by external objects.

My analysis of the misprinted representation sheds light on a distinctive feature of the Stoic concept of representation. This feature, which has been ignored in modern scholarship, is related to what it means (and does not mean) to say that a representation has an external object as its intentional object. Namely, for an external object to be the intentional object of a representation, the external object does not need to be accurately represented. Nor is it necessary that the subject experiencing a representation know the identity of the external object that caused her representation. Accordingly, it is irrelevant whether the subject correctly identifies it or mistakes it for another object due to its being inaccurately represented. Again, causing a representation is a sufficient and necessary condition for an external object to be the intentional object of this representation.

My analysis of the Stoic concept of misprinted representation is not free from controversy. One troublesome consequence is that a subject can have a (misprinted) representation while not knowing its intentional object. In other words, she can completely ignore the identity of the external object she is aware of. Furthermore, she can even wrongly believe that the object that appears to her awareness is another one. I am aware of the intuitive support that

has the opposite analysis (i.e., the one that holds that the intentional object of one's experience is what one takes oneself to be experiencing). Thus, I have tried to elicit the contrary intuition and showed that what I argue is the Stoic position is a reasonable position to hold. Besides, I have tried to show that my analysis of the Stoic concept of misprinted representation agrees with other elements of the Stoic philosophy of mind. Indeed, as far as I am aware, the only options that remain are either to hold that misprinted representations are hybrid mental states or to prove that the Stoics admitted a third genus of mental state. Both options, I think, undermine the distinction between representations and imaginations.

Despite the lack of interest in the Stoic concept of misprinted representation, a better understating of this concept can provide us with tools to discuss some central issues in Stoic epistemology and philosophy of mind. For instance, they prevent us from confusing the distinction between representations and imaginations with the distinction between cognitive representations and non-cognitive representations. By equating these distinctions, we can draw incorrect conclusions about the Stoic account of mental representations.²³ Besides that, they can help us to understand the definition of cognitive representation. In the next section, I will show that our ignorance of the nature of misprinted representations has led us to misunderstand the sense of the preposition 'ἀπό' in that definition.

3. Misprinted Representations and the Definition of Cognitive Representation

In this section, I show that the insights obtained so far can help us to deal with one of the most controversial issues in modern Stoic scholarship: the definition of cognitive representation. In particular, they can shed light on the problem of the ambiguity of the preposition ἀπό in this definition. For this purpose, I will explain in detail this problem and

²³ E.g., Vasiliou 2019, 67–70. In this paper, he argues that the Stoic conception of knowledge is a form of epistemological disjunctivism. To defend this view, Vasiliou appeals to Chrysippus' twofold distinction. According to his interpretation, representations in this distinction are only true representations, so the distinction between representations and imaginations is equivalent to the distinction between cognitive representations and non-cognitive representations. As I have argued, this is not the case because representations in T3 are both true representations (i.e., cognitive representations) and false representations (i.e., misprinted representations). Thus, Chrysippus' twofold distinction exhibits a kind of metaphysical disjunctivism, but not a kind of epistemological disjunctivism.

discuss the solutions that some scholars have put forward. After arguing that these solutions are unsatisfactory, I show how my analysis of the Stoic concept of misprinted representation can help us to address the problem. I propose that my analysis allows us to see that, in the definition of cognitive representation, the representational sense and the causal sense of ἀπό are not in conflict with each other. Thus, contrary to what some scholars hold, this preposition can have both causal and representational senses at once.

3.1 *The Problem of the Ambiguity of ἀπό*

Let us introduce the problem with the preposition ἀπό by discussing the definition of cognitive representation. Zeno, who coined the concept of cognitive representation (Cicero *Acad.* 1.41–2; 2.18; 2.77), proposed a definition according to which a cognitive representation is

- [1] the one that comes about from (ἀπὸ) what is present (ὑπάρχοντος),
- [2] molded, sealed, and printed in accordance with that present thing (αὐτὸ τὸ ὑπάρχον),
- [3] such as it could not come about from (ἀπὸ) what is not present (μὴ ὑπάρχοντος).²⁴

This definition consists of three clauses that state conditions that are individually necessary and jointly sufficient for a representation to be cognitive. The problem with this definition is that it contains some ambiguous terms that make it difficult to know precisely what these conditions are.

The first ambiguous term is the participle ὑπάρχον. This term has three possible meanings. First, it has an existential meaning, according to which it refers to an existent object. Second, it has a veritative meaning, according to which it refers to a state of affairs that obtains. Third, it has a presential meaning, according to which it refers to an external object

²⁴ 1 [1] ἡ ἀπὸ ὑπάρχοντος γινομένη, [2] ἐναπομεμαγμένη καὶ ἐναπεσφραγισμένη καὶ ἐναποτετυπωμένη κατ' αὐτὸ τὸ ὑπάρχον, [3] οἷα οὐκ ἂν γένοιτο ἀπὸ μὴ ὑπάρχοντος. I follow Togni's (2006) reconstruction of the definition based on the following sources: *SE M.* 7.248 and 7.255 (SVF 1.59 and 2.65), 7.426 (SVF 1.59), *P.* 2.4 (SVF 1.59), 3.242 (SVF 2.97); *DL* 7.46 (SVF 2.53), 7.50 (SVF 1.59 and 2.60); Cicero *Acad.* 2.18 and 2.77 (SVF 1.59).

that is spatiotemporally present. Although my translation of *ὑπάρχον* as ‘what is present’ reveals my preference for the presential meaning, I will not go into the discussion about this term²⁵. The reason for this is that my analysis of the misprinted representation sheds light mostly on the second ambiguous term: the preposition *ἀπό*. This term has two possible senses. First, it has a causal sense, according to which *ἀπό* indicates the thing that causes a representation. Second, it has a representational sense, according to which *ἀπό* indicates the thing represented in a representation.

Let us briefly see how the discussion about those terms affects our understanding of what a cognitive representation is. Let us suppose that we combine the existential meaning of *ὑπάρχον* with the causal sense of *ἀπό*. According to this combination, the first clause of the definition states the following condition: a cognitive representation is caused by an existent object. This condition does not imply that a cognitive representation accurately represents that existent object. Now, let us suppose that we combine the veritative meaning of *ὑπάρχον* with the representational sense of *ἀπό*. According to this combination, the first clause states the following condition: a cognitive representation represents a state of affairs that obtains. This condition does imply that it accurately represents its object. However, it does not imply that the cognitive representation is caused by the object it represents²⁶.

Reading the definition of cognitive representation with the causal sense of *ἀπό* seems to be the most natural thing to do. This preposition is mostly used to indicate the origin (temporal, spatial, material, and *causal*) of something (LSJ s.v. *ἀπό*). Furthermore, the causal sense fits well with the participle *γινομένη* (‘the one that comes about’) in the first clause. Thus, a cognitive representation is the one that comes about from what is present because it has its causal origin in a spatiotemporally present object. In addition to this, there are textual reasons for preferring the causal sense of *ἀπό*. For instance, Chrysippus’ theory of representational mental states in T3 is essentially causal. Hence, it is unlike that the

²⁵ For a defense of the presential meaning of *ὑπάρχον*, see Togni (2006), Stojanović (2019), and Caston (*forthcoming*).

²⁶ Some defenders of the first combination are Reed (2002, 150) and Nawar (2014, 7). The defender of the second one is Sedley (2002).

Stoics ignored this theory in their account of cognitive representations.²⁷ Nevertheless, as Sedley first noted (2002, 142–6), there are some troublesome texts in which ἀπό cannot have a causal sense.

Our texts T1 and T2 about the Stoic definition of cognitive representation are some of them. T2 claims that the Stoics included the first clause to rule out “many representations [that] strike us *from* (ἀπὸ) what is not present (μὴ ὑπάρχοντος).” T1 complements this claim by mentioning, as an example of these “representations”, “the ones that struck Orestes *from* (ἀπὸ) the Furies.” As can be observed, the first clause aims at ruling out imaginations.²⁸ As explained in the previous section, imaginations are representational mental states that are caused by the mind itself and have figments as their intentional objects. Since figments are not (and cannot be) the cause of imaginations, the cause and the intentional object of imaginations come apart. According to this, the Furies are just the entities Orestes is aware of when experiencing imaginations. They are not at all the causal origin of his imaginations. This means that ἀπό must have a representational sense in this context. In T1, Orestes’ imaginations *represent* the Furies. Thus, when T2 says that the first clause rules out “many representations [that] strike us *from* (ἀπὸ) what is not present,” it means representations that *represent* non-present objects. Indeed, this is an appropriate characterization of imaginations because figments are non-present objects.

Sedley acknowledges, however, that there are some texts in which ἀπό clearly has a causal sense (2002, 143–4). For instance, our text T1 again. This text claims that misprinted representations satisfy the first clause of the definition but not the second one. This is because they “are *from* (ἀπὸ) what is present, yet do not resemble that present thing.” The example in this text, Orestes’ misprinted representation, says that “he drew in a representation *from* (ἀπὸ) what is present, Electra, but not in accordance with that present thing.” According to Sedley’s interpretation, Electra is the causal origin of Orestes’ misprinted representation. Therefore, ἀπό must have a causal sense in this context. Orestes,

²⁷ For more textual reasons, see Stojanović (2019, 153–5)

²⁸ As pointed out in the previous section, the Stoics typically used the term ‘representation’ in a loose way. In this loose way, imaginations are species of representations, which are called “empty representations” (T1) or “false representations” (T7).

then, drew in a misprinted representation *caused by* what is present, Electra. Thus, when T1 claims that misprinted representations “are *from* ($\acute{\alpha}\pi\omicron$) what is present,” it means that they are *caused by* spatiotemporally present objects.

Thus, the problem with the preposition $\acute{\alpha}\pi\omicron$ is not that it has two possible senses. The problem is that its causal sense and its representational sense appear in the same contexts. In particular, both senses appear in texts that discuss the Stoic definition of cognitive representation. As a consequence, it is not clear what the sense of this preposition is in the definition. One particular text in which both senses of $\acute{\alpha}\pi\omicron$ seem to coexist is the following:

T6. Sextus Empiricus, *Adversus Mathematicos* (M). 7.244–5 (SVF 2.65) (tr. Bett, modified)
True and false [representations] are like those from ($\acute{\alpha}\pi\omicron$) Electra that struck Orestes in his madness—for in so far as it struck him as from some present thing it was true (for Electra was present), but in so far as it struck him as from a Fury it was false (for there was no Fury). And again, if someone sleeping, from ($\acute{\alpha}\pi\omicron$) Dion who is alive, dreams with a false and empty drawing as from him standing right there.

The first example is Orestes’ misprinted representation. As said before, the preposition $\acute{\alpha}\pi\omicron$ has a causal sense in this example. The phrase “those [representations] from ($\acute{\alpha}\pi\omicron$) Electra that struck Orestes in his madness” indicates that Electra is the causal origin of Orestes’ misprinted representation. The second example is a dream, an imagination produced by the mind itself during sleep. In this example, $\acute{\alpha}\pi\omicron$ has a representational sense because Dion cannot be the cause of an imagination produced during sleep. Thus, the phrase “someone sleeping, from ($\acute{\alpha}\pi\omicron$) Dion who is alive, dreams with a false and empty drawing” indicates that someone’s imagination *represents* Dion.

To deal with the problem with the preposition $\acute{\alpha}\pi\omicron$, Sedley argues that the representational sense is the one that best explains Zeno’s position (2002, 147–51). However, to explain why the causal sense often appears in the sources, he offers “no more than a guess” (2002, 148–9). Thus, Sedley proposes the following historical hypothesis. When Zeno originally formulated the definition of cognitive representation, he had in mind the causal sense of $\acute{\alpha}\pi\omicron$. However, he had to reinterpret his definition in representational terms to face

Arcesilaus' criticism. Later, Chrysippus returned to the original causal sense of ἀπό in his interpretation of the definition. Hence, the ambiguity of ἀπό reflects the Stoics' lack of clarity on the correct interpretation of their own definition of cognitive representation. The main problem with this strategy is that, as Sedley acknowledges, it is no more than a guess.

Before discussing other strategies to solve the problem with the preposition ἀπό, let us highlight an important aspect of the problem. As can be noted in the description of the problem, ἀπό always has a representational sense when used to account for imaginations. This is because ἀπό indicates the intentional object of an imagination. Since the intentional object of an imagination is not its cause, ἀπό cannot have a causal one. In contrast, ἀπό always has a causal sense when used to account for misprinted representations. In these cases, ἀπό indicates the external object that caused a misprinted representation. Thus, while imaginations favor the representational sense, misprinted representations favor the causal sense. As might be anticipated, the starting point of my proposal is the recognition that ἀπό can also have a representational sense when used to account for misprinted representations. Since the external object that caused a misprinted representation is its intentional object, ἀπό indicates the cause and the intentional object at once. I will return to my proposal after arguing that other ones are unsatisfactory.

3.2 Some Strategies to Solve the Problem

The first strategy I want to discuss is Togni's (2006). His strategy consists of proving that the putative representational usages of ἀπό are really causal ones. The starting point of his strategy is the Stoic account of the formation of imaginations. The key text seems to be the following:

T7. Sextus Empiricus, *Adversus Mathematicos* 8.56–60 (SVF 2.88) (tr. Bett, modified)
Every thought comes about from sense-perception or not without sense-perception, and either from experience or not without experience. Hence, we will find that not even the so-called false representation [i.e., the imagination]—for example, those in sleep or those in madness—are distinct from the things grasped by us through sense-perception by way of experience. Indeed, the person who in madness imagines Furies, bloody-looking, dragon-

shaped girls, conceives a shape put together out of the things that have appeared to him. In the same way, the person who dreams in his sleep of a winged human does not have this dream without having seen something winged and a human being. And generally, it is impossible to find anything to do with conception that one does not have for oneself as something known by way of experience. For this will be grasped either in virtue of similarity to the things that have appeared in experience, or in virtue of augmentation or diminution or combination.

According to this text, any representational mental state results, directly or indirectly, from the causal interaction between external objects and the perceptual apparatus.²⁹ This is true even of the imagination. As explained in the previous section, imaginations result from the mind's capacity to manipulate the content of previously acquired representations. For instance, the mind can take the content of previously acquired representations to conjure up a figment by combination (κατ' ἐπισύνθεσιν). In this way, the imaginations of the Furies result from combining the contents of previously acquired perceptual representations of girls, snakes, and blood.

From this account of the formation of imaginations, Togni argues that even imaginations have their causal origin in external objects and, therefore, the sense of ἀπό in T6 is really causal. This text speaks of someone who, “*from* (ἀπό) Dion who is alive, dreams with a false and empty drawing.” I said before that ἀπό has a representational sense here because Dion could not have caused an imagination produced during sleep. Nonetheless, there is a sense in which he is its causal origin. The mind can produce the imagination of Dion because it has previously acquired a genuine representation of Dion. Thus, Dion indirectly caused that imagination. Now, the main problem with this strategy is that it cannot successfully explain another troublesome case: Orestes' imaginations of the Furies in T1. This text speaks of imaginations that “struck Orestes *from* (ἀπό) the Furies.” In this example, the Furies are not the indirect causes of Orestes' imaginations. Their indirect causes are the girls, the snakes, and the blood that he had previously perceived. Hence, Togni's strategy does not prove that ἀπό has a causal sense in this text.

²⁹ Although text T7 explicitly mentions thoughts (νοήσεις) instead of representations, the Stoics say that thoughts are the representations of rational beings (DL 7.50–1 = SVF 2.61).

The second strategy I want to discuss is Stojanović's (2019, 156–60). Like Togni's, his strategy consists of proving that the putative representational usages of ἀπό are really causal ones. To that aim, he proposes a textual hypothesis according to which the passages in which ἀπό has a representational sense are corrupted. The word ὡς preceding ἀπό has been incorrectly removed from these passages. The following passage supports this hypothesis:

T8. Diogenes Laertius 7.51 (SVF 2.61) (tr. Stojanović, modified)

Some perceptual representations come about from (ἀπὸ) present things (ὑπαρχόντων), and they are accompanied by yielding and assent. But representations also include appearances [i.e., imaginations] that come about as if from (ὡσανεὶ ἀπὸ) present things (ὑπαρχόντων).

This text characterizes imaginations as representations that come about *as if* they were caused by present things. In other words, they pretend to be caused by present things when in fact they are not. In this passage, ἀπό can retain its causal sense because ὡσανεὶ clarifies that the indicated causal origin is merely hypothetical. According to Stojanović, we must reinsert ὡς in all the passages in which ἀπό seems to have a representational sense and, as a result, we can interpret them in the same way as text T8. Text T6 should be revised to read: “someone sleeping, *as if from* (ὡς ἀπὸ) Dion who is alive, dreams with a false and empty drawing.” Text T1 should be revised to read: “some representations are empty, such as the ones that struck Orestes *as if from* (ὡς ἀπὸ) the Furies.” In this way, the texts say that imaginations pretend to be caused by Dion and Electra respectively, when in fact they are not. In both examples, Dion and the Furies are considered merely hypothetical causes of imaginations.

The main problem with Stojanović's strategy is that it is not clear in which passages we must insert ὡς, so it runs the risk of becoming an *ad hoc* hypothesis. Also, there are some passages in which this strategy does not work. Let us consider T2. This text says that “many representations [i.e., imaginations] strike *from* (ἀπὸ) what is not present (μὴ ὑπάρχοντος).” At first sight, this ἀπό cannot have a causal sense because non-present things cannot cause representations. However, Stojanović (2019, 169, n. 37) maintains that there

is at least one thing that is not present and can cause representations: the mind. Thus, when T2 claims that many representations are caused by what is not present, it means that they are caused by the mind. Although this is an appropriate characterization of imaginations, the problem is that the mind is never explicitly considered a non-present thing. Indeed, text T1 mentions imaginations from the Furies as examples of representations from non-present things. Thus, the Furies and figments in general are the sorts of non-present things that the Stoics had in mind in T2.

Suppose now that to solve this problem we apply Stojanović's strategy in T2. Accordingly, it should be revised to read: "many representations [i.e., imaginations] strike us *as if from* (ὡς ἀπὸ) what is not present (μὴ ὑπάρχοντος)." This revision is problematic since it says that imaginations come about as if they were caused by *non-present things*. This is different from what text T7 says, namely that imaginations come about as if they were caused by *present things*. On the one hand, it is not clear what it means to say that a representational mental state pretends to be caused by something that is not present. On the other hand, imaginations do not pretend to be caused by something that is not present because, according to Stojanović, they are in fact caused by something that is not present: the mind.

3.3 My strategy to Solve the Problem

I have argued that the strategies of some scholars to solve the problem with the preposition ἀπό are unsatisfactory. Now, I will show how my analysis of the misprinted representation can help us to address this problem. As I said before, while imaginations seem to tilt the balance in favor of the view that ἀπό has a representational sense, misprinted representations seem to tilt the balance in favor of the view that ἀπό has a causal sense. This explains why some defenders of the causal view strive to offer a causal analysis of imaginations. In doing so, they seek to prove that ἀπό has a causal sense when applied also to imaginations. In contrast, in the previous section, I took the other way and offered an analysis of misprinted representations that combines representational and causal elements. Thus, I now seek to show that this analysis proves that ἀπό can have both causal and representational senses at once.

The view that misprinted representations favor the causal reading of ἀπό results from a misunderstanding of the nature of these representations. In particular, it results from the view I rejected in the previous section, namely that the intentional object of misprinted representations is not its cause. To see this clearly, let us return to the example of a misprinted representation in T2. This text says that Orestes “drew in a representation *from* (ἀπό) what is present, Electra, but not in accordance with that present thing.” According to Sedley’s interpretation of this example, Electra is the causal origin of Orestes’ misprinted representation. Therefore, ἀπό has a causal sense here. To this extent, I agree with this interpretation. However, this interpretation overlooks the fact that Electra is also the intentional object of Orestes’ misprinted representation.

What is behind this overlooking, I think, is the view that the cause and the intentional object of misprinted representations come apart. According to this view, Orestes’ misprinted representation does not represent the external object that caused it. Instead, it represents what Orestes thinks is the entity he is aware of when experiencing it, namely the Fury. Hence, by referring to Electra, ἀπό cannot have a representational sense. Thus, when T2 says that Orestes “drew in a representation *from* (ἀπό) what is present, Electra,” it means that what is present, Electra, is just the causal origin of Orestes’ misprinted representation. In this way, misprinted representation seems to favor the view that ἀπό has *only* a causal sense. As can be seen, this view is precisely the one I rejected in the previous section.

My analysis of misprinted representations shows that they favor not only the causal readings of ἀπό but also the representational readings. According to it, the cause of a misprinted representations is its intentional object. Accordingly, Electra is both the cause and the intentional object of Orestes’ misprinted representation. Therefore, when T2 says that Orestes “drew in a representation *from* (ἀπό) what is present, Electra,” it means that Orestes’ misprinted representation was *caused by* Electra and *represents* her. What must be clarified is that it inaccurately *represents* Electra *as* having some of the characteristic features of the Furies. But at any rate, the representation does not *represent* one of the

Furies. From this analysis, I conclude that ἀπό can have both causal and representational senses at once. Thus, there is no reason to think that misprinted representations tilt the balance in favor of the causal reading of ἀπό.

My analysis of misprinted representations has shown that the representational sense and the causal sense of ἀπό are not in conflict with each other. Furthermore, contrary to what some scholars think, this preposition can have both causal and representational senses at once. This is true not only of misprinted representations but also of any genuine representation. This includes, of course, cognitive representations. Since the intentional object and the cause of a genuine representation are one and the same thing, the preposition ἀπό is used to indicate the external object that is both the cause and the intentional object of a representation.

Notwithstanding the above, those observations are not true of imaginations. Since the cause (i.e., the mind itself) is not the intentional object of imaginations, ἀπό is used only to indicate their intentional object (i.e., the figment). This suggests that the main function of ἀπό is to indicate the thing that appears to our awareness when experiencing any representational mental state. When the intentional object and the cause are one and the same thing, ἀπό has both the causal and the representational senses at once. When they are not, ἀπό has only the representational sense. In both cases, ἀπό always has the representational sense³⁰. However, as we are dealing with the Stoic definition of cognitive representation, we are interested in the cases in which ἀπό has both senses at once. Thus, let us see how my proposal is applied to the definition.

The first clause of the definition says that the cognitive representation “comes about *from* (ἀπό) what is present.” According to my interpretation, this clause states the following

³⁰ One might think that the defenders of the causal reading can use a similar strategy, so they occasionally accept the representational sense while retaining the primacy of the causal sense. However, they do not have this move available. According to my view, sometimes ἀπό only has the representational sense, and other times it has both the representational and the causal sense. In contrast, by arguing that ἀπό has the causal sense even when applied to imaginations, they reject the possibility that ἀπό has both the representational and the causal senses at once. At best, they could argue that sometimes it only has the representational sense, and other times it only has the causal sense. I thank an anonymous reviewer for bringing this issue to my attention.

condition: a cognitive representation (i) is caused by and (ii) represents a spatiotemporally present object. This condition rules out imaginations because they are not caused by present objects, nor do they represent present objects. In contrast, misprinted representations meet this condition because they are caused by present objects, and, as I have argued, they also represent these objects. Thus, my interpretation is consistent with what T2 claims is the Stoic motivation for adding the first clause.

The second clause says that the cognitive representation is “molded, sealed, and printed in accordance with that present thing.” Since this clause does not include *ἀπό*, my proposal seems to be irrelevant here. Like most scholars, I hold that this clause states the correctness condition.³¹ According to my interpretation, a cognitive representation is correct in two senses. On the one hand, it is correct because it accurately represents the present object mentioned in the first clause. On the other hand, it is correct because it has an appropriate causal history. Both senses are closely related to each other, as are the two senses of *ἀπό* in my proposal. A cognitive representation accurately represents the present object because it has an appropriate causal history. Thus, this condition rules out misprinted representations since they are incorrect in both senses.

The third clause of the definition says that the cognitive representation “could not come about *from* (*ἀπὸ*) what is not present.” According to my interpretation, this clause states the following modal condition: a cognitive representation could not (i) be caused by and (ii) represent an object that is not spatiotemporally present. Like the first clause, this condition has two parts. The first one claims that a cognitive representation could not have been caused by an object other than the one that actually caused it. The second one claims that a cognitive representation could not have represented an object other than the one it actually represents. Since the cause and the intentional object of a representation are one and the same thing, both parts claim virtually the same condition. Thus, this condition rules out representations that, while meeting the first two conditions, could have been caused by

³¹ E.g., Frede (1999, 304–8), Long and Sedley (1987, 250–1), Reed (2002, 150), Nawar (2014, 5), Stojanović (2019 170–1), and Caston (*forthcoming*).

another object that is not actually present.³² Or, in other words, representations that could have represented another object that is not actually present³³.

To conclude, let us discuss Sedley's objection to my interpretation of the definition. Although he entertains the idea that ἀπό retains both the causal and the representational senses at once, he rejects it (2002, 149, n. 14). If that were so, he thinks, the first clause would stipulate the following condition: a cognitive representation (i) is caused by and (ii) represents an actual thing or state of affairs. Since non-actual things or states of affairs lack causal powers, the first part of the condition is vacuously satisfied by any representational mental state. Even imaginations are caused by an actual thing: the mind. This problem, I think, results from combining the causal sense of ἀπό and either the existential meaning or the veritative meaning of ὑπάρχον. But, if we combine the causal sense of ἀπό and the presential meaning of ὑπάρχον, we do not have this problem. As can be seen above, the first part of the condition is no longer vacuously satisfied.³⁴

Conclusion

Although the concept of misprinted representation has been largely overlooked in modern Stoic scholarship, I have shown that this concept is important for appropriately understanding the Stoic concepts of representation and cognitive representation. By elucidating some distinctive features of misprinted representations, we have obtained

³² In this way, my interpretation of this clause closely follows that of Stojanović (2019 171–2) and Caston (*forthcoming*).

³³ Misprinted representations do not meet this modal condition. Since they inaccurately represent the object that caused them, they could have been caused by another object. This might be the object the subject wrongly believes appears to her awareness. In these counterfactual circumstances, the representation would represent this object. For example, Heracles' misprinted representations that were caused by his children but inaccurately represent them as being those of Eurystheus could have been caused by Eurystheus' children. In these counterfactual circumstances, Eurystheus' children would have been the represented objects of Heracles' representations.

³⁴ Contrary to what an anonymous reviewer suggested, my view is not an improved version of Sedley's account. The main reason is that he takes the veritative meaning of ὑπάρχον and, therefore, he has a substantially different interpretation of the conditions stated in each clause. At best, my view can be seen as an improved version of the account of those who take the presential meaning of ὑπάρχον (e.g., Stojanović 2019 and Caston *forthcoming*).

insights into some elements of the Stoic account of mental representations that have been ignored or misunderstood.

First, my analysis of misprinted representations showed that they are genuine representations despite inaccurately representing their objects. This means that a representation does not need to accurately represent the external object that caused it for this object to be its intentional object. In turn, this means that the subject experiencing a representation can ignore the identity of the object she is aware of. Second, my analysis of misprinted representations shed light on the sense of the preposition *ἀπό* in the definition of cognitive representation. Since it showed that the cause and the intentional object of *any* genuine representation are one and the same thing, I concluded that the representational sense and the causal sense of *ἀπό* are not in conflict with each other. From this fact, I argued that this preposition has both causal and representational senses at once in the Stoic definition of cognitive representation.

Further questions about the Stoic concept of misprinted representations remain. First, what is the range of representations that count as misprinted? Second, why are misprinted representations considered both true and false in T6? Regarding the first question, since the Stoics characterized cognitive representations and misprinted representations in opposition to one another, the response to the first question could provide some insights into the range of the representations that count as cognitive. Regarding the second question, its response could give us some insights into the Stoic theories of truth and mental content. Thus, the concept of misprinted representation is important for appropriately understanding some key elements of Stoicism. Even if the reader disagrees about the views I proposed here, I hope I have proven that this concept deserves to be studied.

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