Aristotle and Michael of Ephesus on the Deceptive Character of Dreams

Gregorić, Pavel

CHAPTER 1

Aristotle and Michael of Ephesus on the Deceptive Character of Dreams

Pavel Gregoric

> This is one essential feature of dreams: in dreams the subjective activity of our minds appears in an objective form, for our perceptual faculties regard the products of our imagination as though they were sense-impressions.
>
> KARL FRIEDRICH BURDACH, *Physiology as Empirical Science* (1838)

1 Introduction

One of the most striking features of dreams is their realism: things that appear to us in dreams seem to be real, so real in fact that we are sometimes reported to scream in terror, sob, mutter, or giggle while asleep. There are cases when we are aware of the fact that we are dreaming, but, for the most part, when we are asleep our dream world seems to be the real world. This feature of dreams is well-recorded and -investigated. The great German physiologist and neuroanatomist Karl Burdach, for instance, regarded it as one of the most essential features of dreams, and Freud quotes him approvingly in his influential book *The Interpretation of Dreams*.[1] I will refer to this feature of dreams as their "deceptive character."

The deceptive character of dreams is of perennial interest not only to neuroscientists, psychologists, and analysts, but also to philosophers. There are at least two reasons for this. First, philosophers are fond of comparing our waking experience with our experience in dreams, often to question our sense of reality. The so-called "dream argument" is one of the famous sceptical arguments, and it rests on the premise that the dreaming state is typically indistinguishable from the waking state, which entails that dreams are taken to be real by

1 Sigmund Freud, *Die Traumdeutung* (Leipzig: Deuticke, 1900); id., *The Interpretation of Dreams*, trans. J. Strachey (New York: Basic Books, 2010), 80.

the dreamers.[2] Second, any explanation of this feature is bound to operate, explicitly or implicitly, with a number of psychological and epistemological propositions that are of direct interest to philosophers. Any attempt at explaining the deceptive character of dreams is bound to be committed to certain views as to how dreams come about, how judgements are passed or fail to be passed, which cognitive capacities are active and which are suspended in dreaming, how that compares with the operation of cognitive capacities in the waking state, etc. This chapter will ignore the first and focus entirely on the second source of philosophical interest in the deceptive character of dreams.

Aristotle is fully alert to this feature of dreams. He does not discuss it in a systematic fashion, but he does bring it up in several passages in his short treatise *De insomniis* (*Peri enypníōn*). The first and central task of this chapter is to examine the relevant passages and offer a coherent interpretation of Aristotle's explanation of the deceptive character of dreams. Apart from furthering our understanding of Aristotle, coming to grips with this task is fundamental for an appreciation of the ways in which the subject of dreaming is approached in the Aristotelian tradition. Not only will the chapter introduce some crucial concepts that will recur in the following chapters of this volume – such as the common sense, appearance, belief – but it will also give the reader a sense of the diversity and plasticity of the Aristotelian tradition. The reader has to understand Aristotle's views to be able to see just how different, and even opposite, views on the same subjects have been entertained by later thinkers who were influenced by Aristotle or indeed who considered themselves followers of Aristotle.

This brings me to my second task, which is to present the interpretation of Aristotle's explanation of the deceptive character of dreams proposed by the Byzantine scholar Michael of Ephesus (1050–1129) in his commentary on Aristotle's *De insomniis*. Michael's is the only extant Greek commentary, and it is the earliest commentary that we have, in any language, on any of Aristotle's three short treatises on sleep and dreams. The way Michael reads Aristotle's text and the way he updates Aristotle's physiology of sleeping and dreaming is a fine example of the plasticity of the Aristotelian tradition.

Before I can embark on these tasks, however, I need to provide the necessary terminological and theoretical background.

2 The dream argument was made famous by Descartes' *First Meditation*, but it was discussed earlier by Plato, Aristotle, Sextus Empiricus, Augustine, and others.

2 The Background

To understand how Aristotle explained the deceptive character of dreams, we first need to understand what dreams are in Aristotle's view, and how they come about. When we speak of dreams, we normally think of episodes that have a first-person narrative structure. This structure is typically loose and incoherent, it includes characters, things, scenes, and situations – often baffingly strange – as well as our emotional reactions to them. In most cases, things happen to us in dreams, though sometimes we also seem to make decisions and take actions in our dreams, and some people even claim to take control of what happens to them in dreams. In any case, when asked to report our dreams, we normally tell a first-person narrative of what we saw, what happened to us, how we felt, and how it ended.

Aristotle does not operate with such a narrative notion of dream, as scholars have already observed.[3] Rather, he operates with the notion of an *enýpnion*. The word *enýpnion* – literally, "that which occurs in sleep" (*én+hýpnos*, *in+somnus*) – is fairly standard in Greek literature, found already in Homer and Herodotus. It refers to an individual character, object, or scene that appears to one in sleep. Perhaps we can say that *enýpnia* are the building-blocks of what we call dreams. Because *enýpnia* cannot be simply equated with what we call dreams, I will use the expression "dream-image" in the rest of this chapter. Speaking of dream-image*s* may be somewhat misleading, since Aristotle allows *enýpnia* to be not only of visual, but also of auditory, olfactory, gustatory or tactile qualities. However, he does seem to treat of dream-images as being primarily or paradigmatically visual, which most of us find natural, so perhaps "dream-image" is not a bad rendering after all.

Aristotle defines the dream-image as "an appearance that (i) arises from the motion of sense-impressions, (ii) while one is asleep, and (iii) insofar as one is asleep."[4] Let us first look at conditions (i) and (ii). A dream-image is an image or appearance (*phántasma*) understood as a remnant of an earlier sense-impression (*aísthēma*) which lies dormant in the peripheral sense organ until it gets activated in sleep. According to Aristotle, all appearances come from earlier sense-impressions, but dream-images are specifically those appearances that are activated, that is, experienced, in sleep. This distinguishes

3 See Eric Robertson Dodds, *The Greeks and the Irrational* (Berkeley: University of California Press, 1951), 104–5; David Gallop, *Aristotle on Sleep and Dreams* (Warminster: Broadway Press, 1990), 3–7.

4 τὸ φάντασμα τὸ ἀπὸ τῆς κινήσεως τῶν αἰσθημάτων, ὅταν ἐν τῷ καθεύδειν ᾖ, ᾗ καθεύδει, τοῦτ' ἐστὶν ἐνύπνιον. (*Insomn.* 3, 462a28–31.)

dream-images from appearances that occur in the waking state, as when we walk and a stranger across the street for a brief moment appears to be our childhood friend, or when we close our eyes and deliberately imagine something. Moreover, dream-images are appearances that do not arise from the motion of sense-impressions in any random way, but as an effect of the digestive process that causes sleep, as I will explain presently. This distinguishes dream-images from appearances in sleep that have a different causal origin, such as appearances that may be generated by the thinking part of the soul during sleep, since we sometimes think in sleep, as Aristotle observes.[5] In other words, appearances in sleep that may come about through thinking do not satisfy condition (i), and appearances that come about in the waking state do not satisfy condition (ii). Aristotle's definition entails a further distinction between dream-images and perceptions of external objects of which the sleeper may become faintly aware, mostly in the period just before waking, for instance, the noise produced by cockerels or the light of lamps.[6] The sleeper does not have such experiences (iii) "insofar as he is asleep," so they do not satisfy condition (iii) for a dream-image.

So much about dream-images, let us now turn to their physiological basis. As is well-known, Aristotle believes that the heart is the central organ. It is connected with the peripheral sense organs through a network of blood-vessels and channels so as to form a continuous system. External objects affect the peripheral sense organs and cause certain motions in them. When these motions reach the heart, they produce perceptual experience. Motions that for any reason do not reach the heart do not produce perceptual experience. However, Aristotle seems to think that there are motions set up in the peripheral sense organs that may reach the heart with some delay, so that they are not experienced when the external objects cause them, but remain in the system and arrive in the heart only subsequently. In other words, the perceptual system is retentive: motions caused by external objects in the peripheral sense organs – whether or not they immediately reach the heart and produce perception – can be retained in the system. How long they are retained, and how faithful they remain to the external object that caused them, depends on a

5 *Insomn.* 1, 458b17–25. One might object that images or appearances (*phantásmata*) accompanying thoughts also have a causal origin in the sense-impressions produced by external objects. That is true, but this is not their immediate causal origin. Their immediate causal origin is the activity of the thinking part of the soul, i.e., the thinker's decision what to think and his or her way of thinking it. The immediate causal origin of experiencing a dream-image, by contrast, is the retained motion of a sense-impression that arrives in the heart due to the digestive process, which is something purely physiological and beyond one's control.

6 *Insomn.* 3, 462a19–25.

number of factors, including the qualities of the tissues from which an individual's body is built and the physiological processes that it happens to undergo.

There are various ways in which motions caused earlier by external objects and retained in the system can reach the heart and produce a sort of perceptual experience that Aristotle usually calls "appearing" or "having an appearance" (*phaínesthai*). One natural way is through the digestive process that takes place every day. I am not going to describe Aristotle's theory of digestion in detail. Suffice it to say that it crucially involves withdrawal of the blood and heat from the upper parts of the body to the heart under the agency of half-digested food.[7]

There are two important effects of this withdrawal of blood and heat. One effect is the state of sleep, which involves fatigue and the need to lie down. Crucially, it involves a temporary disablement of the common sense located in the heart, which in turn causes the peripheral senses to shut down, too. Hence, there is no perception in sleep. This does not mean, however, that sleepers can have no experience whatsoever. On the contrary, sleepers can and often do experience appearances when the motions retained in the system reach the heart. Aristotle attributes such experience to a distinct capacity of the soul, namely the capacity to have appearances (*phantasía*, *tò phantastikón*).

The second important effect of the withdrawal of blood and heat is the transportation of the retained motions from the peripheral sense organs to the heart. However, as the digestive process involves all sorts of commotion inside the body, especially at the early stages following the ingestion of food, many motions get destroyed on their way to the heart, causing no experience whatsoever. This explains why we sometimes do not dream. If the digestive commotion is moderate, it tends to distort the transported motions, which then produce strange appearances when they arrive at the heart. This explains why many of our dream-images are weird, crabbed, or confused. Finally, when the digestive commotion subsides, motions arrive in the heart more or less intact, which explains why some dream-images are more or less like the external objects which had earlier caused motions in the peripheral sense organs. Aristotle compares this situation with reflections in water: if the water is very agitated, there is no reflection in it; if moderately agitated, the reflection is distorted; and if the water is still, the reflection is a more or less faithful representation of the object.[8] Depending on their bodily constitution, people vary

7 See Introduction to this volume, 7–8. Admittedly, there are other physiological processes in the body that could cause the withdrawal of the blood and heat from the upper parts. That would explain the cases of sleeping and dreaming that do not follow upon the ingestion of food. However, sleeping and dreaming are for the most part an effect of the digestion of food, according to Aristotle, which gives his account a sufficient level of generality.

8 *Div.Somn.* 2, 464b8–16.

in how many dream-images they experience on average, what sort of dream-images they typically experience, how likely they are to remember their dreams upon waking, and so forth.

This should suffice as the necessary background information for the first task of this chapter. But before I take up that task and look at Aristotle's explanation of the deceptive character of dream-images, I should like to make one general point that is of crucial importance for the rest of this chapter. There has been much confusion in the scholarly literature concerning the "common sense" that is said to be inactive in sleep. To prevent this confusion, it is vital to distinguish two uses of the expression "common sense" (*koinὲ aísthēsis*) in Aristotle and the Aristotelian tradition, a narrow and a broad one.

In the broad use, the "common sense" refers to the perceptual part of the soul insofar as it accounts for any function that goes beyond perception of basic sensible qualities through the corresponding special senses. The perceptual part of the soul is a complex set of capacities that allows animals not only to perceive various things through the special senses, but also to compare perceptions, to be aware of them, to have appearances, and to remember things. The perceptual part of the soul, insofar as it enables these higher functions, is called the "common sense" two or perhaps three times in Aristotle's extant works. More often, he refers to it as "the primary perceptual faculty" (*tò prṓton aisthētikón*).[9]

In the narrow use, by contrast, the "common sense" refers to a distinct aspect of the perceptual part of the soul, namely to a higher-order capacity that coordinates and monitors the special senses. This higher-order capacity is strictly perceptual; it has nothing to do with appearances or memory. Once, in a context directly relevant to our subject-matter, Aristotle speaks of a "common capacity that accompanies all the senses" (κοινὴ δύναμις ἀκολουθοῦσα πάσαις, *koinὲ dýnamis akolouthoûsa pásais*, *Somn.Vig.* 2, 455a16) by which we discriminate the white from the sweet and perceive that we are seeing and hearing. It is possible that Aristotle uses the expression "common sense" in the same way at one or perhaps two further passages in his extant works, and certainly that is how the expression is often used in the Arabic tradition and in Latin scholastic philosophy, where we find the tendency to keep the common sense distinct from the other internal senses, such as *phantasía* and memory.[10]

Even though Aristotle uses the expression "common sense" only three or four times in his extant works, and even though he himself fails to make the

9 *Mem.* 1, 450a11–14, 451a17; *Somn.Vig.* 1, 454a23.

10 All the occurrences of the expression "common sense" in Aristotle are analysed in Pavel Gregoric, *Aristotle on the Common Sense* (Oxford: Clarendon Press, 2007), 65–125, where one can find further support for the distinction I have just introduced.

distinction clear, it is necessary to keep these two items of Aristotelian psychology distinct. To that end, the reader should bear in mind that in the rest of this chapter I use the expression "common sense" in the narrow sense only.

3 Dream-Images and Their Deceptive Character in Aristotle

Aristotle launches his discussion of dream-images in *De insomniis* with the question regarding the part of the soul to which they belong, observing that it must be either the perceptual or the thinking part of the soul, "for these are the only two things in us by which we cognise something."[11] Aristotle's procedure here is aporetic. He constructs an initial *aporía* – the problem to be solved – by formulating a dilemma and then offering one negative argument against each horn of the dilemma. The argument against the perceptual part of the soul is based on the observation that no perception takes place during sleep, since the senses are shut down in sleep. The argument against the thinking part of the soul is that *dóxa* operates on reports of perception, and since no perception takes place during sleep, dream-images cannot be the work of *dóxa*, either. So, it seems that dream-images cannot belong either to the perceptual or to the thinking capacity of the soul. However, Aristotle adds, what regularly happens in sleep is that "we believe (*dokoûmen*) that we see that the approaching thing is a man and likewise that it is white" (*Insomn.* 1, 458b14–15), which suggests that dream-images in fact belong to both perception ("we see," "white") and thought ("we believe").

The belief that the approaching thing we see is a man or that it is white is a textbook example of *dóxa*. In Plato, *dóxa* is a capacity of the rational soul to pass judgements on things in the domain where no true knowledge is possible, and these are first and foremost perceptible things. In Aristotle, *dóxa* is also a capacity of the thinking part of the soul; and it is also typically directed at contingent – real or imagined – things, and it can be either true or false.[12] *Dóxa* enables a person to have beliefs (*dokeîn*), to have a degree of conviction that something is or is not such and such. However, Aristotle sometimes uses the verb *dokeîn* in ways that do not necessarily involve *dóxa*. For instance, in *De insomniis* 1, 458b28–29 Aristotle says that the sun *dokeî* one foot across to an ill person as well as to a healthy person who knows his astronomy and who

11 τούτοις γὰρ μόνοις τῶν ἐν ἡμῖν γνωρίζομέν τι (*Insomn.* 1, 458b2–3); cf. *de An.* 3.9, 432a15–16. Similarly, Aristotle opens his treatise on memory by asking whether it belongs to the perceptual or to the thinking part of the soul (*Mem.* 1, 449b4–6). See also the opening of the treatise on sleep and waking (*Somn.Vig.* 1, 453b13).

12 *De An.* 3.3, 427b20–21, 428a19, 428a27–b9; *Int.* 11, 21a32–33; *SE* 5, 167a1–2.

consequently does not believe the sun to be one foot across; here the verb *dokeîn* comes very close to the verb *phaínetai*, meaning "to appear" or "to seem" – independently of what one believes. The verb *dokeîn* in this sense often expresses caution or reservation: something seems to me to be such and such, but I am not convinced, or not yet fully convinced, that it really is so.

More importantly for my present purpose, the verb *dokeîn* can also refer to something like pre-rational conviction afforded by the perceptual part of the soul. Given that animals have senses that enable them to identify food, find mates, and avoid all sorts of danger, they must trust their senses and, at least in principle, go along with what they perceive. Now, I presume they would not go along with what they perceive if they did not in some sense take what they perceive as real, if they did not in some way accept what they perceive. Of course, this acceptance cannot be anything rational, since no animal other than the human being has a thinking part of the soul. On the contrary, this acceptance seems to be something rather simple, primitive, and passive. It is not a separate act of perception, let alone of some higher capacity, as is the Stoic assent (*synkatáthesis*), but part and parcel of every normal act of sense-perception.[13] In the following pages I will give textual evidence for this use of the verb *dokeîn* in Aristotle, and I will show that it is the key to Aristotle's explanation of the deceptive character of dream-images.

Let us return to Aristotle's argument in *De insomniis* 1. Having formulated the aporia, Aristotle offers a second argument against the option that dream-images belong to the thinking part of the soul (*Insomn.* 1, 458b15–25). By clinching the case against that option, he clears the ground for the alternative option, namely that dream images belong to the perceptual part of the soul, which is indeed the option he will espouse, albeit with an important qualification. The second argument can be summarised as follows. Aristotle observes that sometimes in sleep we have thoughts in addition to dream-images and these thoughts come together with certain images or appearances. But these images or appearances that come together with thoughts are *not* dream-images,[14] and hence, whatever dream-images are, they should not be attributed to the thinking part of the soul. "Thus," Aristotle concludes, "it is

13 It might be useful to evoke Thomas Reid here, who claims that perception as such includes "a conviction or belief in the present existence" of the thing perceived, and he argues that this conviction or belief is "the immediate effect of my constitution"; both quotations, one from Reid's *Essay* and the other from his *Inquiry*, are taken from James Van Cleve, *Problems from Reid* (New York: Oxford University Press, 2015), 12. See also Radovic's chapter in this volume for similar formulations in Spinoza, William James, and Bertrand Russell.

14 Images or appearances (*phantásmata*) needed for thoughts do not satisfy condition (i) in the definition of dream (pp. 30–31 above).

clear that not every appearance in sleep is a dream-image, and that it is by *dóxa* that we have beliefs about what we think [in sleep]."[15]

It seems, therefore, that dream-images must be attributed to the perceptual part of the soul. However, an obvious problem with that option is that there is no perception in sleep, as Aristotle has already pointed out. To solve this problem and to show how dream-images can, after all, be attributed to the perceptual part of the soul, Aristotle writes a passage in which the deceptive character of dream-images is discussed for the first time.

3.1 *The First Discussion* (*Insomn. 1, 458b25–459a8*)

Here are the opening lines of that passage:

> Concerning all these things, this much at least is clear: that by virtue of which we are deceived when we are awake but ill, that very same thing produces this affection [viz. deception] also in sleep. Indeed, even to those who are healthy and who know otherwise, the sun still seems (*dokeî*) to be one foot across.[16]

It is not immediately clear what makes Aristotle so sure that deceptions in pathological waking states have the same account as deceptions in the state of sleep, but it seems to be a methodological assumption that will receive corroboration as Aristotle proceeds. In any case, he claims that the sun appears one foot across, but we resist this appearance.[17] The reason is that we are educated persons who give more credence to our knowledge of astronomy, so we take the sun – despite the appearance provided by the sense of vision – to be larger than the inhabited world, as the best astronomical knowledge of that time would have it.

In what follows, Aristotle posits that, though we do not have proper perceptual experience in sleep, we have a sort of perceptual experience, or quasi-perceptual experience, that is, we have appearances. "Both vision and the other senses," Aristotle writes, "undergo something, and each of these things somehow impinges upon perception as in the case of a waking person, though not in the same way as in the case of a waking person" (*Insomn.* 1, 459a3–5).

15 ὥστε δῆλον ὅτι οὐκ ἐνύπνιον πᾶν τὸ ἐν ὕπνῳ φάντασμα, καὶ ὅτι ὃ ἐννοοῦμεν τῇ δόξῃ δοξάζομεν. (*Insomn.* 1, 458b24–25.)

16 δῆλον δὲ περὶ τούτων ἁπάντων τό γε τοσοῦτον, ὅτι τὸ αὐτὸ ᾧ καὶ ἐγρηγορότες ἐν ταῖς νόσοις ἀπατώμεθα, τοῦτ' αὐτὸ καὶ ἐν τῷ ὕπνῳ ποιεῖ τὸ πάθος. καὶ ὑγιαίνουσι δὲ καὶ εἰδόσιν ὅμως ὁ ἥλιος ποδιαῖος εἶναι δοκεῖ. (*Insomn.* 1, 458b25–29.)

17 This is the example Aristotle gives also in *de An.* 3.3, 428b2–4, in the course of distinguishing *phantasía* from *dóxa*, and revisits again later in *Insomn.* 2, 460b18–20.

As we have already seen, Aristotle explains the quasi-perceptual experience in terms of residual motions produced earlier by external objects in the sense organs. When these motions reach the heart, they are experienced. And when they are experienced,

> [s]ometimes *dóxa* says that it is false, as in the case of those who are awake, and sometimes it is suppressed and goes along with the appearance.[18]

What Aristotle means by "*dóxa* says that something is false," I take it, is that a judgement that something is false is made. I look at the sun, it appears one foot across, but I judge this appearance to be false, for I know that it is larger than the inhabited world. Another example: upon entering an unknown room in the dark, a centaur appears to me in the left corner, but I judge this appearance to be false, for I know that centaurs do not exist and I remember cases when arrangements of furniture in the dark looked like strange things at first glance. In some conditions, however, Aristotle says that *dóxa* can be suppressed and "go along" (*akoloutheî*) with the appearance. What he has in mind, I suppose, is that in certain conditions, notably in sleep or in acute pathological states, if a centaur appears to me, I believe that a centaur really is there. What is puzzling about this is the following: if *dóxa* is indeed suppressed in states such as sleep and acute illness, it is incapacitated; but if it is incapacitated, it does not pass *any* judgement, either to say that the appearance is true or to say that it is false. Why, then, are we deceived by our appearances in such states?

The quoted passage clearly suggests that the suppression of *dóxa* in sleep and acute pathological states does *not* entail that one is neutral with regard to the content of perception or appearance. The person in acute fever is not indifferent towards what appears to him as a centaur. His attitude towards what appears to him as a centaur is not disengaged in the way that it is when he conjures up an image of the centaur or when he observes Boticelli's painting of the Centaur.[19] On the contrary, the suppression results in *dóxa* "going along" with what perception or *phantasía* presents, which is supposed to explain why we are deceived by dream-images.

There are two ways of taking this "going along." One way is to take it as botched belief, but still a belief. This is how Mor Segev interprets it in his 2012 article. He writes: "Opinion may be barred from judging what is seen in a dream as false, and thereby may 'follow the *phantasma*' (*Insomn.* 1, 459a7–8), but in

18 καὶ ὁτὲ μὲν ἡ δόξα λέγει ὅτι ψεῦδος, ὥσπερ ἐγρηγορόσιν, ὁτὲ δὲ κατέχεται καὶ ἀκολουθεῖ τῷ φαντάσματι. (*Insomn.* 1, 459a6–8.)

19 Cf. *de An.* 3.3, 427b23–25.

doing so it is by no means suspended. The dreamer then *thinks* that what is seen in the dream is *true*" (italics are all Segev's). Segev goes on:

> The misleading character of dreams consists in the fact that we often take our dreams to be real. By assuming the veracity of the dream, however, judgement does not cease, but rather we continue to judge the content of the dream, holding it to be actually happening. [...] In any case, judgements, whether right or wrong, are essential to our (human) dreaming experience.[20]

According to Segev, then, we are deceived by dream-images because our reason passes false judgements on dream-images. The problem with this interpretation is that Aristotle says that *dóxa* is "suppressed" (*katéchetai*) in sleep. Segev claims that this does not mean that *dóxa* is inactive, but only that it is malfunctioning, "dominated" by a "compelling influence" exerted upon it. This is not a very plausible interpretation of the Greek verb *katéchein*, I think, because the verb carries a strong connotation of complete mechanical arrest or block, as when Aristotle uses it to describe holding one's breath.[21] But even if we permit Segev's interpretation of the verb *katéchein*, we find the following three difficulties. First, we must assume that the thinking part of the soul, or at any rate its doxastic capacity, is always operative when we dream, even though it may not operate properly. However, Aristotle does not seem to take the thinking capacity of the soul to be always operative when we dream.[22] Indeed, he maintains that we are unable to exercise our natural capacities for too long periods of time, which is precisely why we need sleep, namely in order to rest, and that includes rest from thinking no less than from perceiving.[23] Second, Segev's interpretation seems to imply that non-rational animals cannot be deceived by their dreams. But then it is difficult to explain the twitching and barking of dogs in sleep, which Aristotle took to be evidence that they dream.[24] Third, Segev's interpretation is phenomenologically implausible. The omnipresent phenomenon of being deceived by our dreams seems to be the result of some intuitive, primitive, and primeval psychological condition, rather than of thinking about and evaluating what appears to us in dreams.

---

20 Mor Segev, "The Teleological Significance of Dreaming in Aristotle," *Oxford Studies in Ancient Philosophy* 43 (2012): 123.

21 E.g., *de An.* 2.9, 421a3, b15; *HA* 7.10, 587a4; *GA* 4.6, 775b2.

22 "Sometimes" (*eníote*): *Insomn.* 1, 458b18; "often" (*pollákis*): *Insomn.* 1, 458b22; 3, 462a6.

23 See *Somn.Vig.* 1, 454a26–b9; *de An.* 3.4, 430a5–6; *EN* 10.4, 1175a3–10; 10.7, 1177a21–22; 10.8, 1178b33–35.

24 *HA* 4.10, 536b27–30; cf. *Div.Somn.* 2, 463b12.

Fortunately, there is another way of taking Aristotle's statement that *dóxa* is "going along" with what perception or *phantasía* present. It can be interpreted as saying that we are deceived by appearances we experience in sleep and acute pathological states precisely because our *dóxa* is incapacitated, completely blocked from functioning (*katéchetai*). *Dóxa* "going along" with appearances does not mean that it passes false judgements that the appearances are true, but rather that its incapacitation allows the appearances to be passively accepted. An appearance would not be passively accepted – that is, one would not be deceived by it – if *dóxa* or some other cognitive capacity contradicted the appearance. In sleep, however, *dóxa* and all the other cognitive capacities are shut down, so there is nothing to contradict the appearances. That is why the appearances are passively accepted as they are experienced, which explains why the dreamer is deceived by his or her dream-images. I will return to this point shortly.

With this discussion of the deceptive character of dream-images in *De insomniis* 1, 458b25–459a8, Aristotle is finally able to solve the initial aporia concerning the part of the soul to which dream-images belong, which is the aim of the last passage of *De insomniis* 1, 459a8–22. To recapitulate, Aristotle used two arguments to establish that dream-images do not belong to the thinking part of the soul. Now he explains that deception by dream-images, much like waking appearances in pathological states, does not require *dóxa* but only passive acceptance of appearances. This is the crucial move that allows Aristotle to attribute dream-images to the perceptual part of the soul. Having shown that the absence of *dóxa* is sufficient for appearances to be passively accepted, which means that the deceptive character of dreams does *not* require involvement of the thinking part of the soul, Aristotle is able to conclude that dream-images belong to the perceptual part of the soul.[25] However, an important qualification is needed. Dream-images do not belong to the perceptual part as such – that is, insofar as it enables the animal to perceive external objects through the peripheral sense organs, since in sleep there is no perception strictly speaking; rather, dream-images belong to the perceptual part of the soul insofar as it enables the animal to have appearances, for the capacity to have appearances (*phantasía*, *tò phantastikón*) is inseparable from

25 Observe that Segev's interpretation wrecks Aristotle's argument: if the deceptive character of dream images were due to the operation of *dóxa*, as Segev claims, Aristotle would *not* be entitled to the conclusion that dream images belong to the perceptual part of the soul, since the option that they belong to the thinking part of the soul would then remain very much open. This is a real difficulty for Segev's interpretation, to be added to the aforementioned ones.

perception, as Aristotle claims to have established in *De anima*.[26] Therefore, he solves the initial aporia by concluding that "dreaming is the function of the perceptual part of the soul insofar as it enables one to have appearances."[27]

3.2 *The Second Discussion* (*Insomn. 2, 460a32–b27*)

Towards the end of chapter two, Aristotle announces a fresh start. He posits that we are easily deceived by our senses when we are in strong emotional states. For instance, someone captivated by fear will be likely to misperceive something as an enemy soldier because it bears a small similarity to the enemy, and someone in love will be likely to misperceive a person as his lover because this person bears some small similarity to the one he loves. And the stronger the emotional state, the smaller the similarity required for misperception to occur.

What is said about emotional states is then extended to pathological states: people in fever see spiders on the wall because cracks on the wall bear a small resemblance to spiders. If people are not too feverish, they will be aware that their senses are playing tricks on them, but if they are in very acute fever, this will escape their notice and they will believe that there really are spiders on the wall, and they will react accordingly – back off, call for help, or whatever. Here is Aristotle's explanation of this phenomenon:

> The reason why these things happen is that the authoritative thing and the thing by which appearances occur do not judge (*krínein*) with the same power. An indication of this is that the sun appears only one foot across, and yet frequently something else contradicts the appearance. Again, by crossing the fingers a single object appears two, but even so we still deny that there are two things, because vision has more authority than touch; if touch were our only sense, we would judge (*ekrínomen*) the one thing to be two.[28]

---

26 Aristotle's cross-reference at *Somn.Vig.* 1, 459a15 no doubt refers to *de An.* 3.3. There Aristotle does not explicitly say that *tò phantastikón* is the same as *tò aisthētikón*, but this can be easily inferred from his definition of *phantasía* as "motion effected by actual perception" (*de An.* 3.3, 429a1–2), repeated almost verbatim at *Insomn.* 1, 459a17–18.

27 τοῦ αἰσθητικοῦ μέν ἐστι τὸ ἐνυπνιάζειν, τούτου δ' ᾗ φανταστικόν (*Insomn.* 1, 459a21–2).

28 αἴτιον δὲ τοῦ συμβαίνειν ταῦτα τὸ μὴ κατὰ τὴν αὐτὴν δύναμιν κρίνειν τό τε κύριον καὶ ᾧ τὰ φαντάσματα γίνεται. τούτου δὲ σημεῖον ὅτι φαίνεται μὲν ὁ ἥλιος ποδιαῖος, ἀντίφησι δὲ πολλάκις ἕτερόν τι πρὸς τὴν φαντασίαν. καὶ τῇ ἐπαλλάξει τῶν δακτύλων τὸ ἓν δύο φαίνεται, ἀλλ' ὅμως οὔ φαμεν δύο· κυριωτέρα γὰρ τῆς ἁφῆς ἡ ὄψις. εἰ δ' ἦν ἡ ἁφὴ μόνη, κἂν ἐκρίνομεν τὸ ἓν δύο. (*Insomn.* 2, 460b16–22.) This is the text of Drosaart Lulofs, Ross, Siwek, and Gallop. Some manuscripts read κρίνειν τὸ κύριον καὶ τὰ φαντάσματα γίνεται in the first sentence, which avoids the implication that "the thing by which appearances occur" (viz. *phantasía*) does

This passage tells us three important things. First, Aristotle here uses the verb *phaínesthai* ("to appear") and its cognates to describe situations in which there is an actual perception going on, but the report of the senses is overridden by a more epistemically authoritative source. If there is no reason to suspect a report of a sense, Aristotle would not use the *phaínesthai* terminology, but he would speak simply of perception.[29] This suggests that perception as such is veridical, at least typically. That is, in normal circumstances animals go along with what they perceive because they are built in such a way as to trust their senses. And they will trust their senses for as long as they have no grounds for distrusting them.

Second, different cognitive capacities can take the role of the epistemically authoritative source in different situations. In the example with the sun, it is the science of astronomy, and in the just quoted example with the crossed fingers touching a single object, it is the sense of vision that takes the role of the epistemically authoritative source. I suppose Aristotle would acknowledge situations in which the reverse of the second example is the case, that is, in which the sense of touch is more authoritative than the sense of vision. For example, I look at the surface of an object which looks rippled, but for some reason I wonder if it really is rippled, so I run my fingers over it. I will rely on my sense of touch in my judgement whether the surface only appears rippled or really is rippled. So, in different situations different senses can take the role of the epistemically authoritative source. Furthermore, apart from different special senses, I take it that the same role can be assumed by memory, as well as by what Aristotle calls *empeiría* – an organised set of memories of the same thing – and indeed by inductive or deductive reasoning. Thus, in various situations and contexts any of these cognitive capacities can play the role of an authoritative source that overrides the report of any other cognitive capacity.[30]

Scientific knowledge (*epistḗmē*) is a cognitive state which cannot be overridden by anything, on that much Aristotle would agree with Plato. However, whatever falls short of science, in Aristotle's view, can be overridden by any

any κρίνειν. However, I welcome that implication, for reasons that will become clear presently. Besides, *de An.* 3.3, 428a3 and *MA* 6, 700b18–21 seem to be saying that *phantasía* is one of the capacities that are κριτικά.

29 Cf. *de An.* 3.3, 428a12–15 and Malcolm Schofield, "Aristotle on the Imagination," in *Essays on Aristotle's De anima*, ed. M. C. Nussbaum and A. Oksenberg Rorty (Oxford: Clarendon Press, 1992), 249–77.

30 I take it that even reports of the senses with regard to their special sensibles can be challenged when non-standard conditions obtain. For instance, memory or reason can very well override the report that honey is bitter which our sense of taste tends to deliver when we are ill; cf. Mark Johnstone, "Aristotle and Alexander on Perceptual Error," *Phronesis* 60 (2015): 310–38.

other cognitive capacity in various situations, as when a newly observed phenomenon necessitates the rejection or a major revision of a working theory. Consider the following passage from Aristotle's *De generatione animalium*: "But the facts have not been sufficiently ascertained; and if at any future time they are ascertained, then credence must be given to the direct evidence of the senses more than to theories – and to theories too provided that the results which they show agree with what is observed."[31] Aristotle's insistence on conforming theories to the evidence of the senses, allowing the works of reason to be corrected by perception, is one good reason to celebrate Aristotle as an empirically-minded protoscientist; also, it is one point which sets him in stark contrast to Plato.[32]

The third point in connection with the quoted passage is the following: for one sense to be more authoritative than another sense, clearly it is necessary to suppose that the senses are coordinated. Indeed, one function of the common sense is to coordinate the special senses. The common sense is what informs us that the sensible qualities perceived by two different senses, for instance, white and sweet, belong to the same object. For the example with the crossed fingers to work, I need to be aware that it is *the same thing* that my sense of vision reports to be one and my sense of touch reports to be two. Now, if the common sense is incapacitated, clearly there cannot be any coordination among the special senses, and that eliminates the possibility of distrusting one sense on the basis of another. Presumably, the ability to distrust one sense on the basis of another is the most fundamental and widely available ground for distrusting one's perceptions or appearances, and this basis ceases to be available in sleep.

The last point fits well into my interpretation of Aristotle's explanation of the deceptive character of dream-images: because the common sense is incapacitated, a visual appearance cannot be distrusted on the grounds of a tactile or an auditory appearance, so it is passively accepted, taken to be true

31 οὐ μὴν εἴληπταί γε τὰ συμβαίνοντα ἱκανῶς, ἀλλ' ἐάν ποτε ληφθῇ τότε τῇ αἰσθήσει μᾶλλον τῶν λόγων πιστευτέον, καὶ τοῖς λόγοις ἐὰν ὁμολογούμενα δεικνύωσι τοῖς φαινομένοις. (Aristotle, *Generation of Animals*, trans. A. L. Peck (Cambridge, MA: Harvard University Press, 1942), 3.10, 760b30–32.) See also *Metaph.* 12.8, 1074a14–17.

32 This contrast has recently been emphasised, with Aristotle's bent for empirical investigation amply exemplified, in Armand Marie Leroi's book *The Lagoon: How Aristotle Invented Science* (Bloomsbury: London, 2014), e.g., 84, 88, 157, 346, 365, 378.

by the dreamer. This would explain why dreamers are not suspicious of dissociated sensory qualities or their gross mismatches.[33]

I should like to point out that the incapacitation of the common sense does not only suspend the most fundamental ground for distrusting one's perception or appearance – the ability to perceive associations and dissociations of perceptible qualities and to check reports of one sense by another sense – but indirectly contributes to the disengagement of the other cognitive capacities. Namely, without perception and the waking awareness, and especially in periods of dreamless sleep, one's memory and rational abilities tend to get disengaged. True, our memory or the thinking part of the soul can occasionally become active in sleep and get involved with dream-images, but that is not a standard situation. After all, sleep exists for the sake of rest – from perception as much as from thought.

3.3 *The Third Discussion* (*Insomn. 3, 461a25–b7*)

In chapter three of *De insomniis*, Aristotle extends his explanation of deception in emotional and pathological states to the state of sleep. Because of the inactivity of the special senses due to the withdrawal of blood, motions from earlier perceptions are "carried to the origin of perception [viz. the heart] where they become apparent as the disturbance caused by the digestive process subsides" (*Insomn.* 3, 461a5–8). The disturbance caused by the digestive process, as I have explained earlier, can be so violent as to efface all the motions of earlier perceptions on their way to the heart, but they can also be moderate so as to merely distort the motions to a certain degree; or the digestive process can subside so as to have negligible effect on the motions transported to the heart, leaving them more or less intact.

33 Juhana Toivanen and Seyed Mousavian raised a difficulty for my argument. I argue that the common sense is responsible for binding different sensible qualities into stable wholes, thus allowing us to perceive objects. However, the common sense is shut down in sleep, which means that no such binding can occur, whereas our dream-images typically appear as objects, not as free-floating sensible qualities. There are two ways around this problem. First, one could argue that the residual motions that cause dream-images are motions from already structured perceptions. Second, one could argue that the retained motions from earlier sense-impressions, though not properly structured, are nonetheless ordered insofar as they were caused by external objects, so they appear much like structured perceptions to the dreamer, or, third, that the structure is imposed on them only later, when we recollect our dreams in the waking state, when the common sense is operative again. In any case, I suppose that the digestive processes inside the body can shuffle and distort the residual motions, and the point is that the dreamer will not detect any problem with jumbled dream-images because the common sense is shut down.

When a motion produced in the eye by an external sense object arrives in the heart, Aristotle writes, we believe (*dokeîn*) we are having a visual experience; when a motion produced in the ear by an earlier auditory perception arrives in the heart, we believe we are having an auditory experience:

> for even when one is awake, it is because the motion from those sources reaches the origin that one believes (*dokeî*) one is seeing, hearing and perceiving. And because the sense of vision sometimes seems (*dokeîn*) to be actualised, though in fact it is not, we affirm our seeing; and because the sense of touch reports two acts, a single thing is believed (*dokeî*) to be two. For in general the origin affirms what comes from each sense, provided that something other, more authoritative does not contradict it. For things appear in any random fashion, but what appears is not believed (*dokeî*) to be in any random fashion – unless the judging thing is suppressed or does not move in its proper way.[34]

The sentence "in general the origin affirms what comes from each sense, provided that something other, more authoritative does not contradict it" seems to support what I have said several times over, namely that perception is by default taken to be veridical. Now the quoted passage extends this claim also to *phantasía*. By default, the origin will affirm not only perceptual motions currently caused by external objects, but also motions that were caused by past acts of perception.[35] These latter motions have been lingering in the peripheral sense organs and they may no longer bear much similarity to the objects of perception that caused them originally (due to the disturbances in the blood caused by the digestive process). So, whatever enters the heart from the sensory routes is by default affirmed and experienced as presenting an actual state of affairs – unless, of course, some epistemically more authoritative source kicks in.

I pause here to make two remarks. First, Aristotle says that, even in the waking state, it is because the motions from the peripheral sense organs, say eyes

34 τῷ μὲν γὰρ ἐκεῖθεν ἀφικνεῖσθαι τὴν κίνησιν πρὸς τὴν ἀρχὴν καὶ ἐγρηγορὼς δοκεῖ ὁρᾶν καὶ ἀκούειν καὶ αἰσθάνεσθαι, καὶ διὰ τὸ τὴν ὄψιν ἐνίοτε κινεῖσθαι δοκεῖν, οὐ κινουμένην, ὁρᾶν φαμεν, καὶ τῷ τὴν ἁφὴν δύο κινήσεις εἰσαγγέλλειν τὸ ἓν δύο δοκεῖ. ὅλως γὰρ τὸ ἀφ᾽ ἑκάστης αἰσθήσεώς φησιν ἡ ἀρχή, ἐὰν μὴ ἑτέρα κυριωτέρα ἀντιφῇ. φαίνεται μὲν οὖν πάντως, δοκεῖ δὲ οὐ πάντως τὸ φαινόμενον, ἀλλ᾽ ἂν τὸ ἐπικρῖνον κατέχηται ἢ μὴ κινῆται τὴν οἰκείαν κίνησιν. (*Insomn.* 3, 461a30–b7.)

35 See Gallop, *Sleep and Dreams*, 18–25. On p. 21 he writes: "In dreaming it <viz. *dóxa*> simply fails to oppose them <viz. imagination's deliverances>, so that the appearances presented to the subject gain acceptance by default (3, 461b29–462a8; cf. 1, 459a6–8; 3, 461b3–7)."

or ears, reach the heart that one *dokeî* to be seeing or hearing. Presumably, this is a description of a case in which one is unthinkingly aware of the fact that one is engaged in seeing (rather than, say, hearing) or in hearing (rather than, say, seeing). Aristotle elsewhere speaks of "perceiving that we are seeing or hearing."[36] Perhaps we can say that one "believes" that one is seeing or hearing, but this is a very deflated sense of believing. There is no thinking involved, one simply goes along with one's senses.

However, when the sun appears but does not *dokeî* to be one foot to across, this clearly *is* the work of *dóxa*, for the belief that contradicts the appearance crucially draws on one's knowledge of astronomy. And I suppose that *dóxa* is at work not only when a perception or an appearance is *contradicted* on rational grounds, but also when it is *confirmed* on rational grounds.[37] So, *dóxa* and *dokeîn*, in the strict sense, refer to the rational ability to evaluate and pass judgements on our perceptions and appearances, drawing on whatever cognitive resources one may have available, from the reports of other senses, memory, and *empeiría* to episodes of inductive and deductive reasoning, working theories, or established scientific knowledge. Of course, non-rational animals do not have *dóxa* in this sense, and yet it must be the case that the world *dokeî* to them in the more basic, unreflective sense of the verb *dokeîn*, since animals surely trust their senses.[38]

Second, the common sense is said to be inactive in sleep, which explains why the special senses are all simultaneously inactive in sleep.[39] Now, if the common sense is inactive in sleep, it cannot possibly be "the origin that affirms what comes from each sense" (τὸ ἀφ' ἑκάστης αἰσθήσεώς φησιν ἡ ἀρχή, *tò aph' hekástēs aisthḗseṓs phēsin hē archḗ*, *Insomn.* 3, 461b4), for what is inactive cannot engage in any sort of "affirming." The only thing that can engage in some such activity as "affirming" in the state of sleep is *phantasía*, i.e., the perceptual part of the soul insofar as it accounts for having appearances (τὸ αἰσθητικὸν ᾗ φανταστικόν, *tò aisthētikòn hēi phantastikón*, *Insomn*. 1, 459a21). This "affirming" in which *phantasía* is engaged is nothing other than the passive acceptance

36 αἰσθανόμεθα ὅτι ὁρῶμεν καὶ ἀκούομεν (*de An.* 3.1, 425b12; *Somn.Vig.* 2, 455a15–20).

37 I am not sure what is Aristotle's stance on the suspension of judgement on rational grounds when the perception or appearance is less than clear, and yet one's available cognitive resources are insufficient either to confirm it or disconfirm it. This becomes a central philosophical issue with the Stoics and the Sceptics.

38 Aristotle does not address the question whether non-rational animals are able to distrust one sense on the basis of another or on the basis of their memory, but I see no reason why he would deny this. However, non-rational animals certainly have fewer resources and opportunities to engage in such evaluations, and also fewer reasons to do so.

39 *Somn.Vig.* 2, 455a5–b2.

of appearances in the absence of anything to contradict them. And there is nothing to contradict them in sleep, since perception and the other cognitive capacities are typically shut down in sleep.

This sits well with the passage I quoted earlier. When Aristotle said at *Insomn.* 2, 460b16–18 that deception in pathological states happens because "the authoritative thing and the thing by which appearances occur do not judge (*krínein*) with the same power," he clearly implied that *phantasía* ("the thing by which appearances occur") also judges. However, I insist that this is judging only in the deflated sense that the appearances are passively accepted, and they are passively accepted only if no cognitive capacity contradicts them. So, on my interpretation, *phantasía* can be overruled by any cognitive capacity, and normally is overruled by some, but when it happens not to be overruled – because it is not challenged at all – it yields acceptance, which can be regarded as a primitive sort of judgement.[40]

3.4 *The Fourth Discussion* (*Insomn. 3, 461b7–462a8*)

Aristotle's final discussion of the deceptive character of dream-images occurs in a passage rife with textual difficulties, as one can tell from a quick look at the critical apparatus accompanying it. However, the gist of the passage is reasonably clear and, I think, supportive of the interpretation I have been putting forward.

First, we need to remind ourselves that, according to Aristotle, when we perceive Coriscus, our sense is assimilated to Coriscus, or rather to a set of sensible qualities inhering in Coriscus' body. For all practical purposes, we can identify this act of assimilation with the sense-impression (*aísthēma*) in our sense organ. Now, this sense-impression is the medium, as it were, which puts us in contact with real Coriscus:

> While one was perceiving, the authoritative and judging thing was saying not [that the sense-impression is] Coriscus, but because of it that the actual person over there is Coriscus.[41]

40 So perhaps there is a sense in which *phantasía* can be called *kritikḕ dýnamis*, although I would insist that it is not a cognitive capacity. In my view, a cognitive capacity has to be *kritikḗ* in both senses – in the sense that it yields some sort of judgement, and in the sense that it has a class of objects among which it discriminates, so that it can be authoritative in certain situations. *Phantasía* is not *kritikḗ* in the latter sense, and hence I would not count it as a cognitive capacity.

41 ὅτε δὲ ᾐσθάνετο, οὐκ ἔλεγε Κορίσκον τὸ κύριον καὶ τὸ ἐπικρῖνον, ἀλλὰ διὰ τοῦτο ἐκεῖνον Κορίσκον τὸν ἀληθινόν. (*Insomn.* 3, 461b24–26.)

Aristotle seems to be saying here that in the normal waking state sense-impressions are transparent: we perceive the world through them, so to speak, without attending to the sense-impressions themselves. If I am right, the "authoritative and judging thing" in this particular example is not *phantasía*, but the common sense, since this is a waking state scenario. As our sense of vision is assimilated to a set of colours and shapes that inhere in Coriscus' body, we perceive these colours and shapes; but we also perceive their unity, we associate this specific combination of sensible qualities with Coriscus, and all along we are awake and aware of our perceptions. Whatever "judging" and "saying" can be said to take place at that moment, I would argue that it amounts to nothing more sophisticated than passive acceptance: we go along with what our vision presents. Of course, we can also reflect upon what is going on, in which case we will be aware of the distinction between the sense-impression and the external object. And in that case, "judging" and "saying" would be the work of *dóxa*, as it supplies the fully-fledged belief that the actual person over there is Coriscus, based on what we are seeing.[42]

Second, Aristotle posits that the remnant of a sense-impression is similar to the object that caused it and which may no longer be present. He points out that it is true to say that the remnant of a sense-impression is "like Coriscus, but not that it is Coriscus" (*Insomn.* 3, 461b22–4). What happens in sleep is that these remnants, if they survive the digestive commotions inside the body and arrive in the heart, cause us to have appearances, and these appearances have a certain degree of similarity to the objects that caused the original sense-impression. Because of that similarity, the remnants are processed as actual sense-impressions. That is to say, *phantasía*, which remains operative in sleep, "is moved by the motions in the sense organs just as if it were perceiving (unless it is completely suppressed by the blood), so what is like something is believed to be the real thing."[43] Again, this "belief" is the passive acceptance of the appearances produced by the remnants of earlier sense-impressions that arrive in the heart.

---

42 According to Michael of Ephesus (73.13–19, 28–29), the "authoritative and judging thing" in this passage is reason.

43 ὃ δὴ καὶ αἰσθανόμενον λέγει τοῦτο, ἐὰν μὴ παντελῶς κατέχηται ὑπὸ τοῦ αἵματος, ὥσπερ αἰσθανόμενον τοῦτο κινεῖται ὑπὸ τῶν κινήσεων τῶν ἐν τοῖς αἰσθητηρίοις, καὶ δοκεῖ τὸ ὅμοιον αὐτὸ εἶναι τὸ ἀληθές. (*Insomn.* 3, 461b26–29.) This is one of the most problematic parts of the text. I assume that Aristotle is not describing what happens in normal perception, but what happens when one experiences ("perceives") dream-images. I take it that it is *phantasía* that does the "saying" and that is being "completely suppressed by the blood" amounts to the cases when the residual motions are completely wiped out by violent digestive processes, so that no dream-images occur.

> And the power of sleep is such that it makes this escape our notice. So, just as for someone who is unaware of a finger being pressed beneath his eye, not only will a single object appear to be two, but it will also be believed to be two, whereas for someone aware of this, it will appear to be two, but not believed to be two [...].[44]

Sleep makes us unaware of the fact that what we are experiencing are not perceptions of external objects, but appearances caused by earlier perceptions (and hence similar to earlier perceptions). Aristotle compares this with the situation in which a person is unaware of having her finger pressed beneath her eye, so she goes along with her double vision. We may say that in this situation she mistakenly "believes" one thing to be two, but surely it is not a belief at which she arrives after much thought, that is, it is not a work of *dóxa*. Rather, she just happens to be unaware of her condition, so she unsuspectingly goes along with what she sees. This is what I described as passive acceptance, and what I think is the default of every act of perception or appearance – as long as no grounds for suspicion are available.

We are unaware of our condition in sleep, so that we are oblivious to the fact that we are not experiencing perceptions of external objects but appearances that have some degree of similarity to external objects, because the common sense is shut down in sleep. According to Aristotle, one function of the common sense is to perceive that we are seeing and hearing, that is, to monitor the special senses.[45] I have argued elsewhere that this function is important because it alerts the animal to interruptions in perceptual input, allowing it to rely on the other senses in situations of stimulus deprivation, and to take steps to diagnose and fix the problem.[46] As the common sense shuts down in sleep, then, not only do the special senses shut down, but also monitoring of the special senses ceases, which means that one becomes oblivious

44 καὶ τοσαύτη τοῦ ὕπνου ἡ δύναμις ὥστε ποιεῖν τοῦτο λανθάνειν. ὥσπερ οὖν εἴ τινα λανθάνοι ὑποβαλλόμενος ὁ δάκτυλος τῷ ὀφθαλμῷ, οὐ μόνον φανεῖται ἀλλὰ καὶ δόξει εἶναι δύο τὸ ἕν, ἂν δὲ μὴ λανθάνῃ, φανεῖται μὲν οὐ δόξει δέ. (*Insomn.* 3, 461b29–462a2.)

45 Based on his interpretation of *de An.* 3.2, 425b12–25, Victor Caston ("Aristotle on Consciousness," *Mind* 111 (2002): 751–815) argues that every act of perception by a special sense is partly directed at the external object and partly reflexive, so Caston disagrees that monitoring is a function of the common sense. Thomas Kjeller Johansen argues convincingly against Caston's interpretation in the article "In Defense of Inner Sense: Aristotle on Perceiving that One Sees," *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 21 (2005): 235–85.

46 See Gregoric, *Aristotle*, 174–92, and id., "Perceiving that We are Not Seeing and Hearing: Reflexive Awareness in Aristotle," in *Encounters with Aristotelian Philosophy of Mind*, ed. P. Gregoric and J. Leth Fink (London: Routledge, 2021), 119–37.

to the fact that one is *not* seeing anything, *not* hearing anything, etc. And this is absolutely crucial for Aristotle's explanation of the deceptive character of dreams: the monitoring function must be turned off if a visual appearance is to be mistaken for an actual visual perception, an auditory appearance for an actual auditory perception, and likewise for the other sense modalities. Let me clarify this point.

When a motion that was caused in my eyes by an external object arrives in my heart after a period of lingering latently in my perceptual system, I have a visual appearance of, say, a floating red flame; however, I will not be deceived by this appearance – if I am aware that my sense of vision is currently inactive (for instance, because I am located in a dark recess of a cave, with eyes open but deprived of visual stimuli). That is, being aware of the fact that I am currently *not* perceiving anything, I would immediately know that the appearance I am having is just that, an appearance. Consequently, if I am to mistake a dream-image for an actual perception, I must be oblivious to the fact that my senses are in fact inactive. And indeed, with the common sense being shut down, no monitoring of the senses is taking place and I lose any awareness of the current state of my senses. More to the point, with the common sense being shut down and no monitoring taking place, I have suggested, all the other cognitive capacities are typically shut down. Thus, we lose any grounds for contradicting the appearances that *phantasía* affords, and consequently we go along with them, that is, we take them to be real.

On the other hand, if some cognitive capacity happens to become operative during sleep, we immediately obtain grounds for distrusting the appearances and we become aware that what we are experiencing are not actual external objects. The previously quoted passage continues as follows:

> [...] in the same way, in episodes of sleep, if one perceives that one is asleep, i.e., that it is a sleeping state in which the perception is occurring, then there is an appearance, but something in him says that although it appears to be Coriscus, it is not in fact Coriscus. (For often something in the soul of the sleeper says that what appears is a dream-image.) But if it escapes his notice that he is asleep, nothing will contradict *phantasía*.[47]

47 [...] οὕτω καὶ ἐν τοῖς ὕπνοις, ἐὰν μὲν αἰσθάνηται ὅτι καθεύδει, καὶ τοῦ πάθους ἐν ᾧ ἡ αἴσθησις τοῦ ὑπνωτικοῦ, φαίνεται μέν, λέγει δέ τι ἐν αὐτῷ ὅτι φαίνεται μὲν Κορίσκος, οὐκ ἔστι δὲ ὁ Κορίσκος (πολλάκις γὰρ καθεύδοντος λέγει τι ἐν τῇ ψυχῇ ὅτι ἐνύπνιον τὸ φαινόμενον)· ἐὰν δὲ λανθάνῃ ὅτι καθεύδει, οὐδὲν ἀντιφήσει τῇ φαντασίᾳ. (*Insomn.* 3, 462a2–8.)

This "something" that "says" that the dream-image only appears to be Coriscus and which "contradicts" the *phantasía* is probably a rational capacity such as *dóxa*, and I suppose that it may rely on other cognitive capacities. For instance, remembering the fact that Coriscus moved to China last week, the sleeper infers that what appears to her cannot possibly be real Coriscus. However, such thoughts are rather atypical, so in most cases there will be nothing to contradict the appearances that we experience in sleep, and hence we will passively accept them and thus be deceived.

3.5 *Concluding Remarks*

Let me now summarise the elements of my interpretation of Aristotle's explanation of the deceptive character of dream-images. First, in sleep all our cognitive capacities are typically shut down, whereas *phantasía* may remain operative. Because the common sense is shut down, (i) all the peripheral sense organs are shut down, so no perception takes place in sleep; (ii) there is no monitoring of the special senses, so there is no awareness of the fact that no perception takes place in sleep; (iii) there is no integration of sense modalities and hence no possibility of associating, dissociating, and comparing appearances (in the waking state, by contrast, cross-modal association, dissociation, and comparison are important grounds for distrusting the senses); (iv) all the other cognitive capacities tend to be shut down in sleep too, which eliminates all the other grounds for distrusting one's experience. On the other hand, because *phantasía* may be operative in sleep, dream-images can be experienced. That is, retained motions from earlier sense-impressions may arrive in the heart as the blood and heat withdraw from the periphery towards the heart in the course of the digestive process, thus causing dream-images to appear.

Second, given that dream-images are caused by motions from sense-impressions that real things produced earlier in our sense organs, dream-images resemble these things to a certain degree. Because of this resemblance, dream-images are treated as sense-impressions when all the cognitive capacities except *phantasía* are shut down.[48] In the waking state, as I have explained,

48 In the fourth discussion Aristotle makes much of the similarity between the dream-images and the real objects that caused the antecedent sense-impressions. Does he think that dream-images *must* be similar to objects in the real world in order to be mistaken for sense-impressions and thus to cause deception? Perhaps, but I suppose a minimal degree of similarity (*mikrá homoiótēs*, *Insomn.* 3, 461b10; cf. 2, 460b6–8, 12) will be satisfied by pretty much every dream-image, given that they are all caused by motions from sense-impressions. A dream-image need not look like a giant spider or tiger to deceive us; it can very well look like a pulsating shimmer, or sound like an indistinct hiss. The latter dream-images, it can be argued, still retain a degree of similarity to real things.

sense-impressions put us in contact with real things out there, and to treat dream-images as sense-impressions is to take them as presenting us with real things. This is precisely the point of Burdach's observation from the epigraph. Dream-images are not merely entertained, but they are also accepted, that is, they take the place of sense-impressions through which we gain information about the world around us. This acceptance follows from the basic fact that animals are naturally constructed to go along with what appears to them, as long as nothing contradicts the appearances. And given that in sleep there is nothing to contradict the appearances, since the common sense and the higher cognitive powers are all shut down in sleep, animals accept them.

One last remark. Aristotle sometimes speaks of *kritikaì dynámeis*.[49] These are the capacities that perform *krínein*, which means that they discriminate or pick out items in a certain domain. This much has been established by Theodor Ebert and elaborated by other scholars.[50] However, I have argued that *krínein* also means "judging," that is, taking something to be true or false. While this *krínein* is a proper function of *dóxa*, expressed also with the verb *dokeîn*, and achieved by the thinking part of the soul, I have argued that there is also a deflated sense of the verbs *krínein* and *dokeîn*, as when a perception or an appearance is passively accepted. *Krínein* and *dokeîn* in this sense refer to something very basic, primitive, and constitutional, something that certainly all animals have and something that precedes the possibility of contradicting our perceptions or appearances on rational grounds.

Apart from being philosophically plausible, I think the advantage of the proposed interpretation is that it facilitates our reading of the passages in Aristotle's writings in which the verb *krínein* and its cognates are used in ways that clearly invite the connotation of judgement rather than that of discrimination. More to the point, it enables us to interpret Aristotelian passages that make use of the verb *dokeîn* and its cognates – as well as verbs of saying, affirming, confirming, and contradicting – in contexts that do not imply the presence or operation of rational capacities.[51]

---

49 See *APo.* 2.19, 99b35; *de An* 3.3, 428a3; 3.9, 432a15–16; *MA* 6, 700b18–21.

50 See Theodor Ebert, "Aristotle on What is Done in Perceiving?" *Zeitschrift für Philosophische Forschung* 37 (1983): 181–98, and, more recently, Klaus Corcilius, "Activity, Passivity, and Perceptual Discrimination in Aristotle," in *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*, ed. J. F. Silva and M. Yrjönsuuri (Dordrecht: Springer), 31–53, and Mika Perälä, "Aristotle on Perceptual Discrimination," *Phronesis* 63 (2018): 257–92.

51 Here is a sample of such passages in addition to those discussed on the preceding pages: *dokeîn* (*de An.* 3.1, 425b8); *eipeîn* (*de An.* 3.1, 425b2; *MA* 7, 701a33); *légein* (*de An.* 3.2, 426b20, 21, 25, 28); *ereîn* (*Sens.* 7, 447b15), *phánai* (*Metaph.* 4.5, 1010b18), *amphisbēteîn* (*Metaph.* 4.5, 1010b20).

4 The Interpretation of Michael of Ephesus

It is surprising that the question of why we are deceived by our dreams received very little attention in the ancient Aristotelian tradition. We had to wait for no less than thirteen centuries to find this question addressed again, in the commentary on *De insomniis* written by the Byzantine scholar Michael of Ephesus (1050–1129).[52] This lack of interest in the question of the deceptive character of dreams probably has something to do with the fact that Aristotelian and other philosophers increasingly came to regard dreams as revelatory and god-sent, contrary to what Aristotle himself wrote in *De divinatione per somnum*.[53] As Philip van der Eijk and Maithe Hulskamp write:

> Divination in sleep is no longer associated with the non-rational but is considered something alongside or even superior to rational thought. This development can already be observed [...] in the 4th century Peripatetic thinker Dicearchus and subsequently in the later Peripatetics Clearchus (frs. 7–8) and Cratippus. It is a development that is continued in the Imperial period, e.g. in Nemesius, Synesius and ultimately in the Arabic versions of Aristotle's *Parva naturalia* by Averroes.[54]

If dreams are considered overwhelmingly significant and "even superior to rational thought," one is unlikely to consider them deceptive in the first place. And if one allows some dreams to be deceptive, one may be discouraged from examining their deceptiveness, as that would naturally lead to the question of the criterion of distinguishing between deceptive and non-deceptive, that is, significant or prophetic dreams, which might prove unpleasant for anyone keen on the divine origin of dreams.

Whatever the cause of the lack of interest in the question of the deceptive character of dreams in later antiquity, Michael's interpretation of the relevant passages of *De insomniis* yields the following picture. Sleep is a state of arrest of the central sense organ, the heart, due to the digestive process. Ingested food causes hot, dense, and chunky exhalation to rise from the stomach to the upper parts of the body. This compromises the normal functioning of the

52 For the reception of Aristotle's works on sleep and dreams in antiquity, see Philip van der Eijk and Maithe Hulskamp, "Stages in the Reception of Aristotle's Works on Sleep and Dreams in Hellenistic and Imperial Philosophical and Medical Thought," in *La réception des Parva Naturalia d'Aristote: Fortune antique et médiévale*, ed. C. Grellard and P.-M. Morel (Paris: Sorbonne, 2010), 47–75.

53 *Div.Somn.* 1, 462b20–36.

54 Van der Eijk and Hulskamp, "Stages in the Reception," 60.

cold, thin, and pure *pneûma* in the upper parts which mediates motions set up by external objects in the peripheral sense organs to the central sense organ. That is, the exhalation destroys or distorts motions from sense-perceptions, and even generates new motions that are similar to sense-perceptions. As the exhalation bounces off from the region around the brain and goes back down, it pushes the *pneûma* from the upper parts down towards the heart, together with all the motions that are retained in the *pneûma* or internally generated by the agency of the exhalation. Unless these motions are destroyed on their way to the heart, upon their arrival in the heart they are experienced. Given that some of the motions are distorted and some generated internally, the experience they cause will not correspond to anything in reality. Michael concludes that "*pneûma* of this sort is the cause of our being deceived in sleep" (63.28).[55]

What happens with *pneûma* inside the body, then, explains how dream-images come about, why sometimes they do not come about, and why they are often bizarre. But it does not explain the deceptive character of dreams. Michael tells us that the exhalations affect the central sense organ so as to disable the thinking part of the soul:

> When the descending exhalation is massive, so that it escapes our notice and we are incapable of grasping that we are not awake, upon seeing the images and remnants of perceptible objects we are deceived and we believe that we are seeing the real perceptible objects themselves. But when the blood exhalation is not so massive, but moderate, so that this does not escape our notice, we are not deceived, but instead we say while asleep that though this image appears to be Coriscus it is not Coriscus, but a remnant or an impression of Coriscus.[56]

55 Observe that Michael updates Aristotle's physiology of sleep here by replacing blood with *pneûma* as the medium of transmission of perceptual motions from the peripheral sense organs to the heart. This is common knowledge after Galen, whom Michael mentions explicitly at 67.21.

56 ὅταν μὲν οὖν πολλὴ ᾖ ἡ ἀναθυμίασις ἡ κατελθοῦσα, ὥστε λανθάνειν ἡμᾶς καὶ μὴ δύνασθαι ἀντιλαβέσθαι ὅτι <οὐκ> ἐγρηγόραμεν, ἀπατώμεθα καὶ ὁρῶντες τὰ εἴδωλα καὶ ἐγκαταλείμματα τῶν αἰσθητῶν δοκοῦμεν αὐτὰ ἐκεῖνα τὰ ἀληθῆ αἰσθητὰ ὁρᾶν. ὅταν δὲ μὴ οὕτως ᾖ πολλὴ ἡ αἱματικὴ ἀναθυμίασις, ἀλλὰ σύμμετρος, ὥστε μὴ λανθάνειν, οὐκ ἀπατώμεθα, ἀλλὰ λέγομεν ὑπνώττοντες ὅτι φαίνεται μὲν τὸ εἴδωλον τοῦτο ὅτι Κορίσκος ἐστίν, οὐκ ἔστι δὲ Κορίσκος, ἀλλὰ τὸ ἐγκατάλειμμα καὶ ὁ τύπος τοῦ Κορίσκου. (Michael of Ephesus, *In Parva naturalia commentaria*, ed. P. Wendland (Reimer: Berlin, 1903), 64.3–10.) I insert the negation οὐκ before ἐγρηγόραμεν, because otherwise the text makes no sense; the parallel place in Sophonias, *In Parva naturalia commentarium*, ed. P. Wendland (Berlin: Reimer, 1903), 31.32–32.1) is of no help.

Michael repeats several times over that the cause of deception, both by dream-images in sleep and by perceptual appearances in acute pathological states, is the disablement of reason (*diánoia*, *noûs*).[57] "If reason is not suppressed," he writes, the sun "appears [one foot across], but is not believed to be so; and if it is suppressed, it both appears and is believed to be so" (70.32–71.1). Again, in his paraphrase of Aristotle's fourth and final discussion, Michael says:

> This authoritative and judging thing, if it is not entirely suppressed by blood in sleep, is moved by motions in the sense organs in the same way as when one perceives; and just as it is not deceived (unless something unusual happens) when one really perceives, it is not deceived in sleep either. But if the authoritative and judging thing is suppressed, so that it believes the image which is similar to something to be the real thing itself, it is not moved by the images as when one perceives and in a way that resembles the waking state, but as when one is deprived of perception.[58]

A few lines down, Michael makes sure the reader understands that "the authoritative and judging thing is, as has been stated earlier, reason (*diánoia*)" (73.28–29).

So, Michael thinks that there is one thing whose activity consists in monitoring what comes from the sense organs. If this thing operates properly, it will notice the distinction between perceptions, which put us in touch with external objects, and images, which do not. If this thing does not operate properly, it will fail to notice this distinction, thus allowing images to pass as perceptions that put us in touch with external objects, which explains why we are deceived by perceptual appearances and images. This thing, Michael suggests, can become active in sleep, in which case we are aware that what we are experiencing in sleep are only images that bear some similarity to real objects, but we are not deceived by them. And this thing is reason (*diánoia*).

Still, this does not constitute an explanation of the deceptive character of dreams, for it is one thing to have an appearance and quite another to go

57 Michael, *In Parva naturalia*, 65.16–21, 67.12–19, 22–26, 70.30–71.1, 72.33–35, 73.13–19, 28–29, 76.4–6.

58 τοῦτο τὸ κύριον καὶ ἐπικρῖνον ἂν μὴ παντελῶς ὑπὸ τοῦ αἵματος ἐν τοῖς ὕπνοις κατέχηται, ὑπὸ τῶν κινήσεων τῶν ἐν τοῖς αἰσθητηρίοις οὕτω κινεῖται ὥσπερ αἰσθανόμενον, καὶ ὥσπερ τὸ κυρίως αἰσθανόμενον, εἰ μή τι συμβαίη, οὐκ ἀπατᾶται, οὕτως οὐδὲ τοῦτο. ἐὰν δὲ οὕτω κατέχηται, ὥστε τὸ ὅμοιον καὶ τὸ εἴδωλον δοκεῖν ὅτι αὐτό ἐστι τὸ ἀληθινόν, οὐ κινεῖται ὑπὸ τῶν εἰδώλων ὡς αἰσθανόμενον καὶ τρόπον τινὰ ἐγρηγορός, ἀλλ' ὡς ἀναίσθητον. (Michael, *In Parva naturalia*, 73.13–19.)

along with it. That is to say, we do not merely entertain appearances in dreams, as when we conjure up things in our imagination or when we observe paintings, but we buy into them, we take them to give us real things. The activity of reason may well explain the rare cases when we are not deceived by our dreams, but its inactivity, as such, does not explain the typical cases when we are. Obviously, more needs to be said.

The explanation of the deceptive character of dreams is found in Michael's commentary on Aristotle's statement that "in general the origin affirms what comes from each sense" (*Insomn.* 3, 461b3–5):

> To put it simply, if something is reported to be in a certain way by touch, vision, or some other sense, that is how it is said to be by the primary sense, for that is what Aristotle calls "origin." Thus also if touch reports one thing as two, the origin will say that this one thing is two, unless another more authoritative capacity contradicts. Vision, being superior and more authoritative, immediately contradicts touch by saying: "The finger is one!," or rather, "The image of the finger is one, not two!"[59] However, even when vision reports the size of the sun as being one foot across (for we see such things in our dreams), reason, being more authoritative than vision, contradicts and says: "It's not one foot across, but larger than the earth!"[60]

This brings Michael close to my interpretation of Aristotle. The cause of deception is the fact that the "primary sense" by default confirms whatever a sense conveys unless a more authoritative sense or thought contradicts. What Michael does not explain, however, is what this "confirming" and "saying" of the primary sense exactly amounts to. Are these judgements? If yes, how are they related to the judgements passed by *dóxa* or reason? If not, what are they?

---

59 Michael interprets Aristotle's example with crossed fingers in *Insomn.* 2, 460b20–21 (mentioned also in *Metaph.* 4.6, 1011a33–34) in such a way that the crossed fingers of one hand are touching a finger of the other hand, as is clear from 68.2–8.

60 ἁπλῶς γὰρ ὁποῖον ἂν διαπορθμεύσῃ ἡ ἁφὴ ἢ ἡ ὄψις ἢ ἄλλη τις τῶν αἰσθήσεων, τοιοῦτον λέγει αὐτὸ εἶναι ἡ πρώτη αἴσθησις· ταύτην γὰρ εἶπεν ἀρχήν. ὥστε καὶ τὸ ἓν ἂν ὡς δύο διακομίσῃ, τὸ ἓν δύο φησὶν ἡ ἀρχή, ἂν μὴ ἑτέρα κυριωτέρα ἀντιφήσῃ. εὐθὺς γὰρ ἡ ὄψις κρείττων καὶ κυριωτέρα οὖσα τῆς ἁφῆς ἀντίφησι λέγουσα· εἷς ἐστιν ὁ δάκτυλος, μᾶλλον δὲ τὸ τοῦ δακτύλου εἴδωλον ἕν ἐστιν, ἀλλ᾽ οὐ δύο. ἀλλὰ καὶ ἡ ὄψις τὸ τοῦ ἡλίου μέγεθος ὡς ποδιαῖον διαπορθμεύσασα, ὡς ποδιαῖον αὐτό φησιν ἡ ἀρχὴ ἐν τοῖς ὕπνοις (ὁρῶμεν γὰρ καὶ τοιαῦτα ἐν τοῖς ὕπνοις), ἀλλ᾽ ἡ διάνοια ὡς κυριωτέρα τῆς ὄψεως ἀντίφησι καὶ λέγει· οὐκ ἔστι ποδιαῖος, ἀλλὰ μείζων τῆς γῆς. (Michael, *In Parva naturalia*, 70.19–28.) I thank Börje Bydén for his assistance in translating this passage.

My interpretation of Aristotle in section three supplies answers to these questions, and I do not think Michael would have any reason to object to them.

More importantly, what is the "primary sense" (ἡ πρώτη αἴσθησις, *hē prṓtē aísthēsis*) mentioned in the just-quoted passage? Michael leaves no room for doubt: the primary sense is the primary perceptual faculty located in the heart. At more than one place he explicitly identifies it with the common sense[61] and claims that it is in charge of *phantasía* and memory. Michael uses the expression "common sense" in the broader of the two senses laid out in section one above (p. 33), which is not a problem in itself. What is a problem, however, is that Michael endorses Aristotle's statement in *Somn.Vig.* 1, 454a22–24 that sleep and waking are "both affections related to the primary perceptual capacity," so he admits that sleep is an affection of the primary sense.[62] Well, if sleep is an affection of the primary sense such that the primary sense is shut down, how can it account for our experience of dream-images? Clearly, it cannot be the whole of the primary sense that is affected by sleep, for at least *phantasía* needs to remain active in order to confirm the dream-images. Michael does not seem to be aware of this acute problem.

Perhaps there is a way of saving Michael's interpretation by exploiting what he says about the common sense in his commentary on Aristotle's *De somno et vigilia*. Let us look at the relevant passage from Aristotle first and then at Michael's commentary. In *Somn.Vig.* 2, 455a15–25, Aristotle writes that there is a "common capacity accompanying all the senses" by which we perceive that we see and hear.[63] This allows Aristotle to conclude that the perceptual part of the soul is a complex thing, with the special senses as its offshoots, so to speak, in the peripheral sense organs, and with the common sense as its root in a single controlling organ. He then says that this organ coincides with the organ of touch.[64] The purpose of this statement is to secure the claim that waking and sleep are found in all animals: given that all animals necessarily have the sense of touch, and the organ of touch coincides with the controlling organ, all animals necessarily have the controlling sense organ; and given that waking

61 ἡ κοινὴ αἴσθησις: 13.3–4, 18.26–28; cf. 44.16–20, 47.23–26.

62 Michael, *In Parva naturalia*, 44.17–22, 49.14–15.

63 ἔστι δέ τις καὶ κοινὴ δύναμις ἀκολουθοῦσα πάσαις, ᾗ καὶ ὅτι ὁρᾷ καὶ ἀκούει αἰσθάνεται. (*Somn. Vig.* 2, 455a15–17.)

64 τοῦτο <viz. τὸ κύριον αἰσθητήριον> δ' ἅμα τῷ ἁπτικῷ μάλιστα ὑπάρχει. (*Somn.Vig.* 2, 455a22–23.) For Aristotle, the heart is the proper sense organ of touch, whereas the flesh is only the connate medium of the sense of touch; cf. *Sens.* 2, 438b30–439a2; *Juv.* 3, 469a10–23; *PA* 2.10, 656a27–b6. See also Gregoric, *Aristotle*, 43–46.

and sleep are states of the controlling sense organ,[65] it follows that waking and sleep will be found in all animals. By saying that the controlling organ coincides with the organ of touch, however, Aristotle is not identifying the common sense with the sense of touch. The most that can be validly inferred from his statement is that they obtain together: if the controlling sense organ coincides with the sense organ of touch, the common sense is present wherever the sense of touch is present.

Michael's interpretation of this passage is very surprising. First he says, quite rightly, that we judge that we are seeing and hearing "by the common sense, which resides in the heart" and which is "one in subject, but many in account" (47.23–6). But then he goes on to identify the common sense with the sense of touch. Touch is the only sense that can be instantiated without any other sense, and all animals necessarily have touch, so, Michael concludes, the common sense is identical with the sense of touch:

> If truth be told, touch and the common sense are the same thing, for all animals have this sense in common, not vision or hearing. Hence, sleep too is an affection of touch and of no other sense.[66]

By saying that sleep is an affection of the sense of touch, one could argue on Michael's behalf, he restricts sleep to a particular aspect of the primary sense, so that *phantasía* can remain active in sleep. This would resolve the problem I have identified: it is not the whole primary sense that is affected by sleep, but only the sense of touch; its shutting down somehow causes all the other senses to shut down too, but *phantasía* remains active and thus capable of confirming dream-images.

However, Michael's identification of the common sense with the sense of touch does not seem to be very plausible as an interpretation of Aristotle.[67] More to the point, it creates a new problem for Michael's interpretation:

---

65 τούτου <viz. τοῦ κυρίου αἰσθητήριου, 455a21> ἐστὶ πάθος ἡ ἐγρήγορσις καὶ ὁ ὕπνος. (*Somn.Vig.* 2, 455a26.)

66 εἰ δὲ χρὴ τἀληθὲς εἰπεῖν, ἀφὴ καὶ κοινὴ αἴσθησις ταὐτόν ἐστι· ταύτῃ γὰρ κοινωνεῖ πάντα τὰ ζῷα, ἀλλ᾽ οὐ τῇ ὄψει ἢ τῇ ἀκοῇ. ὥστε καὶ ὁ ὕπνος τῆς ἁφῆς ἐστι πάθος καὶ οὐδεμιᾶς ἄλλης. (Michael, *In Parva naturalia*, 48.7–10.)

67 There is a passage in *Historia animalium* (1.3, 489a17) where Aristotle says that touch is the only sense common (*aísthēsis koinḗ*) to all animals. What he means by that clearly is not that the sense of touch is identical with a higher-order perceptual capacity or with the primary perceptual faculty, but rather that touch is the only sense found in all animals, of all species. Michael seems to be aware of this passage. In his commentary on Aristotle's *PA* 4.10, 686a31, where one of the few occurrences of the phrase *koinḕ aísthēsis* is found in Aristotle, Michael writes: "By the 'common sense' he <viz. Aristotle> means either touch

everywhere else in his commentary on the *Parva naturalia* he identifies the common sense with the primary sense, that is with the perceptual part of the soul insofar as it accounts for higher-order perceptual abilities plus *phantasía* and memory. So, the price of the proposed way of saving Michael's interpretation is grave inconsistency in his use of technical terminology.

Michael's identification of the common sense with touch has puzzled interpreters. Péter Lautner recently attempted to resolve the "apparent contradiction" in Michael's views.[68] Availing himself of a number of premises that are unstated by Michael, Lautner argued that Michael's views on the common sense are tolerably consistent. Very briefly, Michael's view that the common sense is identical with the sense of touch, according to Lautner, highlights the fact that touch "just is the base of the perceptual system as the common sense is."[69] Consequently, "if there is no other possibility for the common sense to work, it works as touch which is the basic form of perceptual activity and shared by all animals."[70]

I am not sure that the common sense can ever "work as touch," or that touch is ever "able to perform some of the activities which are usually performed by the common sense,"[71] but even if Lautner's interpretation is accepted and there is no inconsistency in Michael's views concerning the common sense, the old problem is reopened. Now that we know that the common sense that is shut down in sleep is identical with touch, the identity relation commits us to the view that the common sense that confirms dream-images is also identical with touch. But if the common sense that is identical with touch is shut down in sleep, how can it confirm dream-images? Resolving this problem by saying that the common sense that is shut down in sleep *is* identical with touch, but the common sense that confirms dream-images *is not* identical with touch, means (at best) that the term "common sense" is used inconsistently. In short, either Michael's interpretation leaves an acute problem open or it is based on an egregious inconsistency.

Another objection to Michael's interpretation is that he seems to attribute to Aristotle a rigid hierarchy of cognitive capacities according to their epistemic

(because all animals have that sense) or, as I think, all five senses jointly" (*In Parva naturalia*, 84.18–20).

68 Péter Lautner, "The Notion of κοινὴ αἴσθησις and Its Implications in Michael of Ephesus," in *The Parva naturalia in Greek, Arabic and Latin Aristotelianism*, ed. B. Bydén and F. Radovic (Dordrecht: Springer, 2018), 70–75.

69 Lautner, "The Notion," 73.

70 Lautner, "The Notion," 75.

71 Lautner, "The Notion," 73.

authority. For Michael, vision is always more authoritative than touch, and reason always more authoritative than vision. I have advocated a more flexible interpretation of Aristotle, according to which different situations require different senses to assume the role of the more authoritative source, and indeed that Aristotle would recognise situations in which reason yields its authority to a sense.

To conclude, I hope that it is clear by now that my interpretation of Aristotle is not only conceptually tidier, but also philosophically superior to Michael's. First, in my interpretation there are no arbitrary shifts in the term "common sense," and second, the role of the common sense in the explanation of sleep and dreams is multifaceted. It explains not only (i) the simultaneous shutting down of the senses in sleep, so that there is no perception strictly speaking, but also the conditions that eliminate the grounds for distrusting one's appearances, namely (ii) the lack of awareness of the fact that there is no perception, (iii) the absence of coordination of sense modalities, and (iv) the inactivity of all the other cognitive capacities. With the grounds for distrusting one's appearances eliminated, all appearances are confirmed, that is, passively accepted, which is the core of Aristotle's explanation of the deceptive character of dreams.

Nevertheless, Michael's interpretation is interesting, in the context of this volume, for two reasons. First, it shows Michael's insistence on reason (*diánoia*, *noûs*) as the main explanatory factor in tackling the issue of the deceptive character of dreams. As long as reason in us is functioning, we remain impervious to our dreams' power of deception; as soon as reason is disengaged, we lose touch with reality and give in to our dreams. I hope to have shown that Michael's somewhat simplistic rationalist explanation differs significantly from Aristotle's own explanation, though the text of *De insomniis* is vague enough to allow Michael to read it in that way. However, such a reading has some loose ends and strays into conceptual or terminological muddles, as I also tried to show.

Second, Michael updates Aristotle's physiology by replacing blood with *pneûma* as the medium of transmission of perceptual motions, following Galen's authority. However, Michael uses well-established post-Aristotelian medical knowledge selectively, omitting many closely related and theoretically crucial views, such as the view of the brain as the central organ. Michael was surely aware of that view, but he knew that Aristotle was a resolute cardiocentrist and that his texts could not be interpreted otherwise. So, he was prepared to elucidate Aristotle with reference to more recent knowledge, but only up to a point – to the extent that Aristotle's core doctrines remain unchallenged.

Acknowledgements

Two versions of this chapter were read at two workshops of the *Representation and Reality* project in Gothenburg, on 9 March and 14 December 2018. I would like to thank the members of the research project for their generous comments in discussion and writing, especially Sten Ebbesen, Katerina Ierodiakonou, Börje Bydén, and Filip Radovic. I am particularly grateful to Mika Perälä for his penetrating remarks as the invited commentator at the second workshop, which he supplemented with written notes on a revised version of this text. The same version was also read by Péter Lautner, whereas a very early version was commented on by Klaus Corcilius; I thank them both for their observations and suggestions.