Forms of Representation in the Aristotelian Tradition

VOLUME TWO:
DREAMING

EDITED BY
CHRISTINA THOMSEN THÖRNQVIST
& JUHANA TOIVANEN

PHILOSOPHIA ANTIQUA - VOLUME 162

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Contents

Preface

Christina Thomsen Thörnqvist and Juhana Toivanen

The common title of the present three volumes, *Forms of Representation*, echoes the name of the research project that made them possible. *Representation and Reality: Historical and Contemporary Perspectives on the Aristotelian Tradition* was funded by Riksbankens jubileumsfond, Sweden, and hosted by the University of Gothenburg from 2013 to 2019. The project enabled a group of specialists on Greek, Latin, and Arabic Aristotelianism to join forces in a study of various processes and phenomena involving mental representation in late ancient, Byzantine, medieval Latin, and Arabic commentaries on the *Parva naturalia* until c.1400. Furthermore, the project concentrated on the three philosophical themes that are the topics of the three parts of the present collection: sense-perception, dreaming, and concept formation.

Two circumstances in particular have influenced the character of these volumes: the breadth of the project of which they are the outcome, and the fact that almost none of the relevant sources had been edited before the project started. An important aim of *Representation and Reality* was to make a number of unedited medieval commentaries on Aristotle's *De sensu et sensibilibus* and the treatises on sleep and dreams (*De somno et vigilia, De insomniis, De divinatione per somnum*) available in modern critical editions. Several of the chapters aim at offering an analysis of the Aristotelian problems discussed in these texts, which were edited for the first time under the auspices of the project. Other chapters focus instead on one specific philosophical problem dealt with by more than one linguistic tradition and seek to map out the interactions between them. Some chapters highlight the fact that the study of the reception triggers new questions regarding Aristotle's own account, and some chapters deal with the aftermath of Aristotle and his commentators long after the middle ages had come to an end. What links the chapters and the volumes together is the fact that they all in one way or another, directly or indirectly, demonstrate how Aristotle's successors understood, explained, and further developed the idea that when we perceive, dream, think, or communicate about the external world, reality is somehow represented in our mind. Reality is present to us first and foremost through sense-perception (vol. 1), whereas dreams (vol. 2) and concepts (vol. 3) take us in opposite directions, one of representation in detachment from reality and the other of representation supposedly revealing the truth of reality.

We expect many of our readers, but not all, to be specialists in ancient and medieval philosophy. For those who are not familiar with a broader historical background, the general introduction in volume one offers an overview of the origin and development of Aristotelianism, its sources and literary genres. In addition, each of the three volumes contains an individual introduction that serves several purposes: to provide an overview of the works of Aristotle that are the starting point for the chapters in each respective volume, to present the main philosophical problems that form the core of the historical discussions, and to show how each chapter relates to Aristotle's account and to the other chapters in the same volume. Each volume then proceeds chronologically, covering discussions from all three linguistic traditions, and occasionally pointing out connections to contemporary philosophical discussions.

The fundamental aim of the present volumes is to offer a broad range of interesting examples of how the late ancient and medieval commentary tradition on the *Parva naturalia* and related parts of Aristotle's other writings contributed to the development of philosophical theories on mental representation. Our sincere hope is that these examples will spark the interest for further philological and philosophical research into this and the many other related, and still understudied, aspects of ancient and medieval philosophy.

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The generous funding of Riksbankens jubileumsfond made it possible to form an unusually large research group – especially for research within the humanities – that was able to work together for an exceptionally long period. The members of the research group would like to thank Riksbankens jubileumsfond for this extraordinary scholarly experience and for its competent and constant support throughout the project.

Over the seven years that the project ran, more than one hundred scholars from around the world visited the project and contributed to its results. For the present volumes, we are particularly grateful to the project's advisory board for their advice and encouragement: Peter Adamson (Ludwig-Maximilians-Universität München), Joël Biard (Université François-Rabelais, Tours), David Bloch (University of Copenhagen), Charles Burnett (The Warburg Institute), Victor Caston (University of Michigan), Paolo Crivelli (Université de Genève), Silvia Donati (Albertus-Magnus-Institut), Eyjólfur Kjalar Emilsson (University of Oslo), Henrik Lagerlund (University of Stockholm), John Magee (University of Toronto), Costantino Marmo (Università di Bologna), Robert Pasnau (University of Colorado), Dominik

Perler (Humboldt-Universität zu Berlin), Pasquale Porro (Università degli Studi di Torino), Christof Rapp (Ludwig-Maximilians-Universität München), and Jack Zupko (University of Alberta).

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Abbreviations

APo.	Aristotle, *Analytica posteriora*
APr.	Aristotle, *Analytica priora*
Cael.	Aristotle, *De caelo*
Cat.	Aristotle, *Categoriae*
de An.	Aristotle, *De anima*
	Alexander of Aphrodisias, *De anima*
De an.	Adam of Buckfield, *De anima*
	Albert the Great, *De anima*
De hom.	Albert the Great, *De homine*
de Int.	Alexander of Aphrodisias(?), *De intellectu*
	Philoponus, *De intellectu*
De sensu	Albert the Great, *De sensu et sensato*
De somno	Albert the Great, *De somno et vigilia*
De veg.	Albert the Great, *De vegetabilibus*
EN	Aristotle, *Ethica Nicomachea*
Exp. Sens.	All exposition commentaries on *Sens.*
Exp. Somn.Vig.	Walter Burley, *Expositio in Somn.Vig.*
GA	Aristotle, *De generatione animalium*
GC	Aristotle, *De generatione et corruptione*
HA	Aristotle, *Historia animalium*
in Cat.	Ammonius, *In Aristotelis Categorias commentarius*
	Simplicius, *In Aristotelis Categorias commentarium*
in de An.	Simplicius, *In libros Aristotelis De anima commentaria*
	Philoponus, *In Aristotelis De anima libros commentaria*
	Priscian of Lydia, *In libros Aristotelis De anima commentaria*
	Ps.-Philoponus, *In Aristotelis De anima librum 3 commentarium*
	Themistius, *In libros Aristotelis De anima paraphrasis*
In De somno	Adam of Buckfield, *Commentarium in De somno et vigilia*
In Metaph.	Alexander of Aphrodisias, *In Aristotelis Metaphysica commentaria*
In Mete.	Alexander of Aphrodisias, *In Aristotelis Meteorologicorum libros commentaria*
	Olympiodorus, *In Aristotelis Meteora commentaria*
In Sens.	Alexander of Aphrodisias, *In librum De sensu commentarium*
In tertium de An.	Siger of Brabant, *Quaestiones in tertium De anima*
	Radulphus Brito, *Quaestiones in Aristotelis librum tertium De anima*

Insomn.	Aristotle, *De insomniis*
Int.	Aristotle, *De interpretatione*
Juv.	Aristotle, *De juventute*
Liber Sens.	Roger Bacon, *Liber de sensu et sensato*
Long.	Aristotle, *De longitudine et brevitate vitae*
MA	Aristotle, *De motu animalium*
Mem.	Aristotle, *De memoria et reminiscentia*
Metaph.	Aristotle, *Metaphysica*
Mete.	Aristotle, *Meteorologica*
Quaest. De animal.	Albert the Great, *Quaestiones super De animalibus*
Quaest. Sens.	All question commentaries on *Sens.*
Quaest. Somn.Vig.	All question commentaries on *Somn.Vig.*
PA	Aristotle, *De partibus animalium*
Ph.	Aristotle, *Physica*
Phys.	Albert the Great, *Physica*
Rep.	Plato, *Republic*
Resp.	Aristotle, *De respiratione*
Tim.	Plato, *Timaeus*
SE	Aristotle, *Sophistici Elenchi*
Sens.	Aristotle, *De sensu et sensibilibus*
Sent. de An.	Thomas Aquinas, *Sentencia libri De anima*
Sent. Sens.	Thomas Aquinas, *Sentencia libri De sensu et sensato*
ST	Thomas Aquinas, *Summa theologiae*

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INTRODUCTION

Sleeping and Dreaming in Aristotle and the Aristotelian Tradition

Pavel Gregoric and Jakob Leth Fink

> Our life is twofold: Sleep hath its own world,
> A boundary between the things misnamed
> Death and existence: Sleep hath its own world,
> And a wide realm of wild reality.
>
> BYRON, *The Dream* (1816)

It is estimated that the average person in this day and age spends about 27 years of their lifetime in sleep. That is, we spend about a third of our life in a horizontal position, rather motionless, withdrawn from the world. While in sleep, however, we often plunge into another world, the world of dreams, in which we experience all sorts of strange things in most unexpected sequences. The things we experience in our dreams often assume unnatural forms and break the laws of space, time, and causality. Yet most of these strange things feel perfectly real when we experience them in our dreams – as real as anything experienced in the waking world. That is why dreams are regarded in many cultures as portals to an alternative reality in which we can converse with the dead, see the future, or receive divine commands. And if one is unable to see the significance of one's own dreams, in many cultures there are interpreters who can provide the missing links and help one to navigate the world of one's waking hours in accordance with one's experiences from the world of dreams.

However, there have always been sceptics. Individuals who doubted that dreams put us in touch with gods, or transport us to another reality, sought a natural explanation of dreams. Aristotle was one of them; not the earliest, but certainly one of the greatest. Freud praised Aristotle for his astutely naturalistic approach to dreams, for his definition of dream as "the mental activity of the sleeper in so far as he is asleep," as well as for his claim that "the beginnings of an illness might make themselves felt in dreams before anything could

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be noticed of it in waking life, owing to the magnifying effect produced upon impressions by dreams."[1] Freud found an illustrious precursor in Aristotle, who thought that dreams, despite being entirely natural phenomena, can be useful and should be attended to for medical reasons.

There are also philosophical reasons for attending to our dreams. They are an instrument for the study of the nature of reality. Like a prism, which enables us to study the nature of light by separating out its components, dreams enable us to study the nature of reality by separating out the features that differentiate dreams from reality. For instance, dreams are not bound by physical laws, whereas reality is. Things in dreams mostly appear and disappear or morph into one another, whereas reality is populated mostly by stable objects. Things in dreams occur incongruently and inconsistently, whereas in reality objects and facts fit together and support one another. Moreover, dreams are an instrument for the study of the way we normally deal with reality. For example, in dreams we cannot orient ourselves well and assume different perspectives, we are unable to control our emotions or to make considered decisions, and our memory and critical judgement are unavailable for evaluating objects and situations in which we find ourselves. When we are awake, by contrast, we can do most of these things most of the time, and that is what defines our normal, healthy interaction with the world.

Because dreams can teach us so much about reality, then, and because Aristotle's account of sleeping and dreaming was a milestone for much of the later thinking about these phenomena, they are chosen as a topic for the second volume in the *Forms of Representation in the Aristotelian Tradition* series. This volume explores Aristotle's work on sleep and dreams and its reception in the Greek, Arabic, and Latin traditions. As contributions to this volume show, this reception started rather late, it was plagued by conflicting tendencies, and it raised many philosophically interesting questions. After introducing the individual chapters, we append a list of the main resources for studying Aristotle's three treatises on sleep and dreams and their reception.

1 The Context

Aristotle's investigation of issues related to sleeping and dreaming belongs to his science of living beings, or biology. As is well-known, Aristotle analyses living beings as compounds of form and matter, their soul being the form

1 Sigmund Freud, *The Interpretation of Dreams*, trans. J. Strachey (New York: Basic Books, 2010), 37 and 65.

and their organic bodies the matter. The soul is the principle of formation and organisation of tissues and organs in the body, and it accounts for the abilities that living beings of each given kind have, as manifested by their typical behaviour. One might be tempted to think that Aristotle's work is done once he has collected data and made a voluminous record of the variety of living beings, their bodily parts, and their behaviours in *Historia animalium*, and after he has provided a general account of soul in *De anima* and a general account of organic body in *De partibus animalium*. In fact, though these are indeed his main biological treatises, considerable work still remained to be done.

As Aristotle explains in the first book of *De partibus animalium*, sometimes regarded as an introduction to his biology, there are certain attributes of living beings that require special attention because they are salient attributes either of all or of large groups of them. Sleep and waking are just such attributes, along with respiration, growth in youth and decay in old age, life and death, and a few others.[2] Such attributes receive their treatment in the collection of short treatises known since the middle ages as the *Parva naturalia*. Each one of these attributes has a common account, one which is equally applicable to all living beings that have this attribute. In other words, what Aristotle says about sleep and waking was meant to hold equally of humans, dogs, eagles, and dolphins. There are some salient attributes, however, that do not allow for a common account because they occur in importantly different ways in different groups of living beings. For instance, all animals are generated, but the ways in which they are generated differ markedly, for instance, some are born alive whereas others hatch from eggs. This is the topic of a separate and quite extensive treatise, *De generatione animalium*. Similarly, many animals move around, but the way they do so is quite different: some walk, others fly, and still others swim, so the different modes of moving around are explored in *De incessu animalium*. The general principles of animal self-motion, briefly touched upon in *De anima* 3.9–11, are set out in more detail in *De motu animalium*. With such accounts of the salient attributes, then, Aristotle's work in the science of living beings is more or less finished – or, at any rate, the milestones are set. As Aristotle puts it in the outline of his grand project of natural philosophy:

> After we have dealt with all these subjects, let us then see if we can get some account, on the lines we have laid down, of animals and plants, both in general and in particular; for when we have done this we may

2 See *PA* 1.1, 639a19–22, a29–b5, and the opening paragraph of the first treatise in the collection *Parva naturalia*, *Sens.* 1, 436a1–19.

> perhaps claim that the whole investigation which we set before ourselves at the outset has been completed.[3]

Following this framework, and building especially on his general account of the soul in *De anima*, Aristotle wrote the *Parva naturalia*.[4] This collection of short biological investigations contains three treatises on sleep and dreams. These three treatises form a tightly knit unity and it is likely that they were originally written as a single treatise. Indeed, in the Latin scholastic tradition they were usually treated as a single treatise with two or three chapters. However, the division among the three texts is very clear and it is both helpful and customary to take them as three distinct treatises.

2 Aristotle's Three Treatises on Sleep and Dreams

The three treatises progress in a systematic fashion from the more general to the more specific, each treatise forming a basis for the following one. The first treatise (*De somno et vigilia*) discusses the state of sleep, the second (*De insomniis*) deals with appearances experienced in sleep, that is dreams, whereas the third and shortest treatise (*De divinatione per somnum*) considers the question of whether dreams can be predictive, and if so, in what way. These three treatises are generally regarded as forming a coherent whole, though some interpreters have found discrepancies among them.[5] The fit between the three treatises and *De anima*, however, is less obvious. *De anima* espouses a hylomorphic perspective, whereas the treatises in the *Parva naturalia* seem to take a different perspective that has been variously characterised as cardiocentric, physiological, and mechanistic. On the assumption that these two perspectives are mutually incompatible, it was fashionable in the mid-twentieth century to assign the *Parva naturalia* to a different period of Aristotle's intellectual development than *De anima*.[6] However, that approach ended up in the

3 Aristotle, *Meteorologica*, trans. H. D. P. Lee (Cambridge, MA: Harvard University Press, 1952), 1.1, 339a5–9. See also *MA* 11, 704a3–b3; *Long*. 6, 467b4–5.

4 More information about the collection *Parva naturalia*, its topics, structure, and unity, with an overview of its reception from antiquity to modern times and an extensive bibliography, can be found in Börje Bydén, "Introduction: The Study and Reception of Aristotle's *Parva naturalia*," in *The Parva naturalia in Greek, Arabic and Latin Aristotelianism: Supplementing the Science of the Soul*, ed. B. Bydén and F. Radovic (Cham: Springer, 2018), 1–50.

5 See Philip J. van der Eijk, *Aristoteles: De insomniis, De divinatione per somnum* (Berlin: Akademie Verlag, 1994), 62–67.

6 The fashion was launched by Werner Jaeger's influential study *Aristoteles: Grundlegung einer Geschichte seiner Entwicklung* (Berlin: Weidmann, 1923). The application of this so-called "genetic" or "developmental" approach specifically on Aristotle's psychological and

blind alley of rushing to resolve any apparent contradiction, even within a single treatise, by assigning different paragraphs to different periods. Nowadays, most scholars tend to explain different perspectives and apparent contradictions in Aristotle's opus by supposing that his different tasks required different approaches that need not be incompatible at all.[7] In other words, most people today take the view that *De anima* and the *Parva naturalia* belong to the same project and use the same philosophical resources.

Aristotle's approaches in *De somno et vigilia* and *De insomniis* share a common scheme. He starts his investigation by asking to which part of the soul the phenomenon at hand belongs. By considering possible options and eliminating some of them, he clears the ground for a definite answer that will then allow him to set out the details and address further problems. Very briefly, *De somno et vigilia* tells us that sleep belongs to the same part of the soul as the waking state, given that sleep is the privation of waking that occurs naturally after a certain period of waking. More specifically, the relevant part is the perceptual part of the soul, and most specifically, it is that aspect of the perceptual part of the soul that coordinates and monitors the special senses, that is, the "common sense," as it is sometimes called.[8] When the common sense is incapacitated, all the special senses are automatically shut down, and, likewise, when it gets reactivated, all the special senses automatically become responsive to external stimuli. With this specification in place, Aristotle is able to identify the heart as the organ of crucial importance for an explanation of sleep and waking, since the common sense is located there. This in turn enables Aristotle to develop a physiological story as to the conditions and processes that lead from waking to sleep and back.

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physiological writings was undertaken by François Nuyens in his monograph *L'évolution de la psychologie d'Aristote* (Louvain: Éditions de l'Institut supérieur de philosophie, 1948). Nuyens' main conclusions were accepted by many scholars, including William D. Ross in his edition of the *Parva naturalia* (Oxford: Clarendon, 1955), 1–18. However, these conclusions were challenged forcefully, also from the developmental perspective, e.g., by Irving Block in his paper "The Order of Aristotle's Psychological Writings," *American Journal of Philology* 82 (1961): 50–77, and by Charles Lefèvre in the book *Sur l'évolution d'Aristote en psychologie* (Louvain: Éditions de l'Institut supérieur de philosophie, 1972). An early voice of dissent against the developmentalist approach, in a classic paper of relevance for the present topic, is Charles Kahn's "Sensation and Consciousness in Aristotle's Psychology," *Archiv für Geschichte der Philosophie* 48 (1966): 43–81.

7 Examples of this approach with respect to Aristotle's hylomorphism and cardiocentrism, are Theodore Tracy, "Heart and Soul in Aristotle," in *Essays in Ancient Greek Philosophy*, ed. J. P. Anton and A. Preus (Albany: SUNY Press, 1983), 2:321–39, and, more recently, Klaus Corcilius and Pavel Gregoric, "Aristotle's Model of Animal Motion," *Phronesis* 58 (2013): 52–97.

8 For the use of the expression "common sense" in Aristotle, and for the functions he assigned to it, see Pavel Gregoric, *Aristotle on the Common Sense* (Oxford: Clarendon Press, 2007).

Aristotle's procedure in *De insomniis* is very similar. He starts with the premise that dreams can be the work either of the perceptual or of the thinking part of the soul, since these are the only two parts of the soul by which we cognise. After considering difficulties for each one of these options, he argues that, although there is no perception proper in sleep, there is something similar to perception; namely, when asleep, one is often aware of images or appearances (*phantásmata*). Now, according to Aristotle, all appearances are generated by earlier perceptions, which means that they belong to the perceptual part of the soul. Consequently, dreams can be ascribed to the perceptual part of the soul, or more specifically to that aspect of it which accounts for appearances (*tò aisthētikòn hēi phantastikón*). Given that this aspect of the perceptual part of the soul is also affiliated with the heart more intimately than with any other part of the body, Aristotle is able to provide a physiological story as to how dreams come about, why they are often strange, why some people dream more and some less, and why some individuals remember their dreams and others do not.

Understandably, Aristotle's procedure in *De divinatione per somnum* is different, given that it addresses the very specific question of the predictive power of dreams. First, Aristotle excludes the possibility that dreams are sent by gods, which is fully in line with his account of dreams in *De insomniis*, but contrary to popular opinion.[9] Second, he proposes a typology of dreams that turn out to be true. Namely, a dream can turn out to be true insofar as it is the *cause* of, a *sign* of, or a *coincidental match* with the event that makes it true. Aristotle thinks that there is nothing mysterious or supernatural about dreams being causes of events, as this occurs when we are reminded by our dream to perform a particular action, or about dreams being signs of events, as this occurs when our dream is shaped by a physiological process that will develop into an illness. These two types allow prediction, but they are restricted to a very narrow range of events – to one's own actions and to the states of one's own body. The third type does not allow any prediction, since there is no way of knowing whether a dream will coincide with a future event that is causally unrelated to

9 And contrary to the opinion that Sextus Empiricus ascribes to Aristotle (*M* 9.20–23 = *De philosophia*, fr. 12a in *Aristotelis Fragmenta selecta*, ed. W. D. Ross (Oxford: Clarendon Press, 1955)), according to which one source of our notion of gods is what happens with the soul in sleep, "when the soul is itself, assuming its proper nature, it foresees and foretells the future." This is a fragment from a lost dialogue of Aristotle's. We do not have a wider context of the fragment and hence we should refrain from drawing developmentalist conclusions from it. For other reports on prophetic dreams in Aristotle's lost works, as well as for a difficult passage touching on that topic from Aristotle's *Eudemian Ethics* (8.2, 1248a29–b7), see the second appendix in Luciana Repici's book *Aristotele: Il sonno e i sogni* (Venezia: Marsilio, 2003), 180–96.

the dreamer. However, Aristotle seems to make a concession to popular opinion when he admits that there is something uncanny (*daimónion*) about such dreams. Certain types of people, Aristotle argues, namely those who dream a lot and in rapid succession, have more chances of having such dreams.[10]

So much for Aristotle's general approach in these three treatises and his main theses. Let us now look at some details, starting with the phenomenon of sleep. Aristotle's account of sleep in *De somno et vigilia* makes good use of his scheme of the four causes – formal, final, material, and efficient.

Formally, sleep is an incapacitation or immobilisation of perception. However, contrary to what this initial statement might suggest, sleep is not a total incapacitation of absolutely all forms of perception. After all, we do occasionally perceive things while asleep, if only indistinctly; more to the point, in sleep we are often absorbed in a sort of perception (or in a perceptual sort of awareness, *aísthēsis*), namely in the perception of appearances that derive from earlier sense perceptions and hence are very much like objects of perception. Furthermore, sleeping is a particular sort of incapacitation of perception that is distinct from the incapacitation of perception that constitutes fainting. In particular, sleep occurs for a purpose and in a particular way, which brings us to the final cause.

Aristotle says that sleep serves the purpose of preserving the animal, for it allows the animal to recuperate after being active for an extended period of time. Given that the characteristically animal activities, notably perception and locomotion, require animals to be awake, going to sleep is a way of ensuring a necessary rest from such activities. That is to say, by periodic disengagement of the capacities for perception and locomotion (and presumably also of the capacity for thinking, in the case of human beings), sleep ensures the proper functioning of these capacities in the waking state, thus contributing to the animal's preservation and well-being. This is one important way in which sleep is differentiated from other forms of incapacitation of perception, such as fainting, from which no good results.

According to Aristotle, sleep occurs as a consequence of the digestive process regulated by the nutritive part of the soul. Ingested food is cooked in the stomach, causing exhalations to rise inside the body. These exhalations carry chunks of semi-concocted food towards the brain, where they get cooled and condensed. As they get cooled and condensed, they start to fall back down towards the heart, driving the blood and vital heat from the upper parts of the body down to the region around the heart. Without blood and vital heat in the upper parts, the sense-organs cease to function properly, the head

10 For other typologies of dreams in ancient philosophy and medicine, see Antonius H. M. Kessels, "Ancient Systems of Dream-Classification," *Mnemosyne* 22 (1969): 389–424.

becomes heavy, and one has to lie down and take a nap. While one is asleep, the heat concentrated around the heart contributes to the final stage of the transformation of food into blood. Once this process is complete and new blood is produced, the thick and turbid portions of blood move to the lower parts, whereas the pure and thin portions of blood go to the upper parts. And when blood of the right quality arrives at the right places, the animal wakes up, fresh and ready to engage in its activities. So, the efficient cause of sleep is the digestive process, or more specifically the withdrawal and concentration of blood and heat around the heart.

The material cause is the food and the digestive system of an animal, or more specifically the concocted food and blood in the heart. Needless to say, the efficient and the material cause of sleep differentiate it still further from other forms of incapacitation of perception, such as fainting, which has a different causal origin. It is important to observe how the material-efficient causation, in Aristotle's view, contributes to the formal-final causation of sleep. The body of an animal requires maintenance through the process of digestion, and the crucial part of this process, the transformation of food into blood, requires periodic withdrawal of the blood and heat from the periphery. This causes incapacitation of the senses, but, as we have seen, this is all for the best, since sleep allows the animal a necessary rest from its activities. So, in a way, the digestive process, whose primary purpose is the maintenance of the body, is co-opted for another purpose, namely periodic rest which allows the animal some time to recuperate before resuming its waking activities.[11]

Although Aristotle's physiology of sleep is obsolete, he was right in regarding sleep as a major biological phenomenon. He clearly saw that it was a universal and very basic physiological need, connected with internal processes of maintaining the animal body. As for the final and formal part of his explanation of sleep, it seems quite compatible with contemporary science of sleep.

Let us now turn to dreams. Unlike sleep, dreams do not have a final cause. That is to say, there is no purpose to dreaming, according to Aristotle. Dreams are a mere by-product of the digestive process, entirely dependent on the physiological setup of the individual animal and the contingencies of the digestive processes. Formally, a dream is "an appearance that arises from the motion of the sense-impressions when one is asleep, and in virtue of being asleep" (*Insomn.* 3, 462a29–31). To appreciate this definition, we need to make some preliminary observations.

11 Perhaps the distinction between primary and secondary teleology, introduced by Mariska Leunissen, can be useful here; see her book *Explanation and Teleology in Aristotle's Science of Nature* (Cambridge: Cambridge University Press, 2010), esp. 81–99.

First of all, we should bear in mind that our concept of a dream does not fully correspond to what the ancient Greeks called *enýpnion* (Latin *insomnium*).[12] We tend to think of a dream as a series of events with a loose narrative structure, whereas an *enýpnion* is typically an individual thing "seen" or otherwise experienced in a dream, such as a person, object or scene. This explains why a dream (*enýpnion*) is defined as an appearance (*phántasma*). Second, it is an appearance "arising from the motion of the sense-impressions," much as any other appearance. This means that appearances are causally derived from the affections that the external objects produce on our sense-organs. When we see an apple, the apple affects our eyes on account of its visible properties – its red colour of a round shape and a certain size. The perception of an apple sets up a motion in the eyes that extends to the heart as the central sense-organ. This motion can remain in the system for some time, and when it "resurfaces," we have an appearance of the apple. Of course, this appearance is typically weaker than the original perception, it can be embedded in a series of other motions, and it can undergo various transformations under the agency of the on-going processes inside the body. And although *phantásmata* are predominantly described by Aristotle in terms taken from visual perception, it is important to bear in mind that he allows for auditive, olfactory, gustatory, and tactile appearances, and indeed for combinations of these. In short, appearances can be complex, rich in content, and dynamic, such as an appearance of Coriscus shouting as he approaches us.[13]

We become aware of an appearance when the motion begun by earlier sense-perceptions in the peripheral sense-organs arrives in the heart. Aristotle compares these motions to eddies in rivers, each with its own pattern of movement but possibly altered by whatever conditions might interfere with the movement of the eddy. Throw a branch into a river and the eddies alter their movements accordingly. There are all sorts of processes in the body, mostly involving heat, that interfere with the motions from earlier sense-perceptions in ways that determine the quality of the subsequent dreams. Too much commotion due to digestion, growth (as with children), or intoxication tends to destroy the motions altogether, which explains dreamless periods of sleep. If the commotion is not excessive, but still significant, motions will be distorted in various ways, which explains strange or incoherent dreams. If or when the commotion subsides, motions arrive in the heart in a more or less intact

12 As explained by David Gallop in his introduction to *Aristotle: On Sleep and Dreams* (Petersborough: Broadview Press, 1990), 3–7.

13 See *Insomn.* 1, 458b10–11 (a pale or beautiful person or horse approaching), 1, 458b14–16 (a pale person approaching), 3, 461b29–462a8 (Coriscus); cf. Krisanna Scheiter, "Images, Appearances, and *Phantasia* in Aristotle," *Phronesis* 57 (2012): 261–62.

shape and more or less in the same order as the sense-perceptions that generated them, which means that such dreams will tend to replay the events from before, or at any rate some of them and to a certain extent. Aristotle calls these "straightforward" or "direct" dreams (*euthyoneiría*).[14]

Obviously, dreams are only those appearances that occur in sleep and – as Aristotle's definition puts it – "in virtue of being asleep." For an appearance to qualify as a dream, it needs to occur in the right circumstances (the state of sleep) and in the right causal way (through the physiological process that controls sleep). This means that no appearance in the waking state could ever be called a dream; we can be sure that Aristotle would say that "daydreaming" is a misnomer. More to the point, faint perceptions in sleep and appearances caused by them that somehow penetrate to the sleeper are not dreams either.

Now, one important characteristic of dreams, be they straightforward or monstrous, is that we are deceived by them. Sleep induces a sort of hallucinatory state in which the dreamer tends to take the appearances to be real things. If it escapes our notice that we are asleep, we will believe whatever appears in the dream to be real. But often "something in the soul" contradicts the appearance and we are aware that we are dreaming (*Insomn.* 3, 462a5–8). It is not easy to say what this "something" is, but perhaps Aristotle has in mind reason or memory, which may become active in sleep and warn us that what we are experiencing is not real. At any rate, he points out earlier in the argument that when the discerning part is held in check by something or moves in improper ways, it can escape our notice that what appears is just an appearance and not real.

The shortest of the three treatises, *De divinatione per somnum*, explores the possibility of foretelling the future (*mantiké*, *divinatio*) from dreams. It is difficult to persuade oneself that veridical dreams exist, Aristotle argues, because we can offer no causal explanation of how this could come about; but it is also hard to dismiss what all or most people believe, and most people do believe that dreams have some significance. Such an opinion seems to have some rational support, given that doctors attribute significance to dreams and recommend that they be heeded. Adding a god to the picture, however, and arguing that dreams are godsent, is unacceptable to Aristotle. Apart from the

14 Aristotle's account of the formation of dreams is unclear on a number of points. Medieval Latin philosophers spent considerable effort in reconstructing the full picture while relying heavily on the Arabic tradition (Avicenna, Averroes). For an analysis of this development which, among other things, included important discussions on the interrelation of the internal senses, see Thomsen Thörnqvist's chapter in this volume, pp. 150–77.

problem that it is unclear how a god (Aristotelian or traditional) could intervene as required, Aristotle finds it incredible that any god should send dreams to random uneducated people in sleep, rather than to the morally and intellectually most worthy recipients, and that this should happen in sleep rather than in the waking state where due attention could be given to the divine messages.

Dispensing, then, with divine intervention, how can we account for the significance of some dreams? We do so by understanding that dreams are either causes of things that come to pass, signs of things that come to pass, or flukes that merely coincide with things that come to pass. This is the threefold typology of significant dreams that we have mentioned earlier, so let us dwell on it a little longer.

How can dreams be causes of things that come to pass? Consider an example. When we practice for a race, we spend a lot of time running and thinking about the race. It is very likely that we will then also dream about running and racing, given that our waking perceptions and thoughts pave the way for the appearances that might emerge in sleep. But the direction of causality might be reversed. It is possible that our dream also paves the way for our actions. For example, the day before the race, I dream of sipping from the bottle of ice-cold water in the middle of the race. When I wake up, remembering this dream quite vividly, I walk to the fridge, fill the bottle of water, and place it in the bag with my gear. And at the actual race, I take a refreshing sip of water from the bottle. In such a case, then, my dream is the cause of what comes to pass. Observe that the class of dreams that are causes of things that come to pass is limited to one's own actions. And there is absolutely nothing strange, mysterious, or supernatural about it.

Some dreams can be signs of bodily processes that are too weak to be noticed during the waking state. In sleep, however, the impact of such internal processes is much more powerful, presumably because the special senses have been shut down and so external stimuli are reduced considerably, leaving more room, as it were, for the faint internal movements of the body to be perceived. The idea seems to be that a dream can be caused or shaped by an incipient pathological process that will fully develop later on. For instance, a drop of phlegm running down one's throat can bring about a dream of swimming in a barrel of bitter-sweet honey. A skilled doctor could perhaps interpret this dream as indicating an onset of fever that will fully develop only later. This is an important sense in which a dream might be significant, particularly for a doctor. But again, this class of dreams is limited to the bodily states of the dreamer, and there is nothing supernatural about it. The predictive power of this class of dreams, however, is very tenuous. Not only do such dreams require

skilled interpreters, but they need not come true in the end, as Aristotle points out, since other processes in the body may intervene and take things in another direction. One might take a lot of vitamin C with one's breakfast, for example, which might dissolve the phlegm and thus subvert the development of fever.

Finally, the greatest part of significant dreams are sheer flukes, and there is no way of identifying such a dream before the actual event that makes it true. In other words, this type of dream does not offer any possibility of prediction whatsoever. However, there is, as Aristotle goes on to explain in chapter two of *De divinatione* (463b14–15), something uncanny or marvellous (*daimónion*) about such dreams. A "deflationary" way of understanding this is with reference to our typical reaction to such dreams. For instance, if I dream that someone I have long lost contact with is travelling to Zanzibar, and next week that person really boards the flight to Zanzibar, surely I will be astonished upon learning that fact. Indeed, I will be tempted to think that the probabilities for such a coincidence are so low that this can only be an act of some supernatural agency. But it is not, according to Aristotle; it is just a coincidence.

It is to be expected that, if such dreams are coincidental, they will occur more frequently in people who dream a lot. Indeed, Aristotle correlates the occurrence of such dreams with people of melancholic constitution,[15] who are continuously moved in all sorts of ways and so suffer a higher frequency of visions than other people. Some of the visions produced by the various and constant movements will happen to be true by sheer law of probability, and since melancholics suffer more movements, they are also more frequently hit by true visions.

Next, Aristotle engages in a somewhat puzzling account of veridical dreams concerning events that are remote in space and time. Such dreams clearly cannot be explained as causes or signs, and if they are not regarded as flukes, it seems that the best account available would be that of Democritus. He argued that effluences from remote objects travel through the air, and in the calm of night when stronger motions subside, such effluences can penetrate the minds of sleepers. But Aristotle suggests a better account, one in terms of propagation of motions that cause appearances by some sort of chain-reaction, which is more in line with his continuist physics. The point of this alternative is not entirely obvious, but perhaps Aristotle only wanted to show that, even if one refused to regard such dreams as flukes, one would not thereby be committed to atomism, since Aristotle also has resources to explain them. So, this passage

15 Such people would actually be classified as choleric, according to the later ancient taxonomy that has survived to date in popular psychology. That taxonomy derives from a medical theory in which different effects were attributed to the "black bile" (*mélaina cholḗ*) than in Aristotle's theory.

does not give us sufficient reason to think that Aristotle vacillated as to whether veridical dreams concerning spatially or temporally remote events are anything other than flukes, or that his theory of dreams requires a major revision.

Turning to the theme of interpretation of dreams, Aristotle wraps up his short treatise on foretelling the future from dreams. He states that anyone can interpret direct or straightforward dreams (*euthyoneiría*), that is, dreams which reiterate waking experiences. However, dreams are often garbled by movements inside one's body, so a skilled interpreter is needed, one who can spot likenesses between dream-images and things experienced in the waking state. In a word, then, Aristotle allows some room for interpretation of dreams and prediction from them, but this room is quite narrow and it excludes any supernatural factors.

3 Particular Problems

3.1 *Teleology of Sleep and the Integrity of De somno et vigilia*

Some scholars have questioned the integrity of *De somno et vigilia*, claiming that the passage in which the fourfold causal scheme is laid out (2, 455b13–34) and the conclusion (3, 458a25–32) are interpolations from Aristotle's earlier drafts. The ground for this claim is the assumption that Aristotle's requirements on final causation do not permit a teleological explanation of sleep. The idea, to put it briefly, is that sleep is the privation of the waking state, and as such it cannot have a final cause. The waking state is a positive state, which can have a final cause, and this coincides with the formal cause – it is the activity of the soul, what life of a sentient being amounts to. Sleep, by contrast, cannot have a final cause, the argument goes, let alone one in which the final cause will coincide with the formal cause, as is usual in Aristotle's theory.[16] Having realised this difficulty, the argument proceeds, Aristotle abandoned the project of giving a teleological explanation of sleep at the time of writing *De somno et vigilia*, where he focuses solely on material and efficient causes of sleep. What about those passages from *De somno et vigilia* that explicitly mention the final cause of sleep? Well, they are later interpolations from the earlier draft of Aristotle's treatise on sleep and waking, according to these authors.

The argument is indebted to Nuyens and Drossaart Lulofs and it is illustrative of the developmentalist approach to Aristotle's texts, which was popular

16 See Drossaart Lulofs' introduction to his edition of Aristotle's *De insomniis et De divinatione per somnum: A New Edition of the Greek Text with the Latin Translation* (Leiden: Brill, 1947), esp. xvi–xviii, and Malcolm Lowe, "Aristotle's *De somno* and His Theory of Causes," *Phronesis* 23 (1978): 279–91.

in the mid-twentieth century. Stephen Everson has shown very persuasively that the argument rests on a misunderstanding of Aristotle's explanatory method in natural philosophy, and nowadays hardly anyone would question the integrity of *De somno et vigilia* as a unified and well-organised treatise.[17]

3.2 *Women and Mirrors* (*Insomn. 2, 459b23–460a23*)

One of the more curious problems in *De insomniis* is the discussion of what happens when menstruating women look into mirrors. The main problem with this, apart from its general absurdity, is that it seems to commit Aristotle to a sort of extramissionist theory of vision, which he attacks in *De sensu* and which is incongruent with his theory of perception in *De anima*.[18] It should be noted that many interpreters today believe that this part of the text is inauthentic.[19] The text, nevertheless, exercised a strong influence on the medieval reception, particularly with respect to the theory of fascination (also known as "the evil eye"). For this reason, we must look briefly into it.

The mirror case is taken up as corroboration for the claim that the sense organs respond easily, or quickly, to even very slight qualitative changes. Aristotle tells us that when women during their menstrual phase look at themselves in a mirror, the surface of the mirror is coloured and takes on a red hue of a cloudy character. If the mirror is new and its surface cleaner than old and used mirrors, the stain is more difficult to remove (2, 459b27–32). The explanation is that seeing is not just being affected by an exterior object, but also acting upon it.

Different attempts to save Aristotle have been made, none of which is quite convincing. One attempt takes the mirror case as an illustration of sense perception in which the mirror corresponds to the sense-organ (taking on the

17 Stephen Everson, "The *De somno* and Aristotle's Explanation of Sleep," *Classical Quarterly*, n.s., 57 (2007): 502–50.

18 However, Aristotle seems to operate with an extramissionist theory of vision when discussing optical phenomena in his work *Meteorologica*. One such passage is discussed by David Bennett and Filip Radovic in "Autoscopy in *Meteorologica* 3.4: Following Some Strands in the Greek, Arabic and Latin Commentary Traditions" in *Forms of Representation in the Aristotelian Tradition, Volume One: Sense Perception*, ed. J. Toivanen (Leiden: Brill, 2022), 213–48. See also Pavel Gregoric and Jakob Leth Fink, "Introduction: Sense Perception in Aristotle and the Aristotelian Tradition", in *Forms of Representation in the Aristotelian Tradition, Volume One: Sense Perception*, ed. J. Toivanen (Leiden: Brill, 2022), 30–34.

19 Van der Eijk, *Aristoteles: De insomniis*, 183–93, and Gallop, *On Sleep and Dreams*, 145; see also Anthony Preus, "*On Dreams* 2, 459b24–460a33, and Aristotle's *opsis*," *Phronesis* 13 (1968): 175–82; Rosamond Kent Sprague, "Aristotle on Red Mirrors (*On Dreams* II 459b24–460a23)," *Phronesis* 30 (1985): 323–25, and Raphael Woolf, "The Coloration of Aristotelian Eye-Jelly: A Note on *On Dreams* 459b–460a," *Journal of the History of Philosophy* 37 (1999): 385–91.

form of the sensory object) and the eye (counterintuitively) corresponds to the sensory object whose form is taken up by the sensory organ. If that is how we should understand the mirror passage, it seems to have been very poorly chosen for its purpose and it still leaves us quite in the dark as to how this illustration shows that vision is not just a matter of being affected, but also a matter of acting or being active in some way. If the mirror passage is indeed authentic, it would seem that even Aristotle occasionally nods off.[20]

3.3 *Dreams and Ancient Medicine* (*Div.Somn. 1, 463a4–7*)

Having set out his three-fold typology of dreams as causes, signs, and coincidental matches of events that fulfil the dreams, Aristotle writes:

> Is it true, then, that some dreams are causes, while others are signs, e.g. of what is happening with the body? In any event, even distinguished doctors say that one should pay extremely close attention to dreams. And that is a reasonable supposition even for those who are not practitioners, but inquire into this question to a certain extent out of theoretical interest.[21]

Most doctors in antiquity regarded dreams as a medium through which one can learn about the patient's condition and about the requisite therapy. With the invocation of "distinguished doctors," however, this passage is sometimes interpreted with reference to the Hippocratic treatise *De diaeta* (*De victu*, *Regimen*), the fourth book of which is devoted entirely to dreams. The view there, to put it in a nutshell, is that dreams that repeat one's waking actions and thoughts are taken to be signs of health, whereas dreams of conflicts and confusions are signs of illness.

While a reference to *De diaeta* is not unlikely, it has been noted that the explanation of dreams in that treatise is very different from Aristotle's.[22] Most

20 This passage has attracted much attention in the medieval Latin tradition; see section 3.5 below and Filip Radovic, "The Case of Red-Stained Mirrors: Perception, Strange Phenomena, and the Role of Exemplification in Aristotle," in *Philosophical Problems in Sense Perception: Testing the Limits of Aristotelianism*, ed. D. Bennett and J. Toivanen (Cham: Springer, 2020), 77–89; Christina Thomsen Thörnqvist, "A Stain on the Bronze: Some Medieval Latin Commentators on *De insomniis* 2.459b23–460a23," in *The Embodied Soul: Aristotelian Psychology and Physiology in Medieval Europe between 1200 and 1420*, ed. M. Gensler, M. Mansfeld, and M. Michałowska (Cham: Springer (in press)).

21 Aristotle, *Div.Somn.* 1, 463a4–7; *On Sleep and Dreams*, trans. D. Gallop, modified by Pavel Gregoric.

22 Philip J. van der Eijk, "Aristotle on 'Distinguished Physicians' and on the Medical Significance of Dreams," in *Ancient Medicine in Its Socio-Cultural Context*, ed. P. J. van der Eijk, M. H. F. J. Horstmanshoff, and P. H. Schrijvers (Leiden: Brill, 1995), 2:447–59.

notably, the Hippocratic author believes that one's soul is liberated from the body in sleep, so that it can perceive all sorts of things more clearly.[23] Dreams, then, are the results of such perceptions by the soul operating on its own, independently of the body. Although the Hippocratic doctors operated with a conception of the soul and dreams that is obviously incompatible with Aristotle's, he is not prepared to dismiss their practice of considering the patient's dreams as a means of diagnosis and prognosis. On the contrary, he seems to acknowledge that these doctors were onto something. Indeed, not only is their insistence on the medical utility of dreams cited as a piece of evidence in support of Aristotle's own theory and typology of dreams, but his theory of sleep and dreams seems to offer a sound theoretical grounding for their practice. This is interesting as an indication of Aristotle's general approach to expertise in various fields of science. Very briefly, he has great respect for experts, he is keen to use their findings to support his own theories, and he takes his theories to supply the correct explanations of these findings.

Moreover, this passage is important for any attempt to ascertain Aristotle's knowledge of the Hippocratic corpus, and more generally for any investigation of Aristotle's relation to medicine.[24] After all, Aristotle himself came from a family of distinguished doctors, and we know that he planned to write systematically on health and illness, most probably as common attributes of living beings that require investigation along with sleep and dreams and the other topics discussed in the *Parva naturalia*.[25] Finally, this passage reminds us of the fact that the supposition of medical utility of dreams is characteristic of all ancient Greek medicine, from Hippocrates to Galen and beyond.[26] This supposition persists also in the Arabic medical tradition, for instance, in Avicenna's *Canon of Medicine* (*al-Qanūn*), where dreams are treated as diagnostic tools indicating particular humoral mixtures.

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23 Hippocrates, *De diaeta* 86, ed. R. Joly and S. Byl (Berlin: Akademie-Verlag, 1984), 218.

24 See Carolin M. Oser-Grote, *Aristoteles und das Corpus Hippocraticum: Die Anatomie und Physiologie des Menschen* (Stuttgart: Steiner, 2004).

25 See *Sens.* 1, 436a13–b1; *Resp.* 21, 480b22–31; cf. *PA* 1.1, 639a15–22.

26 See, e.g., Rufus of Ephesus, *Quaestiones medicinales*, ed. H. Gärtner (Leipzig: Teubner, 1970), 5; Galen, *De dignotione ex insomniis*, in *Claudii Galeni Opera Omnia*, ed. K. G. Kühn (Leipzig: C. Cnoblochii, 1821), 6:832–35; Nemesius of Emesa, *De natura hominis*, ed. M. Morani (Berlin: De Gruyter, 1987), 68.9–12, 71.9–13, and 122.18–22. References to other ancient medical authors, together with an integral translation of Galen's text, can be found in Steven M. Oberhelman, "Galen, *On Diagnosis from Dreams*," *Journal of the History of Medicine and Allied Sciences* 38 (1983): 36–47. See also Kessels, "Ancient Systems," 414–24.

3.4 *Aristotle's Treatises on Sleep and Dreams in the Arabic Tradition*

The three treatises on sleep and dreams underwent a substantial transformation in their Arabic reception. The work purporting to be the translation of the *Parva naturalia* as a whole, *Kitāb al-Ḥiss wa-l-maḥsūs* ("On sensation and the objects of sensation," named after the first treatise of the *Parva naturalia*) presented a very different account of dreams than is to be found in Aristotle's text: taking the existence of veridical dreams for granted, the adaptor strives to explain them as revelations that the "universal intellect" sends to the imaginative faculties of the sleeper. Only one chapter of one "part" of the Arabic *Kitāb al-Ḥiss* corresponds to the topics in the three sleep and dream treatises (in Arabic, it is called *Bāb al-Nawm wa-l-yaqaẓa*, "Chapter on sleep and waking"), but it is by far the largest section of the (extant) text, and it includes much material on dreams that has no parallel in Aristotle's treatises.

Rotraud Hansberger has demonstrated that the adaptation originated in the "circle of al-Kindī" in the middle of the ninth century;[27] this attribution is supported by considering the text alongside al-Kindī's own book on dreams, the *Treatise on the Quiddity of Sleep and Dreams* (*Risāla fī māhiyyat al-nawm wa-l-ruʾyā*).[28] In this work, al-Kindī claims that the imagination obtains forms more clearly once they are abstracted from sensation, which is confounded by their material natures: perception obtained through the peripheral sense-organs (sensation) is weaker than perception obtained *without* them.[29]

This re-interpretation of Aristotle had a profound impact in the Arabic tradition, notably in Averroes' *Explanatory Paraphrase* of the *Parva naturalia* (*Talkhīṣ Kitāb al-Ḥiss wa-l-maḥsūs*), according to which veridical dreams are caused by the active intellect.[30] After being translated into Latin twice in the course of the thirteenth century, Averroes' *Explanatory Paraphrase* influenced the medieval Latin tradition.

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27 Rotraud Hansberger, "*Kitāb al-Ḥiss wa-l-maḥsūs*: Aristotle's *Parva naturalia* in Arabic guise," in *Les Parva naturalia d'Aristote: Fortune antique et médiévale*, ed. C. Grellard and P.-M. Morel (Paris: Sorbonne, 2010), 150. The only extant Arabic manuscript of the text was discovered in 1985; until then, scholars had been suspicious about the source of Arabic citations of the *Parva naturalia* in Averroes' *Explanatory Paraphrase* because they seemed so alien to the Aristotelian tradition.

28 Al-Kindī, *Rasāʾil al-Kindī al-falsafiyya*, ed. Rīda (Cairo: Dār al-fikr al-ʿarabī, 1950–1953), 1:293–311; trans. Peter Adamson and Peter Pormann in *The Philosophical Works of al-Kindī* (Oxford: Clarendon Press, 2012), 124–33.

29 Al-Kindī, *Risāla fī Māhiyya*, 298; *The Philosophical Works of al-Kindī*, trans. P. Adamson and P. Pormann, 126.

30 See Hansberger, "*Kitāb al-Ḥiss wa-l-maḥsūs*," 143–62, and ead., "How Aristotle came to believe in God-given dreams," in *Dreaming Across Boundaries*, ed. L. Marlow (Boston: Ilex, 2008), 67–68.

At first glance, one might suppose that the Arabic interventions were motivated by religious concerns (prophecy and veridical dreams in the Qur'ān, not to mention the extensive Arabic popular literature on dream interpretation), but the Platonising element in the relevant philosophical texts suggests that its theoretical foundations were more complex.

3.5 *Questions That Occupied Medieval Latin Philosophers*

Aristotle's *Parva naturalia* was translated into Latin in the early thirteenth century (*translatio vetus*) and again between 1260 and 1270 by William of Moerbeke (*translatio nova*). From the middle of the thirteenth century onwards, these translations were studied at universities as part of the curriculum. For instance, the curriculum of the Faculty of Arts in Paris, adopted in March 1255, reserved five weeks for the study of Aristotle's treatises on sleep and dreams.[31] The surviving question commentaries on these treatises, all written by university masters, suggest that the study centred around a series of questions that became standardised over time. There were definitional questions (For instance, what is prior, sleep or waking? Is sleep the privation of waking? Is sleep an affection of the common sense?), extensional questions (For instance, do all animals sleep? Do plants sleep?[32]), and physiological questions (For instance, are there causes of sleep other than those stated by Aristotle, as for example exhaustion or deep speculation, as suggested by Averroes?). Also, there were questions concerning the heart as the place of the common sense, in Aristotle's theory, which had to be squared with the apparently better evidenced encephalocentric theory espoused by Avicenna, among others, and prevalent in medical circles.[33]

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31 See Pieter De Leemans, "*Parva naturalia*, Commentaries on Aristotle's," in *Encyclopedia of Medieval Philosophy: Philosophy Between 500 and 1500*, ed. H. Lagerlund (Dordrecht: Springer, 2011), 919.

32 Aristotle's answer to this particular question is negative (see *Somn.Vig.* 1, 454b27–455a3). Since plants have only the nutritive soul and not the sensitive, they are unable to sleep (and wake). However, Aristotle's answer seems to open new questions. For instance, it seems to entail the assumption that the nutritive soul, unlike the sensitive, can operate continuously without rest. For the medieval discussion of this and other related problems, see Thomsen Thörnqvist's chapter, "Affected by the Matter," in *Forms of Representation in the Aristotelian Tradition, Volume One: Sense Perception*, ed. J. Toivanen (Leiden: Brill, 2022), 183–212.

33 A catalogue of the question commentaries written roughly between 1260 and 1320, with an exhaustive list of *quaestiones* related to sleep and dreams discussed in each commentary, can be found in Sten Ebbesen, Christina Thomsen Thörnqvist, and Véronique Decaix, "Questions on *De sensu et sensato*, *De memoria* and *De somno et vigilia*: A Catalogue," *Bulletin de Philosophie Médiévale* 57 (2015): 96–115.

There were specific problems that occupied the medieval Latin philosophers, such as sleepwalking. The problem was that the senses are supposed to be shut down in sleep, on Aristotle's theory, and yet sleepwalkers seem to make some use of their senses.[34] Another problem was whether menstruating women can indeed affect mirrors, as Aristotle claims in the difficult passage of *De insomniis* in which he seems to contradict some of his central views concerning perception (see section 3.2 above). Yet another problem was whether and how divination in sleep is possible, given Aristotle's explicit rejection of the possibility of god-sent dreams, but also his apparent acceptance of the possibility of veridical dreams concerning events remote in space and time, where Aristotle proposes to replace Democritus' theory of effluences with a theory of propagation of motion by chain-reaction. As several contributions to this volume show, the last problem was of special interest to medieval philosophers.

4 Contributions to This Volume

One of the most impressive and philosophically interesting features of dreams is that they feel perfectly real to the person who experiences them. In chapter one, Pavel Gregoric explores Aristotle's explanation of that feature. There are two main parts to his explanation. First, the common sense is shut down, which means that (1) all the peripheral sense organs are shut down, so no perception takes place in sleep; (2) there is no monitoring of the special senses, so there is no awareness of the fact that no perception takes place in sleep; (3) 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); (4) all the other cognitive capacities tend to be shut down in sleep too, which eliminates all the other grounds for distrusting one's experience. Second, *phantasía* may remain operative in sleep, which means that the sleeper may have appearances. These appearances, unless they are disturbed by physiological processes, are phenomenologically similar to sense-perceptions that caused them in the waking state. Now, these appearances are not merely entertained; rather, they are passively accepted, because in sleep the common sense, memory, and the higher cognitive powers are all shut down, so there is nothing to contradict them. What renders dreams so

34 This question is discussed in detail by Christina Thomsen Thörnqvist, "Sleepwalking Through the Thirteenth Century: Some Medieval Latin Commentaries on Aristotle's *De somno et vigilia* 2.456a24–27," *Vivarium* 54 (2016): 286–310.

realistic, then, is this passive acceptance in the absence of input from all other cognitive capacities.

Aristotle's account, as Gregoric reconstructs it through a careful analysis of the argument of *De insomniis*, is then compared to the account we find in the only extant Greek commentary on that treatise, written by the Byzantine scholar Michael of Ephesus (1050–1129). On Michael's account, what is crucial is the absence of input from reason only. When reason is disengaged, as it usually is, the sleeper takes his dreams to be real; but if reason kicks in, as Aristotle says that it occasionally does, the sleeper is aware that what he is experiencing is only a dream. The way Michael reads and updates Aristotle's text, Gregoric suggests, can serve as an example of the plasticity of the Aristotelian tradition.

Although Aristotle recognises the possibility that dreams can be signs of a limited number of future states and events, Filip Radovic points out in chapter two that Aristotle does not actually provide a clear example of such a dream. His example of faint bodily processes of which we can become aware only in sleep, when commotions in and around the body subside, does not qualify as a dream, according to Aristotle's own definition in *De insomniis*. Radovic argues that this is because the scope of the treatise *De divinatione per somnum*, as the title indicates, is "prophecy in *sleep*" which includes, but is not limited to, "prophecy through dreams."

Radovic analyses Aristotle's conception of a sign and suggests that Aristotle's discussion was influenced by the medical tradition which distinguished between two types of dreams that have medical significance: those that are sent by gods and those that occur naturally. Both types of dreams were traditionally thought to be wrapped in symbolism and abstract forms of similarity that required skilled interpretation. Aristotle agrees only partially, Radovic argues, namely insofar as he admits that dreams may involve plain similarity with objects and processes in the real world, and that dream-interpretation consists in spotting these similarities. However, Aristotle does not restrict that to the class of dreams as signs but extends it to the class of dreams as causes and coincidences, having previously discarded the possibility that dreams could be sent by gods.

Aristotle's eminently naturalist take on veridical dreams posed a major challenge to Aristotle's medieval interpreters. In the Arabic and Latin philosophical tradition alike, few people had any qualms about accepting godsent veridical dreams. Instead of viewing them with suspicion, they considered them endowed with a higher authority. Chapters three and four trace the attempts among Arabic philosophers to develop theories of dreaming that account for veridical dreams and at the same time cohere with Aristotelian psychology. In chapter three, David Bennett analyses the content and context of

Avicenna's (980–1037) discussions of dreaming. Reviewing the antecedents and early reception of these discussions in the Arabic tradition, he shows how veridical dreams are naturally accommodated by Avicenna's psychology and epistemology.

According to Avicenna, there is an intelligible realm of unlimited knowledge and human beings have unrestricted access to that knowledge insofar as they possess sound internal faculties. The state of sleep is particularly conducive for gaining this access, because the subject becomes undistracted by the sensory stimuli, which puts the faculty of imagination in the right state: just dormant enough that the soul can glimpse the intelligible world without distraction, yet precise enough to inscribe them on the common sense. In principle, this is something that can happen to anyone, which explains why prophetic dreams can occur to common folk. With training, according to Avicenna, some individuals can bring themselves to the requisite state even when awake, which accounts for prophets' accomplishments. None of this, Bennett insists, involves any mysticism or esotery on Avicenna's part.

Much like Avicenna before him, Averroes' (1126–1198) account of divinatory dreams is based on the ninth-century adaptation of the *Parva naturalia* (*Kitāb al-Ḥiss wa-l-maḥsūs*) which distorted Aristotle's text and mixed it with Neoplatonic and Galenic lore. In chapter four, Rotraud Hansberger reconstructs Averroes' account against the one found in *Kitāb al-Ḥiss* and shows his commitment to Aristotelianism in the way he interprets and transforms certain un-Aristotelian elements of the doctrine of divinatory dreaming found in that work. One such element is the association of the state of sleep and veridical dreams with "potential sense perception," to which Averroes responds by emphasising a more Aristotelian understanding of the relation between sleep and waking as well as between potentiality and actuality. Another distinctly un-Aristotelian element is the idea that forms and intentions (*maʿānī*) somehow flow from the universal Agent Intellect to both sleepers and dream-interpreters. Averroes, by contrast, places veridical dreams in the context of the normal process of knowledge-acquisition.

Here Averroes has to face two challenges: (1) How is the Agent Intellect supposed to convey *particular* forms and intentions to sleepers and dream interpreters? (2) Why do divinatory dreams occur only to people who are immediately concerned with their subject matter, rather than to any random sleeper? Averroes meets the first challenge, Hansberger shows, by arguing that the Agent Intellect actually conveys *universal* forms that account for the causation of the events that fulfil divinatory dreams, and it is only the sleeper's imaginative faculty that receives such forms as particulars, the modality suited to the nature of the imaginative faculty with its closer ties to the body and

sense-objects. This enables Averroes to hold on to the thesis that divinatory dreams reveal knowledge of particulars, without having to ascribe knowledge of particulars to the Agent Intellect. Averroes meets the second challenge by introducing the notion of prior or "preparatory" knowledge, which puts an individual in a position to experience a divinatory dream. This explains why a divinatory dream can occur only to the individual concerned. As with knowledge acquisition in general, then, divinatory dreams are thus a combined result of the activity of the Agent Intellect and of the sleeper's individual particular circumstances, preparedness, and aptitude. In both of Averroes' manoeuvres Hansberger detects a naturalistic and genuinely Aristotelian instinct.

Averroes' interpretation of divinatory dreams was one major influence on the Latin commentators from the thirteenth and early fourteenth centuries, and we have seen that it was based on a loose adaptation of *Parva naturalia*. The other major influence was Albert the Great (c.1200–1280), who used an early Latin translation of the *Parva naturalia* from Greek. Albert was thus aware of Aristotle's naturalism and minimalism as regards the possibility of prognostication through dreams and he gives Aristotle a fair treatment in his own treatise *De somno et vigilia*. However, Albert develops a theory of celestial influence on our faculties, not unlike Averroes', which makes divinatory dreams possible; he subsequently foists his theory on the problematic passage from *De insomniis* in which Aristotle suggests how information concerning events that are remote in space and time might be propagated (see pp. 12–13 above). As Sten Ebbesen shows in chapter five, the next couple of generations of scholastics mined Albert's treatise for suggestions on how to circumvent Aristotle's disbelief in divinatory dreams.

In the central part of his chapter, Ebbesen exemplifies no less than seven different strategies for getting round the problem, from making Aristotle an ordinary believer in divination (Simon of Faversham, 1260–1306) to modifying Aristotle's typology of dreams (Anonymus Angelicanus I = Siger of Brabant?) or reading Albert's theory into Aristotle (James of Douai, late thirteenth century). An interesting exception is Boethius of Dacia (fl. c.1270), who was unwilling to downplay Aristotle's disbelief in divinatory dreams. In the fourteenth century the influence of Averroes and Albert started to wane, as Ebbesen shows with the example of John Buridan (c.1301–c.1362). There are at least two versions of Buridan's *quaestio* regarding the possibility of divination, one in which he is almost as sceptical as Boethius, and the other in which he is more accommodating. Both versions, however, manifest Buridan's independence from Averroes and Albert.

In chapter six, Christina Thomsen Thörnqvist discusses a selection of question commentaries on *De insomniis* from Albert the Great to John Buridan, demonstrating that questions about the mechanisms of dream

formation dominated the Latin reception of *De insomniis*. Aristotle's description of the process from external sense impressions received in waking state to the sleeper's perception of the dream phantasm is obviously lacunose – several steps of the process are either unclear or not accounted for at all – and the Latin commentators were determined to fill in the blanks. The process as described by Aristotle seems to require that the sense organs are capable of storing the sense-impressions to some extent. But how is this possible? And how can we perceive our dreams in sleep when Aristotle's definition of sleep is that the whole sensory apparatus, from the common sense to the particular senses, is deactivated? Still, not only *phantasía* but also the common sense have key roles in the process as described by Aristotle; which, then, are the precise functions of these faculties in this particular context?

From Albert the Great onwards, the Latin commentators rely on the Arabic theories on the interior senses to develop from Aristotle's brief account of dream formation in *De insomniis* a much more complete explanation. What they end up with is a substantial development of Aristotle's account, a full cycle that starts and ends with perception and where the different stages have a specific anatomical location in the human body.

The volume closes with chapter seven, in which Filip Radovic revisits Aristotle's explanation of why sleepers mistake their dreams for real events, what is nowadays known as "delusional dreaming." Gregoric has argued in chapter one that the core of Aristotle's explanation is the notion of passive or unreflective acceptance in the absence of input from other cognitive capacities. In the first part of his chapter, Radovic traces this notion from the ancient sceptics and Radulphus Brito (c.1270–1320) to Spinoza, William James, Bertrand Russell, and the contemporary critics of this notion, such as Jennifer Windt.

In the second part of the paper, Radovic explores several contemporary explanations of delusional dreaming and shows that the prominent themes of imagination and belief in dreams reflect key Aristotelian doctrines, and, importantly, he defends the Aristotelian explanation in terms of passive acceptance against the alternative views proposed by Jean-Paul Sartre, Colin McGinn, Owen Flanagan, and Jennifer Windt. Following Aristotle's lead, at least as Gregoric interprets him in chapter one, Radovic argues that the lack of awareness that one is asleep is sufficient for dreams to appear real to the sleeper. However, unlike Aristotle, Radovic calls for a wider conception of "appearing real" that does not necessarily include a faithful replication of ordinary perceptual states in waking.

The full circle this volume makes from chapter one to chapter seven is a testimony to the fecundity and relevance of Aristotle's thoughts on the subject of sleep and dreams. We hope that the following pages will spark further interest in the contributions that the Philosopher and his followers in the Greek,

Arabic, and Latin traditions made to our understanding of the "wide realm of wild reality" of dreams.

5 The Resources

Several editions of *De somno et vigilia*, *De insomniis*, and *De divinatione per somnum* have appeared within the last seventy years or so, most of them as part of editions of the *Parva naturalia*.[35] The edition by William D. Ross is the most widely used today. Paweł Siwek's edition is generally considered to be better than Ross', but it is rather inaccessible nowadays. However, neither Ross nor Siwek produce a stemma and their readings do not always follow a firm principle concerning the authority of the manuscripts.[36] The situation has been partly remedied by David Bloch's research into the textual tradition of *De memoria* and *De sensu*.[37] The stemma produced by Bloch for *De memoria* should be valid for the *De somno et vigilia*, *De insomniis*, and the *De divinatione per somnum* also, given that they are transmitted, in most cases, by the same manuscripts. However, we are still awaiting a critical edition that will take these results into account.

Most editions of the *Parva naturalia* come with a facing translation, but the most widely used translations into modern languages are parts of volumes that contain translations of Aristotle's works. The most commonly used English translation is John I. Beare's in the Oxford translation under the editorship of William D. Ross, significantly updated and improved by Jonathan Barnes in 1984.[38] There is an excellent new English translation by

35 In chronological order: *Aristotelis De somno et vigilia liber adiectis veteribus translationibus et Theodori Metochitae commentario*, ed. H. J. Drossaart Lulofs (Leiden: Burgersdijk and Niermans, 1943); *Aristotelis De insomniis et De divinatione per somnum*, ed. H. J. Drossaart Lulofs; *Aristote: Petits traités d'histoire naturelle*, ed. R. Mugnier (Paris: Les Belles Lettres, 1953); *Aristotle: Parva Naturalia*, ed. W. D. Ross; *Aristotelis Parva Naturalia*, ed. P. Siwek (Rome: Desclée, 1963); Aristotle, *On Sleep and Dreams*, ed. D. Gallop; *Aristotele: Il sonno e i sogni*, ed. L. Repici (Venezia: Marsilio, 2003).

36 This is most conspicuously the case for Siwek's edition. Without saying so expressly in his review, Drossaart Lulofs comes very close to charging Siwek with eclecticism, see Hendrik J. Drossaart Lulofs, "Review of Siwek, *Aristotelis Parva Natualia*," *Mnemosyne* 18 (1965): 425–27.

37 David Bloch, *Aristotle on Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism* (Leiden: Brill, 2006); id., "The Text of Aristotle's *De Sensu* and *De Memoria*," *Revue d'Histoire des Textes*, n.s. 3 (2008): 1–58.

38 Aristotle, *Parva Naturalia*, ed. J. I. Beare and G. R. T. Ross (Oxford: Clarendon Press, 1908); repr. in *The Works of Aristotle Translated into English*, vol. 3, ed. W. D. Ross (Oxford: Clarendon Press, 1931); *The Complete Works of Aristotle: The Revised Oxford Translation*, ed. J. Barnes, 2 vols. (Princeton: Princeton University Press, 1984).

Fred D. Miller, Jr.[39] and a forthcoming translation from Hackett Publishing Company, under the editorship of David Reeve. The best German translation of *De insomniis* and *De divinatione per somnum* is by Philip J. van der Eijk, based on Siwek's edition, whereas the most reliable German translation of *De somno et vigilia* is Eugen Dönt's, which forms part of a translation of the whole of the *Parva naturalia*.[40] By now the standard French translation of the whole *Parva naturalia* is that of Pierre-Marie Morel, which was recently incorporated into the complete works of Aristotle in French translation under the editorship of Pierre Pellegrin.[41] As for the Latin translations used in the middle ages, there are preliminary editions by Drossaart Lulofs appended to his editions of the Greek text of Aristotle's three treatises,[42] whereas definitive critical editions are planned to appear in the *Aristoteles Latinus* series.

Curiously, our three treatises do not seem to have been widely read or to have attracted much scholarly attention in antiquity. The first Greek commentary on our treatises, along with all but one treatise from the *Parva naturalia*, was written by the Byzantine scholar Michael of Ephesus, active in the first half of the twelfth century.[43] Michael's commentary, aiming mostly to elucidate Aristotle's words and arguments, was much used for the four Greek paraphrases of *Parva naturalia* produced by Byzantine scholars between the very late thirteenth to the mid-fifteenth century, namely Sophonias (fl. c.1296), George Pachymeres (1242–c.1310), Theodore Metochites (1270–1332), and George Scholarios (1400–c.1473).[44]

The key texts for the Arabic reception of Aristotle's treatises on sleep and dreams are the relevant parts of the ninth-century adaptation of the *Parva naturalia* (*Kitāb al-Ḥiss wa-l-maḥsūs*) and of the *Explanatory Paraphrase* of

39 Aristotle, *On the Soul and Other Psychological Works*, ed. F. D. Miller, Jr. (Oxford: Clarendon Press, 2018).

40 Aristotle, *Kleine naturwissenschaftliche Abhandlungen*, ed. E. Dönt (Stuttgart: Reclam, 1997).

41 Aristotle, *Petits traités d'histoire naturelle*, ed. P.-M. Morel (Paris: Flammarion, 2000); *Aristote: Oeuvres complètes*, ed. P. Pellegrin (Paris: Flammarion, 2014).

42 See 24n35 above. Drossaart Lulof's editions of Latin translations are available in the *Aristoteles Latinus Database* by Brepols Publishers.

43 Michael did not write a commentary on the first treatise from the *Parva naturalia* (*De sensu et sensibilibus*), presumably because Alexander of Aphrodisias had written one which was authoritative and available. An assessment of Michael's commentary on Aristotle's treatises on sleep and dreams can be found in Thomas Ricklin, *Der Traum der Philosophie im 12. Jahrhundert: Traumtheorien zwischen Constantinus Africanus und Aristoteles* (Leiden: Brill, 1998), 284–307.

44 Sophonias' paraphrase was published under Themistius' name in the *Commentaria in Aristotelem Graeca* series, as *Themistii* (*Sophoniae*) *in Parva naturalia commentarium*, ed. P. Wendland (Berlin: Reimer, 1903). For the other three paraphrases, see Bydén, "Introduction," 16nn51–53.

Averroes.[45] The most ambitious medieval interpretation of the *Parva naturalia*, influenced by Averroes, is the paraphrase of Albert the Great (c.1193–1280).[46] Unlike Thomas Aquinas, who wrote commentaries only on the first two treatises from the *Parva naturalia* (*De sensu et sensibilibus* and *De memoria et reminiscentia*), several masters of arts such as Radulphus Brito (c.1270–1320). John of Jandun (c.1285–1328), and John Buridan (c.1300–c.1358) wrote commentaries on most of the *Parva naturalia*, including what we know as the three treatises on sleep and dreams.[47] While much of the medieval Latin material remains unpublished or buried in old uncritical editions, the situation began to change recently with new editions of the question commentaries by Simon of Faversham (c.1260–1306), Geoffrey of Aspall (d. 1287), Radulphus Brito (c.1270–1320), Walter Burley (c.1275–1345), and others – all edited by the members of the *Representation and Reality* group.[48] Of course, the fact that some notable medieval philosophers did not write commentaries on Aristotle's *De somno et vigilia*, *De insomniis*, and *De divinatione per somnum* does not mean that these treatises were unfamiliar to them or that they did not engage with particular topics discussed in these treatises.[49] In fact, these Aristotelian

45 The very first (draft) edition of *Kitāb al-Ḥiss wa-l-maḥsūs* can be found in Rotraud Hansberger's doctoral dissertation from 2007, which will be published in modified form in the *Aristoteles Semitico-Latinus* series by Brill. There is an English translation of Averroes' *Explanatory Paraphrase* by H. Blumberg in Averroes, *Epitome of Parva Naturalia* (Cambridge, MA: The Medieval Academy of America, 1961), following the edition of the Latin translation in the same series (1949) and preceding the edition of the Arabic text (1972). The Arabic text has also been edited by H. Gätje in Averroes, *Talkhīṣ kitāb al-ḥiss wa-l-maḥsūs* (Wiesbaden: Otto Harrassowitz, 1961).

46 Albertus Magnus, *De somno et vigilia*, ed. A. Borgnet (Paris: Vivès, 1890). A new edition of Albert's *Parva naturalia* is being prepared by Silvia Donati for the *Editio Coloniensis* of Albert's *Opera omnia*.

47 For these little-known commentaries, see Bydén, "Introduction," 22.

48 Simon of Faversham, "*Quaestiones super librum De somno et vigilia*: An Edition," ed. S. Ebbesen, *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 82 (2013): 90–145; Geoffrey of Aspall, "*Quaestiones super librum De somno et vigilia*: An Edition," ed. S. Ebbesen, *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 83 (2014): 257–341; Walter Burley, "*Expositio* on Aristotle's Treatises on Sleep and Dreaming: An Edition," ed. C. Thomsen Thörnqvist, *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 83 (2014): 379–515; James of Douai, "On Dreams," ed. S. Ebbesen, *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 84 (2015): 22–92; Radulphus Brito, "On Memory and Dreams: An edition," ed. S. Ebbesen, *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 85 (2016): 11–86; Anonymus Vaticani 3061 and Anonymus Vaticani 2170, "On Aristotle's *Parva Naturalia*: An Edition of Selected Questions," ed. S. Ebbesen, *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 86 (2017): 216–312. Critical editions of the question commentaries by Siger of Brabant(?) and Anonymus Angelicani (MS Rome, Bibl. Angelica, 549) by Thomsen Thörnqvist are in progress.

49 See, for instance, Martin Pickavé, "Good Night and Good Luck: Some Late Thirteenth-Century Philosophers on Activities in and through Dreams," in *The Parva naturalia*, ed. B. Bydén and F. Radovic (Cham: Springer, 2018), 211–31.

treatises retained their status as standard texts to be lectured on in the arts faculties of European universities until at least the end of the fifteenth century, so it was hard for a philosopher not to have some acquaintance with them.

Of the modern commentaries, many are found accompanying the editions and translations of the treatises.[50] Here we should mention especially Philip J. van der Eijk's extensive German commentary on *De insomniis* and *De divinatione per somnum*, which pays great attention to philological and philosophical detail, David Gallop's English commentary on all three treatises, prefaced by a readable wide-ranging introduction, and Luciana Repici's Italian commentary with a seventy-page introductory study.[51] Whereas the number of contemporary commentaries is still modest in comparison with those on *De anima*, there is an extensive amount of research on various topics covered in the three treatises on sleep and dreams specifically, and on *Parva naturalia* more generally.[52]

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50 An exception is a doctoral thesis turned into a monograph: *Aristotle's Concept of Soul, Sleep and Dreams* by Henriette Wijsenbeek-Wijler (Amsterdam: Hakkert, 1978), in which only the last two chapters (pp. 170–248) are relevant for the topic of sleep and dreams, since the book is mostly a general and largely obsolete propaedeutic to Aristotle's psychology.

51 Van der Eijk, *Aristoteles: De insomniis*; Gallop, *On Sleep and Dreams*; Repici, *Aristotele: Il sonno e i sogni*. The reader might also consult Jackie Pigeaud's introduction to his annotated translation of Aristotle's *De divinatione per somnum*, discussing a broad range of topics related to dreaming in antiquity, in Aristotle, *La vérité des songes* (Paris: Rivages, 1995), 9–101.

52 The following volumes offer a first-time visitor's guide to the more recent scholarly literature: *Aristotle on the Mind and the Senses*, ed. G. E. R. Lloyd and G. E. L. Owen (Cambridge: Cambridge University Press, 1978, repr. 2007); *Les Parva Naturalia*, ed. C. Grellard and P.-M. Morel (Paris: Sorbonne, 2010); *The Parva naturalia*, ed. B. Bydén and F. Radovic (Cham: Springer, 2018).

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.

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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 baffllingly 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" (*koinè 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 prôton 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, *koinè 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).

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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.

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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]

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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

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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]

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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.

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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

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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]

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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?

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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:

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

66 εἰ δὲ χρὴ τἀληθὲς εἰπεῖν, ἁφὴ 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.

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CHAPTER 2

Aristotle on Signs in Sleep: Natural Signification and Dream Interpretation

Filip Radovic

1 Introduction

In *De divinatione per somnum*, Aristotle distinguishes between three types of prevision (*proorân*) through dreams (hereafter, dreams involving such prevision will be referred to as prohoratic dreams[1]) in the mode of cause, sign, and coincidence. Even if Aristotle's use of prevision (*proorân*) may seem ambiguous, it is plausible to assume that it in no case implies a veridical apprehension of the future in the present. Roughly, some dreams may correspond to future events, yet such dreams do not constitute foreknowledge about the future, strictly speaking.[2] In this paper I will pay special attention to prohoratic sign-dreams. I consider three questions in relation to Aristotle's account of signs in sleep. First, what conditions must be fulfilled in order for a dream, or a related experience in sleep, to qualify as a sign? Second, how does Aristotle's conception of signs in dreams relate to popular ancient views of prophetic signs, including those of the ancient medical tradition? Third, how does Aristotle's account of dream-interpretation relate to conventional ancient practices of dream-interpretation?

Aristotle's discussion of signs in sleep is important because it illuminates a set of unresolved issues in *De divinatione*, including the problem of how Aristotle's three modes of prevision relate to each other. The topic also sheds light on Aristotle's engagement with the medical tradition and how his view on signs relates to popular opinions about god-sent signs. I shall argue that Aristotle in *De divinatione* endorses a natural conception of signs that may be viewed as a particular version of the popular view that signs in sleep may convey hints about the future. As we shall see, Aristotle's conception of signs does

1 "Prohoratic dreams" is a neologism that is derived from the Greek *proorân*. I prefer "prohoratic dreams" over related terms like "prevision," "foresight," and "prophetic dreams" because of its neutral ring, that is, its less obvious association with some form of knowledge.

2 See Filip Radovic, "Aristotle on Prevision Through Dreams," *Ancient Philosophy* 36 (2016): 383–407, for a comprehensive discussion of the term *proorân*.

not follow the traditional idea that signs signify real-world events by way of some more or less far-fetched resemblance that needs interpretation in order to be understood.

The popular ancient model of dream-interpretation is closely tied to the assumption that some dreams signify by means of a more or less obvious similarity between the dream and the signified event, and that dream-interpretation consists in explicating how the sign indicates an occurrence by means of some similarity-relation.[3] Aristotle challenges this traditional view in which dream-interpretation mainly concerns the elucidation of obscure signs and provides an account in which signs signify by means of an underlying causal development that brings about both the sign and the signified event. Accordingly, since Aristotle does not characterise signs in terms of obscure riddles – dreams which dress up as metaphorical representations that require explication – there is no special connection between signs and dream-interpretation in Aristotle's account. In fact, Aristotle discusses signs and dream-interpretation as two separate topics and does not even mention the popular view in which these two themes are intertwined.

Even if Aristotle pays no special attention to the interpretation of signs in dreams, he maintains that dreams sometimes require interpretation in order to be understood. He regards dream-interpretation as the disambiguation of manifest sensory dream-content in general, not necessarily the elucidation of what a dream-sign signifies. Dream-interpretation, according to Aristotle, aims to determine what real-world objects dreams correspond to (that is, from which real object a distorted dream derives) and takes the form of observing concrete similarities between the dream and real-world objects. Even so, Aristotle's model of dream-interpretation may be conceived as a simplified version of the ancient practice that uses similarity in the broadest possible sense to interpret dreams.

Further, it is shown that Aristotle's discussion of signs that signify states of the dreamer's body merely superficially corresponds to the type of natural signs that are considered by the ancient medical tradition. Both the Hippocratic tradition and Galen, unlike Aristotle, consider natural signs that indicate conditions of the dreamer's body through some kind of similarity with the signified state. This point marks an important difference in relation to Aristotle's examples of natural signs in general.

Finally, I suggest how to understand Aristotle's examples of medically significant signs, which he describes in terms of an awareness of bodily states during

3 See Artemidorus, *Oneirocritic: Text, Translation, and Commentary*, ed. D. Harris-McCoy (Oxford: Oxford University Press, 2012), 38–39, for an illustrative example.

sleep. Aristotle's discussion appears to be about dreams, yet his examples of experiences during sleep do not fit the characterisation of dreams given in *De insomniis*. The seemingly unwarranted digression in which Aristotle characterises signs as emerging through something like perceptual states in sleep, rather than proper dreams, has, I shall suggest, a quite simple explanation.

In sum, Aristotle endorses modified versions of the traditional ideas of signs in sleep and dream-interpretation that partly overlap with ancient mainstream views. His discussion of signs in sleep and dream-interpretation are likely to reflect two *éndoxa*, that is, generally accepted beliefs that deserve to be taken seriously, namely that dreams may convey hints about the future through signs and that dream-interpretation occasionally is required in the context of prophecy in sleep.

2 The Characterisation of Signs in *De divinatione*

According to Aristotle, signs in dreams, or more generally, signs in sleep, are one of the three modes in which experiences in sleep may turn out to be prohoratic dreams (the distinction between signs in dreams and signs in sleep will become significant below). Aristotle explains how the distinct modes of prevision (*proorân*) relate to each other. He writes:

> Well then, it is necessary that the dreams are either causes, or signs of things that happen, or else coincidences; either all or some of these, or one only. By a cause, I mean, for example, the moon as a cause of the sun's being eclipsed, or fatigue as a cause of fever. By a sign, the star's entry into shadow as a sign of its eclipse, or roughness of the tongue as a sign of someone's having a fever. And by coincidence, the sun's being eclipsed when someone is taking a walk, since that is neither a sign nor a cause of its being eclipsed, nor is the eclipse of the walking. Hence no coincidence happens either always or for the most part.[4]

4 ἀνάγκη δ' οὖν τὰ ἐνύπνια ἢ αἴτια εἶναι ἢ σημεῖα τῶν γινομένων ἢ συμπτώματα, ἢ πάντα ἢ ἔνια τούτων ἢ ἓν μόνον. λέγω δ' αἴτιον μὲν οἷον τὴν σελήνην τοῦ ἐκλείπειν τὸν ἥλιον, καὶ τὸν κόπον τοῦ πυρετοῦ, σημεῖον δὲ τῆς ἐκλείψεως τὸ τὸν ἀστέρα εἰσελθεῖν, τὴν δὲ τραχύτητα τῆς γλώττης τοῦ πυρέττειν, σύμπτωμα δὲ τὸ βαδίζοντος ἐκλείπειν τὸν ἥλιον· οὔτε γὰρ σημεῖον τοῦ ἐκλείπειν τοῦτ' ἐστὶν οὔτ' αἴτιον, οὔθ' ἡ ἔκλειψις τοῦ βαδίζειν· διὸ τῶν συμπτωμάτων οὐδὲν οὔτε ἀεὶ γίνεται, οὔθ' ὡς ἐπὶ τὸ πολύ. (*Div.Somn.* 1, 462b26–463a3, in *Aristotle: Parva naturalia*, ed. W. D. Ross (Oxford: Clarendon Press, 1955); *Aristotle on Sleep and Dreams: A Text and Translation with Introduction, Notes and Glossary*, trans. D. Gallop (Warminster: Aris & Phillips Ltd, 1996), 107.)

Roughly put, a sign is something that flags the occurrence of something beyond itself. For example, roughness of the tongue indicates fever, and the star's entry into shadow is a sign of its eclipse. In these particular cases, the character of the sign (the roughness of the tongue and the darkness of the sky) marks a typical co-variance between the sign and the signified event or state. Further, Aristotle tells us that a person who happens to take a walk during the eclipse of the sun is not a sign of the eclipse, even if the two events happen to co-occur. Instead, the walking is coincidental in relation to the darkness of the sky.

Aristotle's account of prohoratic dreams in the modes of sign and cause makes up the scientific part of his account of prophetic dreams. The remaining type of fulfilled dream, namely coincidence, has no scientific explanation. Coincidences are not causes strictly speaking but rather outcomes of separate causal developments that accidentally come together in time and place.[5]

3 Signs in Sleep through Perception of Internal Bodily States

Aristotle gives further clues regarding the nature of signs when he considers dreams as probable signs of disease. Some dreams are assumed to signify conditions of the dreamer's body. Aristotle writes:

> Is it true, then, that some dreams are causes, while others are signs, e.g. of what is happening in the body? At all events, even medical experts say that one should pay extremely close attention to dreams. And that is a reasonable supposition even for those who are not practitioners, but are pursuing a theoretical inquiry. For movements occurring in the daytime, unless they are very big and powerful, pass unnoticed alongside those of the waking state, which are bigger. But during sleep the opposite happens. For then even slight movements seem to be big. This is clear from frequent occurrences in the course of sleep. People think it is lightning and thundering when faint echoes are sounding in their ears; or that they are enjoying honey and sweet flavours, when a tiny drop of phlegm is running down; or that they are walking through fire and feeling extremely hot, when a slight warmth is affecting certain parts. But as they wake up, it is obvious to them that those things have the above character. Thus, seeing that the beginnings of all things are small, so too, clearly, are those of illness and other affections imminent in our bodies.

5 *Metaph.* 5.30, 1025a14–19; *Ph.* 2.8, 198b32–199a7.

> Plainly, then, these must be more evident during periods of sleep than in the waking state.[6]

This passage is puzzling for a number of reasons. First, note that Aristotle's discussion seems to concern dreams, yet the examples Aristotle discusses are not dreams at all (as characterised in *De insomniis*), but rather seem to be distorted perceptions of internal bodily states that take place during sleep. Aristotle's examples of signs of disease do not fit the formal definition of dreaming in *De insomniis* as perceptual remnants that linger on and become apparent during sleep.[7] Nevertheless, Aristotle's description of the case seems to suggest some kind of cognitive misidentification that goes beyond a purely perceptual

6 ἆρ' οὖν ἐστι τῶν ἐνυπνίων τὰ μὲν αἴτια, τὰ δὲ σημεῖα, οἷον τῶν περὶ τὸ σῶμα συμβαινόντων; λέγουσι γοῦν καὶ τῶν ἰατρῶν οἱ χαρίεντες ὅτι δεῖ σφόδρα προσέχειν τοῖς ἐνυπνίοις· εὔλογον δὲ οὕτως ὑπολαβεῖν καὶ τοῖς μὴ τεχνίταις μέν, σκοπουμένοις δέ τι καὶ φιλοσοφοῦσιν. αἱ γὰρ μεθ' ἡμέραν γινόμεναι κινήσεις, ἂν μὴ σφόδρα μεγάλαι ὦσι καὶ ἰσχυραί, λανθάνουσι παρὰ μείζους τὰς ἐγρηγορικὰς κινήσεις, ἐν δὲ τῷ καθεύδειν τοὐναντίον· καὶ γὰρ αἱ μικραὶ μεγάλαι δοκοῦσιν εἶναι. δῆλον δ' ἐπὶ τῶν συμβαινόντων κατὰ τοὺς ὕπνους πολλάκις· οἴονται γὰρ κεραυνοῦσθαι καὶ βροντᾶσθαι μικρῶν ἤχων ἐν τοῖς ὠσὶ γινομένων, καὶ μέλιτος καὶ γλυκέων χυμῶν ἀπολαύειν ἀκαριαίου φλέγματος καταρρέοντος, καὶ βαδίζειν διὰ πυρὸς καὶ θερμαίνεσθαι σφόδρα μικρᾶς θερμασίας περί τινα μέρη γινομένης, ἐπεγειρομένοις δὲ ταῦτα φανερὰ τοῦτον ἔχοντα τὸν τρόπον· ὥστ' ἐπεὶ μικραὶ πάντων αἱ ἀρχαί, δῆλον ὅτι καὶ τῶν νόσων καὶ τῶν ἄλλων παθημάτων τῶν ἐν τοῖς σώμασι μελλόντων γίνεσθαι. φανερὸν οὖν ὅτι ταῦτα ἀναγκαῖον ἐν τοῖς ὕπνοις εἶναι καταφανῆ μᾶλλον ἢ ἐν τῷ ἐγρηγορέναι. (*Div.Somn.* 1, 463a3–21; Aristotle, *On Sleep and Dreams*, 107–9.)

7 To complicate things even more, in *De insomniis* Aristotle also stresses that perception is shut down during sleep. However, Aristotle is not claiming that perceiving in any modified form is impossible during sleep. He is rather saying that it is impossible to be actively exercising perception in the "chief and unqualified sense," while sleeping (*Somn.Vig.* 1, 454b12–14). On the other hand, the example concerning signs of disease does not belong to the discussion in which Aristotle explicitly discusses cases of perception in sleep (cf. *Insomn.* 3, 462a19–31). Yet all cases of perception in the state of sleep seem to involve some degree of distortion. For example, in *De insomniis* occasional perception of external objects in sleep is characterised as dim and faint (i.e., perceived objects are somewhat indistinct) whereas the awareness of bodily states in *De divinatione* is described as amplified in relation to the corresponding sensory stimulus in waking, e.g., slight warmth in waking is experienced as burning fire during sleep. As noted above, it seems plausible to assume that the misidentification occurs at the doxastic level. Even so, I assume that the misapprehension occurs, in part, because this is how things seem to be. In both instances where Aristotle mentions perception in sleep, he adds that the perceived object was correctly identified upon awakening. See Philip van der Eijk, *Aristoteles, De insomniis, De divinatione per somnum: Übersetzt und erläutert* (Berlin: Akademie Verlag, 1994), 62–67, 245–48; id., *Medicine and Philosophy in Classical Antiquity: Doctors and Philosophers on Nature, Soul, Health and Disease* (Cambridge: Cambridge University Press, 2005), 178–79; and Gallop, *Aristotle on Sleep and Dreams*, 154, for further discussions of Aristotle's views on perception in sleep.

error.[8] Slight warmth is perhaps judged or believed to be fire. At any rate, I shall assume that Aristotle suggests that the relevant misidentification is based on some sensory illusory element. A perceptual misidentification does not require a sensory illusion, but an illusion can contribute to such a misidentification.

So why does Aristotle discuss awareness of internal states of the body rather than dreams strictly speaking? The most likely explanation seems to be that *De divinatione* covers all cases of alleged prophecy in sleep, not only dreams in the narrow sense in which they are discussed in *De insomniis*. The title of the treatise (Περὶ τῆς καθ᾽ ὕπνον μαντικῆς, *Perì tês kath' hýpnon mantikês*, *On prophecy through sleep*), even if added by a later editor, hints that the scope includes any alleged prophetic experience that occurs in sleep. Note also Aristotle's wording in *De divinatione* 1, 462b12–13, where he introduces the topic in terms of "the divination that takes place during periods of sleep and is said to be based on dreams."[9] Given a wider scope with the emphasis on *sleep* rather than on dreams, Aristotle's examples of a distorted awareness of bodily states do not appear that misplaced.[10] However, Aristotle presents no explicit example of a sign-dream proper that matches his definition of dreaming in *De insomniis*, and except for the case of perception of bodily states in sleep, the examples of signs that are mentioned in *De divinatione* are not related to sleep at all.[11]

4 Amplified Awareness of Sensory Features during Sleep

One of Aristotle's main points in connection with signs in sleep is that increased noticeability comes with the state of sleep. First, there is the general case in which sensory awareness is more prominent during sleep due to the inactivity of external perception.[12] The examples in *De insomniis* seem to

8 See δοκοῦσιν, οἴονται (*Div.Somn.* 1, 463a11, 12). See also Mika Perälä's contribution, "Aristotle on Incidental Perception," in *Forms of Represenation in the Aristotelian Tradition, Volume One: Sense Perception*, ed. J. Toivanen (Leiden: Brill, 2022), 66–98, for a general discussion of related problems in Aristotle.

9 *Div.Somn.* 1, 462b12–13; Aristotle, *On Sleep and Dreams*, 107.

10 One possibility is that Aristotle's examples of experiences in sleep as signs of states of the body are borrowed from the medical tradition and reflect a broader conception of dreaming that accepts any form of awareness during sleep as a proper dream (cf. Maithe Hulskamp, *Sleep and Dreams in Ancient Medical Diagnosis and Prognosis*, PhD diss. (Newcastle: Newcastle University, 2008), 241). In any case, Aristotle could quite easily construe the case of perceiving a state of the body in sleep as a proper dream in line with his own strict definition of dreaming. For instance, we may suppose that perceptions of bodily states that occur in sleep continue to linger on and thereby become proper dreams.

11 Cf. *Div.Somn.* 1, 462b26–463a3.

12 *Insomn.* 3, 460b28–461a8.

focus on the basic conditions for noticeability as such. For example, the stars are visible during the night but not during daytime, yet they are there in daytime but unnoticeable. Similarly, a greater fire next to a smaller fire obscures the smaller fire.[13] In a similar way, sense-impressions that linger on from past perceptual states go unnoticed during daytime but become apparent during sleep. No distortion seems to be implied by this form of enhanced awareness of sensory remnants.

In *De divinatione*, on the other hand, we face a more clear-cut case of an awareness of amplification that takes the form of a distorted apprehension of bodily changes: slight warmth is mistaken for burning fire. In these cases, the amplified awareness distorts the nature of present bodily stimuli in addition to the general noticeability that is enhanced by the state of sleep.

In order to see the difference between the two kinds of magnification, consider the following: the first, which is described in *De insomniis*, is used to explain the appearance of dreams in the state of sleep and their non-appearance in waking – for example, the sound of a radio may temporarily be over-voiced by a louder sound but is hearable again as soon as the louder sound fades. This sort of relative noticeability applies to all experiences in sleep (not just dreams) due to the absence of competing external sensory activity during sleep. The second type of magnification is more like an excessive degree of amplification caused by some altered way of processing sensory stimuli. For example, think of a hearing aid of low quality that amplifies and distorts indistinct sounds in the environment. The idea seems to be that it is the state of sleep that alters the cognition of bodily sensations and makes these sensations stand out in a distorted way. Being a salient feature that draws attention to probable states or events that are presently not manifest is an important aspect of the sign that will be further discussed below.

5 Aristotle's Conception of Natural Signs

At this point it may be helpful to look at Aristotle's formal definition of signs in the *Prior Analytics*:

> A probability and a sign are not identical, but a probability is a reputable proposition: what men know to happen or not to happen, to be or not to be, for the most part thus and thus, is a probability, e.g. envious men hate, those who are loved show affection. A sign is meant to be a demonstrative proposition either necessary or reputable; for anything such that

13 *Insomn.* 3, 461a1–3.

> when it is another thing is, or when it has come into being the other has come into being before or after, is a sign of the other's being or having come into being.[14]

Generally speaking, a sign indicates that something beyond itself is the case. Signs follow the general formula "if P then Q" and range from expressing something necessary to something credible.[15] For example, breast milk is a sign of pregnancy,[16] or "sign" may be used in a looser sense as 'evidence of x,' not necessarily as 'conclusive evidence.'[17] In *Rhetoric* 1.2, 1357b1–21 Aristotle contrasts necessary signs from non-necessary signs. Necessary signs cannot be refuted because they provide conclusive proof. Aristotle illustrates with the examples of fever as a sign of illness and the fact that a certain woman is giving milk as a sign that she has lately borne a child. These signs are said to be irrefutable. On the other hand, non-necessary signs are like the fact that Socrates was wise and just as a sign that the wise also are just; this latter sign is refutable by a case in which a wise man happens to be unjust. In a similar vein, fast breathing in a man indicates fever yet it may be proved false in a particular case.

So, how are signs in sleep characterised in *De divinatione*? The text offers some substantial descriptions together with a set of subtle clues that together provide a general account of natural signs and the special case of signs in sleep. Roughly, the sign that occurs in sleep is a manifest, distinct feature that indicates the probability of a causal connection. The sign itself is an effect of a causal regularity which in turn indicates the predictability of the signified event in cases where the signified event has not yet occurred or has not yet

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14 <Ἐνθύμημα δὲ ἐστὶ συλλογισμὸς ἐξ εἰκότων ἢ σημείων,> εἰκὸς δὲ καὶ σημεῖον οὐ ταὐτόν ἐστιν, ἀλλὰ τὸ μὲν εἰκός ἐστι πρότασις ἔνδοξος· ὃ γὰρ ὡς ἐπὶ τὸ πολὺ ἴσασιν οὕτω γινόμενον ἢ μὴ γινόμενον ἢ ὂν ἢ μὴ ὄν, τοῦτ' ἐστὶν εἰκός, οἷον τὸ μισεῖν τοὺς φθονοῦντας ἢ τὸ φιλεῖν τοὺς ἐρωμένους. σημεῖον δὲ βούλεται εἶναι πρότασις ἀποδεικτικὴ ἢ ἀναγκαία ἢ ἔνδοξος· οὗ γὰρ ὄντος ἔστιν ἢ οὗ γενομένου πρότερον ἢ ὕστερον γέγονε τὸ πρᾶγμα, τοῦτο σημεῖόν ἐστι τοῦ γεγονέναι ἢ εἶναι. (Aristotle, *Analytica priora et posteriora*, ed. W. D. Ross (Oxford: Clarendon Press, 1964), 2.27, 70a2–9; Aristotle, *Analytica priora*, trans. A. J. Jenkinson, in Aristotle, *The Complete Works of Aristotle: The Revised Oxford Translation*, ed. J. Barnes (Princeton: Princeton University Press, 1984), 1:112.)

15 Cf. the logical τεκμήριον (*tekmḗrion*) in relation to the generic σημεῖον (*sēmeîon*). See Giovanni Manetti, *Theories of the Sign in Classical Antiquity*, trans. C. Richardson (Bloomington, Ind.: Indiana University Press, 1993), especially chapter 5. For the use of τεκμήριον (*tekmḗrion*) in the context of medically significant dreams, see Hippocrates, *Regimen IV, Nature of Man, Regimen in Health, Humours, Aphorisms, Regimen 1–3, Dreams, Heracleitus: On the Universe*, trans. W. H. S. Jones (Cambridge: Harvard University Press, 1923), para. 1.

16 Cf. *APr.* 2.27, 70a13–16.

17 Cf. *Div.Somn.* 2, 463b15. Gallop translates σημεῖον (*sēmeîon*) in this passage as "proof." "Proof," however, does not necessarily imply conclusive proof.

been confirmed to have occurred. Below, I highlight a set of elements that are distinctive for Aristotle's conception of natural signs.

(1) *Signification through causal regularities.* The sign indicates by way of a regularity between a cause and a typical effect. For example, consider smoke as a sign of fire. The sign in this case (the presence of smoke) indicates fire, since smoke, more often than not, is caused by fire. The sign may be understood as a kind of hint that something is or will be the case. However, not all hints about the future qualify as natural signs of the relevant kind. For example, if I dream about gold, my dream does not signify that I will become rich, even if I (for other reasons) happen to gain great wealth in the future. The case of dreaming of gold and later becoming wealthy could be construed as a case of prevision (*proorân*) in the mode of coincidence, but not in the mode of sign. In order for a dream about gold to be a sign of future wealth there has to be some regular causal connection between this kind of dream and the alleged outcome, which my dream about gold apparently lacks.

By contrast, the traditional dream-sign, in divinatory contexts, typically signifies by means of similarity, broadly understood (see sections six, seven, and eight for a set of examples). The kind of dream-sign that Aristotle endorses does not require any resemblance between the sign and the signified event. Rather the important feature is the predictability that is established through regular underlying causal relations between the sign and the signified event. For example, the roughness of the tongue does not resemble fever just as low flying swallows do not resemble rain, yet roughness of the tongue and low flying swallows indicate certain events because they occur in a predictable way given the manifestation of the relevant signs. Thus, the signified event cannot be derived from the manifest properties of the sign itself, apart from the fairly reliable link between the sign and the signified event. Next, I highlight a closely related aspect.

(1b) *The sign and the signified event* (*if fulfilled*) *share a common cause*. Even if signs are not themselves causes they share a common cause with the event or state they signify.[18] This applies to all cases in which signs indicate their causes (smoke as a sign of fire) as well as when signs indicate something other than their causes (low flying swallows indicate rain). Thus, the sign *S* and the signified event *SE* share a common cause *C* in the past or in the present; the sign and the signified event (given that the signified event occurs) are distinct effects of the same underlying causal development. These underlying causal aspects of signs should not be conflated with Aristotle's conception of

18 I am indebted to Pavel Gregoric for making me aware of the shared causal origin of the sign and the signified event.

cause as a particular mode of prevision (*proorân*). As we shall see, cause *qua* a mode of prevision exclusively concerns dreams that later cause the dreamer to actually perform the actions that she performed in her dream.

(2) *The sign does not cause the event it signifies*. An important point in Aristotle's discussion of natural signs is that signs are not themselves causes, although they are the effects of causes and also indicate regular causal connections. The roughness of tongue, as a sign of fever, is not a cause of fever, and a star's entry into shadow is a sign of its eclipse, not a cause. As a clarifying contrast Aristotle mentions fatigue as a possible cause of fever. The sign is not a cause, strictly speaking, even in cases where the sign and the cause of the signified event co-occur and seemingly merge, as, for instance, in the case where dark clouds indicate rain.

(3) *The sign is a conspicuous feature that reveals probable yet non-manifest causal developments*. However, the mere regularity between a dream and a real-world event is not sufficient for it to qualify as a sign. A lot of events are regularly correlated with other things without signifying them, in the way that is distinctive for natural signs. For example, a dream in which I drink water does not signify that I will drink water in the future, no matter how predictable the occurrence of the future event is.[19] Signs have a conspicuous element like for instance the dark clouds that are observed before rain and the smoke that indicates the presence of fire. The sign stands out as a particular manifest feature. Thus, signs, by and large, call attention to certain probable events that are presently not evident in plain sight. Aristotle's example concerning a distorted awareness of internal bodily states can function as a sign because it stands out and provides information about a condition that otherwise would remain obscure.

(4) *The possibility of intervening causes*. Aristotle stresses the possibility that intervening causes may occur in causal developments in general. He writes:

> That many dreams are not fulfilled is in no way surprising. The same holds for many signs of bodily events or of the weather, e.g. of rain or wind. For if another movement should take place, prevailing over the one from which (when it was going to happen) the sign occurred, then the latter movement does not occur. And many well-made plans for action needing to be carried out have been undone because of other causes that prevailed. For, in general, not everything that was *going to* happen actually *does* happen; nor is what *will be* the same as what is *going to* be. But even so, one should say that there are causes of a certain kind, from

19 Cf. n24 on the view that some dreams may be characterised as both causes and signs.

> which no fulfilment ensued, and these things are natural signs of certain things that failed to occur.[20]

So, there is a gap between things that were in the process of happening and things that really happened. The connection between the sign and the signified event is not arbitrary or unlikely, but the causal sequence that the sign and the signified event are part of leaves room for cases in which the expected effect did not occur. In other words, some signs signify the beginning of disease but the indication of the initial phases of illness does not inevitably imply that the disease will develop into a full-blown condition. There is always the possibility that other causes may intervene between a cause and a sign and its typical effect/the signified event, due to the non-necessary relation between the connected events, even if intervening causes are rare. In sum, signs in sleep, as special cases of natural signs, possess some degree of predictive force, but they are not completely reliable in the sense that they guarantee the occurrence of the signified event.

(5) *The predictive force of signs vs. prevision* (*proorân*). It is important to note that signs that indicate more or less likely occurrences in the future and the notion of prevision are fundamentally distinct concepts in Aristotle's account. Even if signs in a sense anticipate likely future events, they do not constitute prevision until a fulfilling event makes them to do so, in retrospect. Thus, it is important to distinguish the predictive aspects of dream-signs from the notion of prevision, that is, dreams that come to pass in the mode of signs.[21]

Since signs reflect a typical causal regularity, it seems plausible to assume that the signified event probably will occur whenever the sign is present. Accordingly, a sign may indicate some future event regardless of whether the expected outcome occurs in a particular case.[22] Hence, a sign retains its status of sign even in those cases where the signified event does not occur, unlike cases of prevision that require a fulfilling event. In sum, some but not all cases

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20 ὅτι δ' οὐκ ἀποβαίνει πολλὰ τῶν ἐνυπνίων, οὐδὲν ἄτοπον· οὐδὲ γὰρ τῶν ἐν τοῖς σώμασι σημείων καὶ τῶν οὐρανίων, οἷον τὰ τῶν ὑδάτων καὶ τὰ τῶν πνευμάτων (ἂν γὰρ ἄλλη κυριωτέρα ταύτης συμβῇ κίνησις, ἀφ' ἧς μελλούσης ἐγένετο τὸ σημεῖον, οὐ γίνεται), καὶ πολλὰ βουλευθέντα καλῶς τῶν πραχθῆναι δεόντων διελύθη δι' ἄλλας κυριωτέρας ἀρχάς. ὅλως γὰρ οὐ πᾶν γίνεται τὸ μελλῆσαν, οὐδὲ τὸ αὐτὸ τὸ ἐσόμενον καὶ τὸ μέλλον· ἀλλ' ὅμως ἀρχάς γέ τινας λεκτέον εἶναι ἀφ' ὧν οὐκ ἐπετελέσθη, καὶ σημεῖα πέφυκε ταῦτά τινων οὐ γενομένων. (*Div.Somn.* 2, 463b22–31; Aristotle, *On Sleep and Dreams*, 111–13.)

21 It is also important to distinguish between (1) the predictive force of signs, (2) prevision in the sense endorsed by Aristotle, and (3) precognition or foreknowledge understood as veridical knowledge in the present about the future. For details, see Radovic, "Aristotle on Prevision," 383–407. Cf. Van der Eijk, *Medicine and Philosophy*, 204.

22 I am indebted to Philip van der Eijk for pointing this out to me.

of signs in sleep constitute prevision. Prohoratic dreams on the other hand, regardless of their mode, require a fulfilling event. For that reason, the act of prediction or anticipation based on signs should not be conflated with prevision in the technical sense endorsed by Aristotle in *De divinatione*.

(6) *Temporal aspects of signification*. Signs may signify the occurrence of events in various temporal modes. For instance, roughness of the tongue signifies a present co-existing state, whereas the presence of water on the ground indicates that it rained in the recent past. As we have seen, a sign that signifies a future event or state cannot be the cause of its signified event. However, signs that indicate occurrences in the present or in the past may signify their causes, such as when smoke is the result of fire. This temporal variability of signs is one reason why it is difficult to capture the causal significance of signs by a simple formula. However, since Aristotle's discussions of signs in sleep take place in the context of prophecy it seems reasonable to consider signs in their predictable forward-looking mode.

There is a temporal aspect that may be worth elaborating further in Aristotle's discussion of signs as indicators of disease. Mor Segev argues that sign-dreams are not prophetic in the ordinary sense. He writes: "We are unable to predict an illness whose beginning has not yet arrived, but we are able to detect in a dream an illness in a preliminary stage."[23] Segev's point seems to be that the sign does not really signify a future event but rather the initial stages of presently ongoing events. This seems plausible if we consider the particular examples of signs in sleep that are discussed by Aristotle. The state of sleep makes us able to notice diseases in an early stage before they become apparent in plain sight in waking, as it were. However, since the sign marks the beginning of disease, it may be described as future-oriented in the sense that it predicts the progression of a certain condition. Yet, the initial state of the disease, which also is the cause of the sign, does not necessarily have to develop into a more severe state of the disease since intervening causes may terminate the progressive course of the pathological condition. Thus, the sign may be said to signify two distinct but related aspects of disease, namely, (1) the initial phase of a disease, and (2) a developed stage of the same pathological process. Hence, a sign may reveal the initial phase of a disease in the present and at the same time predict an advanced state of the underlying pathology in the future.

To sum up, (1) the sign signifies by means of an underlying causal regularity between the sign and the signified event, not by any resemblance between them. (1b) The sign emerges from the same causal sequence that is likely to

23 Mor Segev, "The Teleological Significance of Dreaming in Aristotle," *Oxford Studies in Ancient Philosophy* 43 (2012): 122.

bring about the signified event. The manifestation of a sign reflects a deeper causal link between a cause, a sign, and the signified event, yet (2) the sign itself is not a cause. (3) The sign is a distinct observable feature that provides information about events that presently are not manifest or are difficult to notice. (4) The signified event may fail to occur since there is always a possibility of intervening causes. (5) Signs indicate a likely future even if the predicted events fail to occur, but do not count as prevision (*proorân*) until a fulfilling event makes them do so. (6) The sign may signify the likely presence of a past, present, or future state of affairs. The natural sign in its future-looking mode signifies a causal process that typically has some expected outcome in a later stage of development.[24]

6 The Traditional View of the Dream as a God-Sent Sign

The ancient popular conception of divinatory signs provides an interesting background to Aristotle's account of prevision in the mode of signs. I shall clarify how Aristotle challenges traditional views of divinatory signs and in what ways he stays close to tradition. It will be shown that he rejects the popular ancient idea that may be called "the doctrine of similarity" regarding how signs

24 Even if Aristotle is quite clear that prohoratic dreams in the mode of coincidence exclude causes and signs, there is a passage in *De divinatione* that suggests that some cases of prevision (*proorân*) may be viewed as both causes and signs. See especially *Div.Somn.* 1, 463a21–31 where Aristotle concludes: οὕτω μὲν οὖν ἐνδέχεται τῶν ἐνυπνίων ἔνια καὶ σημεῖα καὶ αἴτια εἶναι = "In these ways, then, it is possible for some of the dreams to be both signs and causes" (Aristotle, *On Sleep and Dreams*, 109). There are two opposing interpretations of this paragraph. One possibility is that the last sentence of the quote simply sums up Aristotle's previous discussion, namely, that some dreams are causes and other dreams are signs. Alternately, in this last sentence he considers dreams that may be viewed as both causes and signs. However, the sentence in the Greek is rather ambiguous – more so than Gallop's English translation suggests. Cf. David Ross who in a paraphrase seems to view "causes" and "signs" as separate dreams: "Thus some dreams may be signs, and others causes" (Aristotle, *Parva naturalia*, 280). For a similar stance see Paul Siwek's Latin translation: "Itaque omnino fieri potest, ut quaedam insomnia sint sive signa sive causae [eventuum]" (Aristotle, *Parva naturalia graece et latine*, ed. and trans. P. Siwek (Rome: Desclée, 1963), 241). For more non-committal views, see for instance John Isaac Beare: "Thus then it is quite conceivable that some dreams may be tokens and causes [of future events]" (in Aristotle, *The Complete Works*, 1:737). See also Fred Miller's translation: "In this way it is possible that some dreams are indications and causes" (Aristotle, *On the Soul and Other Psychological Works*, trans. F. D. Miller Jr. (Oxford: Oxford University Press, 2018), 123). Cf. Van der Eijk, *Aristoteles, De insomniis*, 284. See Hulskamp, *Sleep and Dreams*, 337, for an interpretation that allows for cross-over cases. For further considerations regarding the possibility of cross-over cases, cf. Gallop, *Aristotle on Sleep and Dreams*, 158–59.

are supposed to indicate occurrences in the world. Further, there is no special connection between prohoratic signs and the practice of dream-interpretation in Aristotle's account. However, my objective is not to give a comprehenisve account of mainstream views of prophecy through sleep or of medical views on signification. Rather, I will consider a set of common anicent examples of dreams as signs in order to illuminate correspondences and divergences in relation to Aristotle's conception of natural signs.

An influential ancient conception of dreams as signs roughly views the sign as an obscure hint that something is the case or will occur in the future. This type of dream often appears as a symbolic or allegorical representation of the signified event and frequently crops up in early sources on prophetic dreams. For example, consider *Genesis* 41, where Joseph interprets Pharaoh's dream involving seven fat cows eating seven skinny cows. Joseph interprets the dream as a premonition about seven good years and seven bad years. Giovanni Manetti observes that:

> Divination forms the first homogeneous area of ancient Greek culture in which it is possible to talk about the use of signs. The term *sēmeîon*, which we encounter for the first time in this field, is a generic term which indicates a divinatory sign of any kind, including an oracular response, which is usually a verbal text.[25]

Manetti continues:

> The verb *sēmaínō* thus does not have the simple meaning of "to mean," in the sense of the establishment of a relationship between a plane of expression and a plane of content within the sign. Instead, it seems rather to refer to the very process of communication which the god activates with respect to humanity. In the passage from *Timaeus*, the verb seems to refer to the situation through which the god "indicates by means of (enigmatic) signs" something, as yet unknown, to a human individual. There is a long tradition going back at least to Heraclitus, in a well-known fragment 93 of the Diels–Kranz edition, which confirms the use of the verb *sēmaínō* in this sense in divinatory contexts.[26]

25 Manetti, *Theories of the Sign*, 14.
26 Manetti, *Theories of the Sign*, 16–17.

However, even if Manetti's claim regarding the origin of the word is debatable, the use reflects an ancient popular view of divine signification.[27] The popular ancient belief that dreams on occasion convey obscure god-sent messages may be summarised as follows.

(1) Gods communicate with mortals by sending them messages through dreams, presumably about things happening in distant lands or about events that will occur in the future.
(2) The real-world events that are signified by such dreams are often represented in some obscure way (even if sometimes straightforwardly clear through a straightforward vision, cf. the *hórāma* below).
(3) Interpretation is required in order to elucidate what real-world event the dream signifies.
(4) The god-sent message or sign is in principle decipherable through some sort of code, or more or less rigorous rules of interpretation. The juxtaposition of similarities between sign and signified event, in the broadest possible sense, is a common method of dream-interpretation.

Note in particular that the traditional view of obscure divinatory signs is closely associated with efforts to interpret the significance of dreams. As we shall see, there is no such close link between the dream conceived as a sign and the practice of dream-interpretation in Aristotle's account. His take on the traditional view is that all dreams with obscure content may be subject to dream-interpretation, regardless of the mode in which the dream becomes fulfilled by a future event.

6.1 *Natural and Technical Divination vs. Predictability Based on Causal Regularity*

At this point it might be illuminating to take a look at the ancient division between natural and technical (or artificial) divination.[28] The term "natural" is here used in a quite counterintuitive way, as the form of divination that comes to the subject naturally, or unintentionally, as it were, as opposed to divination that requires a skill. For example, prophecy that occurs in states of inspiration or frenzy is considered to be natural, whereas the reading of entrails or the interpretation of dreams require certain skills.[29]

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27 For example, the word σῆμα (*sêma*) goes back at least to Homer and includes all kinds of signs (significant marks, traces, signals).

28 Cf. Plato's distinction between irrational and rational kinds of divination in *Timaeus* 71e–72a.

29 Aristotle's distinction between the melancholic's ability to patch up corrupted dreams, in a non-voluntary natural manner, and dream-interpretation as a skill (*Div.Somn.* 2, 464a27–b16) probably alludes to the well-known division between natural (irrational)

However, it is clear that Aristotle rejects certain forms of technical divination. Consider Cicero's characterisation of the distinction in question:

> But those methods of divination which are dependent on conjecture, or on deductions from events previously observed and recorded, are, as I have said before, not natural, but artificial, and include the inspection of entrails, augury, and the interpretation of dreams. These are disapproved of by the Peripatetics and defended by the Stoics. Some are based upon records and usage, as is evident from the Etruscan books on divination by means of inspection of entrails and by means of thunder and lightning, and as is also evident from the books of your augural college; while others are dependent on conjecture made suddenly and on the spur of the moment. An instance of the latter kind is that of Calchas in Homer, prophesying the number of years of the Trojan War from the number of sparrows.[30]

Cicero's claim that artificial divination was disapproved of by the Peripatetics fits well with Aristotle's views on prophecy in general and his conception of the sign as an indicator of causal regularity. Cicero also notes the distinction between predictability that is based on obscure signification in dreams and natural signs (not to be conflated with the notion of "natural divination" above) that rely on causal regularities:

> A married woman who was desirous of a child and was in doubt whether she was pregnant or not, dreamed that her womb had been sealed. She referred the dream to an interpreter. He told her that since her womb was sealed conception was impossible. But another interpreter said, "You are pregnant, for it is not customary to seal that which is empty." Then what is the dream-interpreter's art other than a means of using one's

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and technical (rational) divination. However, in Aristotle's version the distinction does not reflect forms of prophecy, strictly speaking, but rather two ways in which dream-content may be disambiguated in documented cases of prevision. See also the discussion on dream-interpretation below.

30 "Quae vero aut coniectura explicantur aut eventis animadversa ac notata sunt, ea genera divinandi, ut supra dixi, non naturalia, sed artificiosa dicuntur; in quo haruspices, augures coniectoresque numerantur. Haec improbantur a Peripateticis, a Stoicis defenduntur. Quorum alia sunt posita in monumentis et disciplina, quod Etruscorum declarant et haruspicini et fulgurales et tonitruales libri, vestri etiam augurales; alia autem subito ex tempore coniectura explicantur, ut apud Homerum Calchas, qui ex passerum numero belli Troiani annos auguratus est […]." (Cicero, *On Old Age, On Friendship, On Divination*, trans. W. A. Falconer (Cambridge: Harvard University Press, 1923), 302–3.)

> wits to deceive? And those incidents which I have given and the numberless ones collected by the Stoics prove nothing whatever except the shrewdness of men who employ slight analogies in order to draw now one inference and now another. There are certain indications from the condition of the pulse and breath and from many other symptoms in sickness by means of which physicians foretell the course of a disease. When pilots see cuttle-fish leaping or dolphins betaking themselves to a haven they believe that a storm is at hand. In such cases signs are given which are traceable to natural causes and explicable by reason, but that is far from true of the dreams spoken of a little while ago.[31]

The problem with the first type of signs is the murky relation between the sign and what it supposedly signifies. It seems as if the sign signifies whatever happens to occur, making predictions akin to wild conjectures rather than sober estimations based on records of real correspondences between events.[32] As Cicero puts it, the latter type of sign is traceable to natural causes and explicable by reason whereas signs that dress up as riddles escape rational comprehension.

6.2 *Artemidorus' Semi-naturalistic View*

Later, in the second century CE, Artemidorus employs a version of the traditional divinatory model but downplays the distinction between signs that have divine causes and ones that have natural causes. Yet Artemidorus assumes that some dreams display symbolic, metaphorical, or allegorical information and that there are interpretative rules that unveil the real-world events that are indicated by such dreams. The origin of dreams is not an important question for Artemidorus – even if dreams are assumed to have natural causes, they require dream-interpretation in order to be properly understood. Artemidorus writes:

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31 "Parere quaedam matrona cupiens, dubitans essetne praegnans, visa est in quiete obsignatam habere naturam. Rettulit. Negavit eam, quoniam obsignata fuisset, concipere potuisse. At alter praegnantem esse dixit; nam inane obsignari nihil solere. Quae est ars coniectoris eludentis ingenio? an ea, quae dixi, et innumerabilia, quae collecta habent Stoici, quicquam significant nisi acumen hominum ex similitudine aliqua coniecturam modo huc, modo illuc ducentium? Medici signa quaedam habent ex venis et spiritu aegroti multisque ex aliis futura praesentiunt; gubernatores cum exsultantis lolligines viderunt aut delphinos se in portum conicientes, tempestatem significari putant. Haec ratione explicari et ad naturam revocari facile possunt, ea vero, quae paulo ante dixi, nullo modo." (Cicero, *De div.* 2, 70, para. 145, 532–33.)

32 Cf. Aristotle's remark on the diviner's use of generality as a way of resisting outright falsification, that is, a prediction is more likely to be right if it says *that* a thing will happen, rather than *when* it will happen (*Rh.* 3.5, 1407b1–6).

> And it is necessary to keep in mind that the things that appear to those who are worried about something and who have requested a dream from the gods will not resemble their worries [and signify something about the matters at hand] since dreams that are identical to the things one has on one's mind are insignificant and have the quality of an *enhypnion*, as the previous section has shown. And they are called "anxiety" and "request" dreams by some. But those that come <to people> who are not worried about anything and reveal something to come, good or bad, are called "god-sent." But I would not, as Aristotle does, raise the difficulty of whether the cause of dreaming is external to us, arising from a god, or if there is some internal cause, which disposes the soul within us and shapes it in accordance with natural processes. Rather, [they are] "god-sent" [insofar] as we customarily call all unexpected things "god-sent."[33]

It seems as if Artemidorus considers dreams as obscure signs regardless of whether the dreams are caused by a god or a natural process. He even suggests a deflationary interpretation of "god-sent" in terms of 'unexpected.'

Artemidorus' rather complicated and seemingly speculative and arbitrary rules for predicting outcomes appear to be a mishmash of rational interpretation, psychological observation, social considerations, and more or less valid assumptions about how the cosmos works.[34] It seems as if the world-view that Artemidorus endorses does not sharply distinguish between natural events narrowly construed, cultural factors, and more or less unfounded presuppositions about how the world operates. Yet Artemidorus assumes that the link between the dream and its indicated outcome is connected by established regularities which sometimes are difficult to discern.

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33 Ἐννοῆσαι δὲ χρὴ ὅτι τὰ μὲν τοῖς φροντίζουσι περί τινος καὶ αἰτησαμένοις ὄνειρον παρὰ θεῶν ἐπιφαινόμενα οὐχ ὅμοια ταῖς φροντίσι [σημαίνοντα δέ τι περὶ τῶν προκειμένων] γίνεται, ἐπεὶ τά γε ὅμοια ταῖς ἐννοίαις ἀσήμαντά τέ ἐστι καὶ ἐνυπνιώδη, ὡς ὁ πρότερος ἔδειξε λόγος· μεριμνηματικὰ δὲ καὶ αἰτηματικὰ πρός τινων λέγεται· τὰ δὲ ‹ τοῖς › περὶ μηδενὸς φροντίζουσιν ἐφιστάμενα καὶ προαγορεύοντά τι τῶν ἐσομένων ἀγαθῶν ἢ κακῶν θεόπεμπτα καλεῖται. οὐχ ὁμοίως δὲ νῦν ἐγὼ ὡς Ἀριστοτέλης διαπορῶ πότερον ἔξωθεν ἡμῖν ἐστι τοῦ ὀνειρώσσειν ἡ αἰτία ὑπὸ θεοῦ γινομένη ἢ ἔνδον αἴτιόν τι, ὃ ἡμῖν διατίθησι τὴν ψυχὴν καὶ ποιεῖ φύσει συμβεβηκὸς αὐτῇ, ἀλλὰ θεόπεμπτα [ὡς] ἤδη καὶ ἐν τῇ συνηθείᾳ πάντα τὰ ἀπροσδόκητα καλοῦμεν. (Artemidorus, *Oneirocritica*, 1.6, 59–61.)

34 Patricia Cox Miller writes: "In late antiquity, the interpreters of dreams, whether classifiers or allegorists, directed their attention less to theories of the source of dreams than to schemas for translating dream-images into useful bodies of knowledge. In their view, worlds were constructed in dreams – worlds of social, ethical, and exegetical import. Given their perspective that the oneiric image was bound up with the structure of reality, interpreters recognized the public intelligibility of their material." (Patricia Cox Miller, *Dreams in Late Antiquity: Studies in the Imagination of a Culture* (Princeton, N. J.: Princeton University Press, 1994), 75.)

Aristotle's rules of inference are considerably simpler than those presumed by Artemidorus. In contrast to those of Artemidorus, Aristotle's conception of natural signs is based on empirical observation of robust causal regularities. Thus, many of the cases that Artemidorus believes are connected by law-like connections would not meet the conditions for natural signs in the sense advocated by Aristotle. Instead, many of the outcomes that Artemidorus reports on the basis of dream interpretation, would, if true, rather be cases of prevision in the mode of coincidence according to Aristotle's account.[35]

7 Signs in Sleep in the Medical Tradition

As we have seen, Aristotle takes the medical tradition into consideration when he discusses the possibility of signs in sleep.[36] The idea that dreams may be of prognostic value is well established in the ancient medical tradition. Eric Dodds provides an interesting observation in this context:

> One fourth-century writer devoted a whole section of this treatise *On Regimen* (*Περὶ διαίτης*) to a discussion of precognitive dreams, though he

35 Consider a common classification of premonitory dream-types that was popular in antiquity and derives from Artemidorus and Macrobius. Eric Robertson Dodds writes: "In a classification which is transmitted by Artemidorus, Macrobius, and other late writers, but whose origin may lie much further back, three such types are distinguished. One is the symbolic dream, which 'dresses up in metaphors, like a sort of riddles, a meaning which cannot be understood without interpretation.' A second is the *horama* or 'vision,' which is a straightforward preënactment of a future event, like those dreams described in the book of the ingenious J. W. Dunne. The third is called a *chrematismos* or 'oracle,' and is to be recognised when in sleep the dreamer's parent, or some other respected or impressive personage, perhaps a priest or even a god, reveals without symbolism what will or will not happen, or should or should not be done." (Eric Robertson Dodds, *The Greeks and the Irrational* (Berkeley: University of California Press, 1951), 107); see also Antonius Hendrik Maria Kessels, "Ancient Systems of Dream-Classification," *Mnemosyne* 22:4 (1969): 389–424. A notable feature of the traditional ancient classification of divinatory dreams is that it is based on how information about the future is transmitted. Foreseeing dreams are divided into (1) symbolic dreams, (2) "vision-dreams" that faithfully replicate a relevant scene as if perceived, and (3) dreams that involve some prominent figure who communicates prophetic information in plain language. By contrast, Aristotle's classification of prevision through dreams (*proorân*) is based on the particular way the dream becomes fulfilled by a future event, i.e., cause, sign, or coincidence.

36 It is true that many physicians considered dreams for their alleged prognostic value, e.g., the author of *Regimen IV*, Herophilus, Rufus of Ephesus, and Galen. Nevertheless, some physicians did not accept the medical value of dreams, e.g., the Methodist school and individuals like Asclepiades and Soranus. See Steven Oberhelman, "Galen, On Diagnosis from Dreams," *Journal of the History of Medicine and Allied Sciences* 38:1 (1983): 36–47.

> does not attempt to cover the entire field; he leaves 'godsent' dreams to the *oneirocrits*, and he also recognizes that most dreams are merely wish-fulfilments. The dreams which interest him as a doctor are those which express in symbolic form morbid physiological states, and thus have predictive value for the physician. These he attributes to a kind of medical clairvoyance exercised by the soul during sleep, when it is able to survey its bodily dwelling without distraction. And on this basis he proceeds to justify many of the traditional interpretations with the help of more or less fanciful analogies between the external world and the human body, macrocosm and microcosm.[37]

It is important to note that various authors in the medical tradition not only distinguished (1) between prophetic dreams, which were assumed to be understandable by the mainstream dream-interpreters, and god-sent medically significant dreams, which were of interest to the physician, they also distinguished (2) between divinatory dreams, which were assumed to require dream-interpretation, and natural dreams, which were thought to be natural expressions of bodily states. In the last group of purely natural dreams, we may further distinguish (3) between dreams that signify through concrete or abstract similarity and signs that signify by means of causal co-variation. As we have seen, there is no reference to similarity in Aristotle's discussions of natural signs. So even if a sign happens to resemble the signified event for some accidental reason, it does not signify in virtue of such resemblance according to Aristotle.

By contrast, some alleged signs of the dreamer's body that are mentioned in the Hippocratic *Regimen IV*, which are believed to indicate health or disease, display elements of analogy. According to the author, dreams may signify disease in some more or less far-fetched way. The text states that: "Crossing rivers, enemy men-at-arms and strange monsters indicate disease or raving."[38] So it seems that Aristotle's main point regarding the distorted awareness of internal bodily states neither reflects the traditional view of obscure signs, nor any element of symbolism, analogy, or other type of resemblance, but rather highlights the conditions in which signs stand out and become recognisable in an early phase of pathological development.[39]

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37 Eric Robertson Dodds, "Supernormal Phenomena in Classical Antiquity," *Proceedings of the Society for Psychical Research* 55 (1971): 210.

38 Hippocrates, *Regimen IV*, 30. For a thorough discussion of dreams in the ancient medical tradition, see Hulskamp, *Sleep and Dreams*.

39 Even Artemidorus acknowledges god-sent dreams with medical significance (cf. Steven Oberhelman, "The Interpretation of Prescriptive Dreams in Ancient Greek Medicine,"

Steven Oberhelman explains how the sign-dream is assumed to signify a real-world event through similarity:

> The principle of analogy is apparent also in the medical works, especially in the *Regimen IV*. The writer of this treatise perceives in the deficiencies, excess, and qualities of the bodily humors the origins of all diseases. He also believes that the symptoms of a disease can be depicted in the visual contents of a dream. The correct interpretation of such prognostic dreams depends upon a series of analogies between the dream's contents, which represent the external world, and the internal workings of the dreamer's body. For example, the earth is analogous to a dreamer's flesh, a river to his blood, a tree to his penis, and so forth. Thus, the condition of a particular external object in a dream will be the analogous state of the bodily organ that corresponds to that object. If the dream indicates a disturbance in the body, the writer of the Hippocratic treatise prescribes specific treatments and regimens in order to restore the proper humoral balance.[40]

In this context we face some superficial similarity with the examples that Aristotle uses in *De divinatione*. A characteristic feature of natural dreams, as described in medical contexts, is the presupposition that dreams indicate disease by means of some kind of resemblance represented through the content of the dream. Even if Galen accepts the possibility of god-sent dreams, he mostly discusses natural prognostic dreams.[41] Yet Galen highlights the problem of how to distinguish between dreams that may be elucidated by traditional dream-interpreters and dreams that reflect states of the body.[42]

Journal of the History of Medicine and Allied Sciences 36:4 (1981): 417–18). Artemidorus calls the medical dream *theópemptos*. A god-sent dream is a dream-vision sent by the gods, by love, or as an effect of offering or prayer. The god-sent dream is either the cure itself, or it is the vehicle for the cure by way of its visual or verbal characteristics. Artemidorus distinguishes between clear and obscure symbolic meaning, which seems to be a relative measure of how far-fetched the analogy between the dream and the signified event is supposed to be. For example, a dream of a physical copy of Aristophanes' book *The Clouds* was reported to be followed by rain the next day (Oberhelman, "The Interpretation," 421), and this is considered to be a dream with a clear symbolic meaning.

40 Oberhelman, "The Interpretation," 422.

41 See Oberhelman, "Galen, On Diagnosis," 36–47, for an English translation of Galen's short text *Diagnosis from Dreams*.

42 Oberhelman, "Galen, On Diagnosis," 44–45. Galen raises the problem of how to decide whether a dream signifies according to the rules of mainstream dream-interpretation or rather indicates a bodily malady. Galen reports that a man dreamed that one of his legs

For example, it was presumed that if someone sees a conflagration in a dream he is affected by yellow bile.[43] Oberhelman elaborates in a footnote: "Probably the conflagration occurs because of the warmth of the disease that yellow bile causes rather than because of the analogy between the colour of the fire and that of the bile."[44] The mentioned case shows some resemblance to Aristotle's example in which the subject has the impression of being burned by fire, yet Aristotle's example concerning temperature involves different degrees of intensity of the same sensation. But the similarity between slight warmth and the belief that one walks on fire does not involve any similarity between the sign and the signified state (the disease). The misapprehension of slight warmth as burning fire is merely a more noticeable variant of the original stimulus of warmth. However, the impression of fire stands out more than the sensation of slight warmth. So even if the experience of fire resembles the sensation of slight warmth, Aristotle does not suggest that neither slight warmth nor the impression of fire resembles the signified disease.

In sum, there seems to be a wide range of dreams that are assumed to have medical significance. Even if Aristotle might be said to follow the medical tradition in his discussion of signs, his examples, unlike the examples by medical authors, do not involve signification through concrete or abstract similarity.

Yet, as we shall see in the following section, Aristotle indeed follows tradition when he says that dream-interpreters retrieve information from dreams with ambiguous content by means of observing resemblances, but he means this in a highly restricted sense that does not presuppose abstract forms of similarity, such as dreams appearing in the form of allegorical riddles. In addition, dream-interpretation concerns any dream with obscure sensory appearances, not just sign-dreams.

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had turned to stone, and that the traditional dream-interpreters judged that the dream concerned the dreamers' slaves, since this is what traditional dream-interpretation suggests, but the man's leg was unexpectedly paralyzed. (See Oberhelman, "Galen, On Diagnosis," 45.) For the assumption that that dreams about ankles, feet, and toes concern slaves, see Artemidorus, *Oneirocritica*, 1.48/53.18–20, 54.21–22. See also George W. Pigman III, *Conceptions of Dreaming from Homer to 1800* (London: Anthem Press, 2019), 41.

43 Oberhelman, "Galen, On Diagnosis," 43.

44 Oberhelman, "Galen, On Diagnosis," 43n49.

8 Aristotle on Dream-Interpretation

The idea that dreams convey messages from gods by way of enigmatic signs was ubiquitous in antiquity. Artemidorus' view serves as an illustration of how dream-interpretation in the popular sense is supposed to work.

Aristotle introduces an alternative model of dream-interpretation that shares some superficial resemblance with the traditional practice of dream-interpretation. However, Aristotle does not share the view that dream-interpretation aims to unveil obscure dreams that supposedly dress up in symbols or metaphors. Yet, he does not deny that dreams may be obscure in the sense of being indeterminate or ambiguous appearances that need disambiguation. He writes:

> But the most skilled interpreter of dreams is one who can observe resemblances. For anyone can interpret direct dream-visions. By resemblances, I mean that the appearances (*phantasmata*) are akin to images in water, as indeed we have said before. In that medium, if there is much disturbance, the reflection becomes in no way similar, nor do the images resemble real objects at all. Indeed, it would take a clever interpreter of reflections to be able to detect readily and to comprehend the scattered and distorted fragments of images as being those of a man, or a horse, or whatever. Likewise in the case before us, of grasping what this dream signifies. For direct dream-vision is erased by the movement.[45]

Dream-interpretation, according to Aristotle, is the skill of recognising real-world objects or events in distorted dreams. Aristotle grants that anyone can interpret undistorted dreams but maintains that a skilled interpreter of dreams is required in order to disambiguate obscure dream-content. On a superficial level, Aristotle seems to follow the traditional model of dream-interpretation by embracing two related popular opinions.

(1) *Dream-interpretation elucidates obscure or ambiguous dreams that reflect real-world objects or events.* Just like Artemidorus, Aristotle provides a model for

45 τεχνικώτατος δ' ἐστὶ κριτὴς ἐνυπνίων ὅστις δύναται τὰς ὁμοιότητας θεωρεῖν· τὰς γὰρ εὐθυονειρίας κρίνειν παντός ἐστιν. λέγω δὲ τὰς ὁμοιότητας, ὅτι παραπλήσια συμβαίνει τὰ φαντάσματα τοῖς ἐν τοῖς ὕδασιν εἰδώλοις, καθάπερ καὶ πρότερον εἴπομεν. ἐκεῖ δέ, ἂν πολλὴ γίγνηται ἡ κίνησις, οὐδὲν ὁμοία γίνεται ἡ ἔμφασις καὶ τὰ εἴδωλα τοῖς ἀληθινοῖς. δεινὸς δὴ τὰς ἐμφάσεις κρίνειν εἴη ἂν ὁ δυνάμενος ταχὺ διαισθάνεσθαι καὶ συνορᾶν τὰ διαπεφορημένα καὶ διεστραμμένα τῶν εἰδώλων, ὅτι ἐστὶν ἀνθρώπου ἢ ἵππου ἢ ὁτουδήποτε, κἀκεῖ δὴ ὁμοίως τί δύναται τὸ ἐνύπνιον τοῦτο. ἡ γὰρ κίνησις ἐκκόπτει τὴν εὐθυονειρίαν. (*Div.Somn.* 2, 464b5–15; Aristotle, *On Sleep and Dreams*, 115.)

how to disambiguate dream-content in order to unveil what real-world objects or events a dream correspond to. The distortions that make dreams obscure have natural causes, according to Aristotle, and dreams may be corrupt in many different ways. Dreams may be fragmentary, deformed, and perhaps scrambled with other dreams (*Insomn.* 3, 461a8–25). In addition, related experiences in sleep may appear in an exaggerated form due to a distorted apprehension (*Div. Somn.* 1, 463a7–21).

(2) *The skilled interpreter of dreams disambiguates dreams by observing resemblances.* Moreover, Aristotle follows the traditional view that the practice of dream-interpretation is performed by observing similarities between dream-content and matching real-world objects or scenes. Yet Aristotle's use of similarity exclusively concerns concrete sensory similarity which is considerably more restricted than Artemidorus' sophisticated theory that exploits any far-fetched similarity, no matter how outlandish, in the form of puns, allegories, and other abstract resemblances. Consider Harris-McCoy's remark on Artemidorus' rather creative use of similarity as an interpretative tool:

> The basic principle involved in the interpretation of allegorical ὄνειροι, which comprise the bulk of the *Oneirocritica*, is a doctrine of similarities. This principle is perhaps most clearly stated in Book 2 at the close of the section on dreams of trees. Here, Artemidorus provides instructions for interpreting unrecorded trees: "And, for the trees that remain, it is necessary to form one's interpretations based on the aforementioned examples, always identifying properties that are similar to their outcomes. For in fact the interpretation of dreams is nothing other than the juxtaposition of similarities" (… καὶ γὰρ οὐδὲν ἄλλο ἐστὶν ὀνειροκρισία ἢ ὁμοίου παράθεσις, 2.25). In the *Oneirocritica*, Artemidorus links dreams to outcomes on the basis of their similar appearance, action, or location, cultural association, etymologies of or puns on their names, appearance in proverbs and myths, or numerological value, to name a few possibilities.[46]

In this context, it may be illuminating to clarify a distinction in Aristotle's model of dream-interpretation between (1) what real-world event an obscure dream represents, and (2) what real-world event is signified by the presence of a sign, in his technical use of "sign." A familiar example may illuminate the relevant distinction. A skilled dream-interpreter may inform us that what we in sleep experience as thunder is in reality a faint ringing in the ears. However, the ringing in the ears, by way of an experience of thunder, may signify the beginning

46 Harris-McCoy, *Oneirocritica*, 15.

of disease. But it is not the dream interpreter's responsibility to reveal this latter connection. Instead, it is the physician's task to identify alleged signs of disease. Thus, dream interpretation according to Aristotle's model reveals what uncorrupted sense impression the distorted dream derives from (for instance, the sound of thunder corresponds to ringing in the ears), but the condition that is signified by the sign (disease) provides supplementary information in relation to the mere awareness of a particular sound.[47]

In sum, dream-interpretation, according to Aristotle, reveals what real-world objects or situations the dreams derive from, but the interpretative act as such does not necessarily concern the elucidation of signs. Rather, dream-interpretation, in the sense explained by Aristotle, applies to all three modes of prohoratic dreams.

9 Conclusion

According to Aristotle, a sign involves a typical causal regularity. The natural sign is a noticeable feature that shares a cause with the signified event that is likely to occur, although not guaranteed to occur, due to the possible confluence of other causal chains. The sign signifies through a typical causal regularity as in the case where roughness of the tongue is likely to co-occur with fever.

In addition, there is no special connection between signs in sleep and dream-interpretation in *De divinatione*. Yet Aristotle follows tradition on two points. (1) Signs are characterised as noticeable items that hint about likely but not yet confirmed present or future events. (2) Dream-interpretation is explained as the skill of observing resemblances between dreams and real-world objects or events. However, Aristotle does not follow the traditional view of the sign as signifying through some kind of resemblance. Even if Aristotle's model of dream-interpretation is based on resemblance, it concerns concrete sensory similarity, not abstract resemblance in the form of more or less far-fetched similarities. Thus, Aristotle has tweaked the traditional notions of divinatory sign and dream-interpretation, yet some elements that reflect traditional views of prophecy in sleep remain the same in a general sense (for instance, that signs may convey information about the future and the idea that dream-interpretation is based on observing similarities).

47 Consider Gallop's translation of *Div.Somn.* 2, 464b15: "Likewise in the case before us, of grasping what this dream signifies" (*On Sleep and Dreams*, 115). The use of "signify" in this passage may misleadingly suggest that the interpretation of dreams aims to elucidate what real-world event a dream-sign signifies *qua* sign.

Even if natural signs may have predictive force they should be regarded as distinct from instances of prevision (*proorân*), which require a future fulfilling event that can never be guaranteed at the time the dream occurs. So, a sign may signify the occurrence of a future event without necessarily developing into a case of prevision. Conversely, a sign may signify a more or less likely future event and later develop into a case of prevision, if the signified event actually occurs. Finally, a sign is in no case the actual cause of the signified item.

Quite surprisingly, even if the conditions for natural signs are more or less clearly spelled out in *De divinatione*, there are no explicit examples of dreams as signs in the treatise. Aristotle's initial examples, that is, a star's entry into shadow and the roughness of the tongue, have no particular relation to sleep and dreams. However, some experiences in sleep are said to be signs of internal bodily conditions, but these instances do not qualify as dreams according to Aristotle's narrow definition of dreaming. Aristotle's discussion concerning a distorted awareness of internal bodily states in sleep mainly seems to concern the favourable conditions of sleep for observing early signs of disease. The main point seems to be that signs of bodily states are more noticeable in the state of sleep than in waking.

The absence of examples of proper sign-dreams in *De divinatione* is probably a result of the wider scope that is covered by Aristotle and that includes any alleged prophetic experience during sleep. If this is right, this explains the reference to perceptions of bodily states, rather than proper dreams.

The medical tradition distinguishes between god-sent dreams that have medical significance and natural dreams with medical significance. Nevertheless, the natural dreams, which are discussed by medical authors, reflect imbalances in the body by means of some kind resemblance generally understood. Aristotle's discussion of medically relevant signs in sleep do not reveal any such underlying assumptions concerning similarity and signification. Still, there is an element of similarity in Aristotle's examples of signs in sleep. For example, the ringing in the ears resembles thunder and the sensation of slight warmth resembles the experience of fire. But Aristotle does not seem to assume that the character of the sign (fire, thunder, etc.) resembles the indicated disease in some particular way.

Finally, Aristotle's model of dream-interpretation exhibits some superficial resemblance to the traditional ancient view of dream-interpretation. Aristotle argues that the interpreter of dreams disambiguates sensory dream-content, not abstract resemblances that go beyond concrete sensory similarity. Dream-interpretation consists in observing resemblances between features of the dreams and real-world objects. This implies that dream-interpretation applies to all modes of prevision, not only dreams that occur in the appearance of signs.

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CHAPTER 3

Avicenna's Dreaming in Context

David Bennett

1 Introduction

Aristotle rejected the commonly held belief that we receive new information about the external world from unknown celestial sources in our dreaming states. Avicenna notoriously claimed in his autobiography: "many problems became clear to me while asleep."[1] Avicenna may well have made such statements from personal conviction, but his epistemology included provisions for various forms of knowledge-acquisition by means of dreaming. In this chapter, we will examine several Arabic sources in order to establish the content and context of Avicenna's discussions of dreaming; we wish to establish that dreams are organically accounted for in his epistemology, that he naturalises prophecy thereby, and that his approach is the culmination of an overall trend in earlier Arabic philosophy. After some preliminary remarks on Islamic concerns related to dreams and prophecy, we will first consider (section two) the account in Avicenna's *Pointers and Admonitions*; we will then investigate (section three) earlier approaches in Arabic philosophical literature to the mechanisms of obtaining knowledge of the "unseen," as Avicenna put it; returning to Avicenna, we will examine (section four) how these ideas are systematically presented in the *Psychology* of his great philosophical compendium, *The Healing*. Avicenna's innovations in the philosophy of mind – rooted in his complex theory of the faculties – are universally credited with changing the course of Western (including Arabic) philosophy. In the following, we will demonstrate that his explanation of veridical dreaming was integral to that accomplishment.

1 Dimitri Gutas, *Avicenna and the Aristotelian Tradition*, 2nd ed. (Leiden: Brill, 2014), 17, 208. Specifically, Avicenna wrote: "Whenever sleep overtook me, I would see those problems by their essences (*bi-aʿyānihā* (the same phrase occurs in al-Kindī: see below, n49)) in my dream (*fī manāmī*), such that many problems became clear to me while asleep." (Edition in William E. Gohlman, *The Life of Ibn Sina* (Albany, NY: State University of New York Press, 1974), 30.) Avicenna meant it quite literally: *ḥads*, the operation by which the middle term in syllogisms is obtained (see Gutas, *Avicenna*, 179–201) may be the pre-eminent intellectual technique, but at least (or even) in Gutas' reckoning, what is obtained thereby may also be obtained in dreams.

Let us begin by acknowledging that every Muslim intellectual tradition has unequivocally affirmed "true dreams," and that this posture is not relegated to superstitious elements of society, that is, the occultists and fantasists on the periphery of a pre-modern civilisation, but is wholly ensconced in the central conceits of religious life: revelation and prophecy.[2] According to tradition, the Prophet's first experience of revelation took place in a "true dream"; just as in the case with Avicenna to which we referred above, it occurred "while I [the Prophet] was asleep."[3] "True dreams" are, after the death of the Prophet, our only access to revelation besides the Qurʾān itself and the prophetic tradition (i.e., his recorded words and deeds, the *Sunna*).[4] The term for "true dream," *ruʾyā*, is just as naturally rendered "vision"; it is derived from the verb *raʾā*, "to see," which is used as such in accounts of dreams. There are other sorts of dreams; indeed, it is his gift for distinguishing true dreams from "mixed-up dreams" (*aḍghāth aḥlām*) that makes the prophet Yūsuf (Joseph) the paragon of dream interpreters in the Islamic tradition. The veridical nature of *ruʾyā* is further distinguished from *ḥulm* (the other sort of dream: "false dreams") in a well-attested prophetic tradition insofar as the former are "from God," whereas the latter are from Satan.[5] Finally, misrepresenting the content of one's true dream is severely censured in the prophetic tradition.[6]

In Avicenna's psychological works, the topic of dreaming arises in the context of the discussion of the internal faculties of the animal soul (see section four, below). In *The Healing: Psychology* 4.2, for example, the principle by virtue of which "premonitions (*al-indhārāt*) occur in the state of sleep" is precisely that "the conceptual realities (*maʿānī*) of all existing things in the world, be they in the past, at present, or willed to be, exist in the knowledge of God and the intellect-angels in one way, and exist in the souls of the celestial-angels in

2 On the importance of dreams in Islamic cultural production, see John C. Lamoreaux, *The Early Muslim Tradition of Dream Interpretation* (Albany, NY: State University of New York Press, 2002). As Lamoreaux demonstrates, dream interpretation was not a fringe occupation, but exercised the minds of the cultural elite: see especially 41–42.

3 See Lamoreaux, *Early*, 204n13 and 117, for the scriptural support for these well-known prophetic traditions.

4 That Muslims of all sectarian stripes should consider the evidence of *ruʾyā* as an integral part of the prophetic legacy, as their share in prophecy after the death of the Prophet, is attested throughout religious literature: see Leah Kinsberg, "Qurʾān and Ḥadīth: A Struggle for Supremacy as Reflected in Dream Narratives," in *Dreaming Across Boundaries*, ed. L. Marlow (Boston: Ilex Foundation, 2008): 26–28.

5 Lamoreaux, *Early*, 117. He translates *ḥulm* as "nightmares."

6 Kinsberg, "Qurʾān," 28–29.

another way."[7] Access to these *maʿānī* is freely given to humans, who are after all "more closely related to those celestial substances (*al-jawāhir al-malakiyya*) than to sensible bodies":[8]

> There is no veiling or miserliness on the part of the angelic substances; veiling only occurs for those who are susceptible to it, either because they are submerged in bodies, or because they are contaminated by things that draw them downward. If they get close to becoming free from these actions, they obtain a disclosure of what is there.[9]

The way to miss out on this divine and/or celestial knowledge proffered in dreams, then, is to be contaminated by (*tadannus*) or submerged (*inghimār*)[10] in the physical world; correct reception of this knowledge is a trait of prophets, to be sure, but it is also among the skills groomed by anyone with a "strong" imagination (see sections 2.1 and 3.1 below). As one develops this skill, Avicenna goes on to explain, one's dreams come to include more rarefied objects: what is verified for the neophyte in dreams might be that which is connected to his person or his country, whereas the more proficient dreamer will "get" (if you will) objects of intellect (*maʿqūlāt*) or that which is beneficial to people in general (*maṣāliḥ al-nās*).[11]

As a starting point, then, we can see that Avicenna's project is to provide a philosophical account of the internal faculties that (among other things) justifies the prevailing religious and cultural view of dreaming and prophecy.[12] He

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7 Avicenna, *Avicenna's De Anima: Being the Psychological Part of Kitāb al-Shifāʾ* (hereafter *Nafs/Shifāʾ*), ed. F. Rahman (London: Oxford University Press, 1959), 178.12, 14–16. All translations from the Arabic are mine unless otherwise indicated. Deborah Black has also translated this book of *Nafs/Shifāʾ*; her version is available online.

8 Avicenna, *Nafs/Shifāʾ*, 178.17–18; here I follow the translation of Alexander Treiger, *Inspired Knowledge in Islamic Thought: Al-Ghazālī's Theory of Mystical Cognition and Its Avicennian Foundation* (London: Routledge, 2012), 79, with minor modifications.

9 Avicenna, *Nafs/Shifāʾ*, 178.18–21, again following Treiger, *Inspired*, 79, with modifications.

10 Treiger, *Inspired*, 79: "preoccupied with [their] bodies," which does not do justice to this rare verb. Deborah Black got it right in her unpublished translation of *Nafs* 4.2, available online only: Avicenna, *al-Shifāʾ: al-Nafs, Book 4*, trans. Deborah Black, chapter 2, 8 (i.e., page 8 of chapter 2: the chapters in this pdf are not continuously paginated), http://individual.utoronto.ca/dlblack/WebTranslations/shifanafs41-3.pdf.

11 Avicenna, *Nafs/Shifāʾ*, 178.21–179.4.

12 On the reception of Avicenna's philosophical account(s) of prophecy in al-Ghazālī, who systematised Avicenna's various discussions as the "three properties of prophethood" – that is, the use of the imagination to be discussed in this chapter, the use of "intuition," and the performance of special, miraculous acts – see Afifi al-Akiti, "The Three Properties of Prophethood in Certain Works of Avicenna and al-Ghazālī," in *Interpreting Avicenna:*

works from a model according to which celestial entities are privy to unlimited knowledge. His epistemology is naturalised in the sense that access to this knowledge is unrestricted for all human animals insofar as they possess sound internal faculties. Finally, the state of sleep is conducive for this process precisely because the subject is less distracted by the demands of the senses.

In the background of this discussion is a long-festering academic debate concerning the nature of Avicenna's epistemology. Scholars have disputed whether Avicenna's frequent suggestion that concepts are obtained by virtue of emanation from the (universal, separate) Active Intellect is compatible with his "abstractionist" model of perception. Interpreters who have favoured one mode of knowledge acquisition in Avicenna over the other have called the apparently opposing mode "metaphorical," and attempts have been made to have it both ways.[13] The material in this chapter may be profitably applied to this debate as well.

2 *Al-Ishārāt wa-l-tanbīhāt*

The principles governing Avicenna's account of dreaming are most vividly evoked in his last major work, *al-Ishārāt wa-l-tanbīhāt* ("Pointers and Reminders").[14] This is a difficult, gnomic work; even enthusiasts will point out that Avicenna explicitly "tried to protect the work from non-philosophers by a veil of ambiguities and vagueness."[15] It is always hard to deal with philosophers

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Science and Philosophy in Medieval Islam, ed. J. McGinnis with D. C. Reisman (Leiden: Brill, 2004), 189–212. See also below, section 4.2.

13 For the debate in a nutshell, see Dag Hasse, "Avicenna's Epistemological Optimism," in *Interpreting Avicenna: Critical Essays*, ed. P. Adamson (Cambridge: Cambridge University Press, 2013), 109–19, and Tommaso Alpina, "Intellectual Knowledge, Active Intellect and Intellectual Memory in Avicenna's *Kitāb al-Nafs* and Its Aristotelian Background," *Documenti e studi sulla tradizione filosofica medievale* 25 (2014): 136–42. A recent article by Stephen Ogden also attempts reconciliation: "Avicenna's Emanated Abstraction," *Philosophers' Imprint* 20:10 (2020): 1–26.

14 Avicenna, *al-Ishārāt wa-l-tanbīhāt*, ed. S. Dunyā, 4 vols., 3rd ed. (Cairo: Dār al-Maʿārif, 1971–1992); there is an English translation of the parts of the work discussed in this chapter by Shams Inati: *Ibn Sīnā and Mysticism: Remarks and Admonitions, Part Four* (hereafter, *Mysticism*) (London: Kegan Paul, 1996). On issues with the Dunyā edition, see Joep Lameer's essential critique in Joep Lameer, "Towards a New Edition of Avicenna's *Kitāb al-Ishārāt wa-l-tanbīhāt*," *Journal of Islamic Manuscripts* 4 (2013): 199–248. The two terms in the title are variously translated in scholarship; I use Gutas' English title. On the late dating of the text and its composition, see Gutas, *Avicenna*, 155–59.

15 Inati, *Mysticism*, 2. Inati cites *al-Ishārāt* 4.162, where Avicenna urges the reader to "protect this truth from the ignorant, the vulgar, those who are not endowed with sharpness of

when they break into aphorism; hence, historians of philosophy have tethered any analysis drawn from *al-Ishārāt* to corresponding points in Avicenna's more systematic works.[16] Yet its suggestive compactness has been a boon in another way: it has generated more commentaries than any other Avicennan work.[17]

The section of the work devoted to physics and metaphysics is divided into ten units.[18] The modern editor, Sulaymān Dunyā, entitled the fourth and final volume (consisting of the last three units) "taṣawwuf," that is, a discourse on the Sufi practice, which is defensible. The topics are "On joy and happiness" (unit eight), "On the states of the Knowers" (nine), and "On the secrets of the signs" (ten). These last two topics, especially, are unapologetically Sufi-sounding: there is no way to render *fī maqāmāt al-ʿārifīn* (the heading of the ninth unit) without acknowledging the huge significance of both terms in Sufi popular and technical lore, and the contents of this unit read like occult instructions. After a guided series of steps, the practitioner "arrives" at a state in which he is "beside the holy."[19]

It is in the final unit (*fī asrār al-āyāt*, "On the secrets of the signs") that we find the strongest case for dreams[20] as sites of special knowledge acquisition. The "signs" of the unit's heading are the specific characteristics of "knowers"; both terms (*āyāt* ("signs") and *ʿārif* ("knower")) are fraught with religious significance. After some preliminary pointers and reminders dealing with the food preferences of knowers, we are advised to trust the assertions of knowers when they inform us of the "unseen":

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mind, with skill and experience, those who lend an ear to the crowds, and who have gone astray from philosophy and have fallen behind" (trans. Inati). On Avicenna's stated intention to keep the work from public dissemination, see Gutas, *Avicenna*, 155–56 and 158.

16 We will do just that: see section 4.1.

17 Gutas, *Avicenna*, 159.

18 The term used, *namaṭ*, is a "way," like a *madhhab*, or a "class," as a sort of thing, or a "course"; the individual "pointers" and "reminders" are like units in modules. Lameer notes that *namaṭ* also has the sense of a resting point or waystation on a journey: see Lameer, "Towards," 207n32.

19 Avicenna, *Ishārāt*, 4.92–93. The reader may well feel that he has stumbled upon something like al-Bīrūnī's translation of Patanjali, which was roughly contemporaneous. This "guided path" flavour to the work inspired "fascination with its intricacies and hidden mysteries," as Ayman Shihadeh put it, leading a later theologian to call it the "'holy book' (*zabūr*) of the philosophers": "Al-Rāzī's (d. 1210) Commentary on Avicenna's *Pointers*: The Confluence of Exegesis and Aporetics," in *The Oxford Handbook of Islamic Philosophy*, ed. Kh. el-Rouayheb and S. Schmidtke (Oxford: Oxford University Press, 2017), 307.

20 Throughout the passages discussed in this section, Avicenna refers not to dreams as "visions" (*al-ruʾyā*), but to the (ordinary) dream which occurs in the state of sleep: *al-manām*.

> When you hear that a knower has spoken of something unseen, having previously predicted good news or issued [valid] warnings, it is true – and you should not find it difficult to believe it. For there are well-known causes for this in the ways of nature.[21]

This reminder sets the stage for all that is to come regarding access to the "unseen" (*al-ghayb*), that is, that ocean of knowledge enjoyed by the celestial souls and imparted (under conditions to be elucidated here) to worthy knowers.[22] Unquestionably, what follows is a defence, supported by an appeal to "nature," of prophecy and divination; that this special knowledge may be obtained in sleep is adduced as evidence for its being possible in waking life:

> Experience and analogical reasoning are in agreement that the human soul acquires something from the unseen in the state of dreaming (*fī ḥālat al-manām*). So there is nothing preventing something similar to that acquisition in the waking state such that there would not be some way to remove [the preventing obstacle], or such that there would be the possibility of its being lifted [i.e., by a benevolent outsider].[23]

The conditions are framed based on the presupposition that "something," that is, some special knowledge, is accessible with respect to the "unseen." One might expect that there is some obstacle to such access when the soul is not quiescent, asleep; yet whatever hinders this can be removed.

For our purposes, this passage exemplifies the principles we set out at the end of the introduction, above. Moreover, Avicenna asserts that evidence for the claim that occult knowledge is obtained in sleep may be found by means of "experience and analogical reasoning" (*al-tajriba wa-l-qiyās*). The appeal to experience is to that of all humans: each person's experience "inspires assent" to this proposition, since the dreaming subject is capable of imagination (*al-takhayyul*) and recollection.[24]

The proof according to analogical reasoning is more complicated. Here, unexpectedly, Avicenna introduces the cognitive capacities of celestial

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21 Avicenna, *al-Ishārāt*, 4.119. These are my translations; for a published translation of this unit, see Inati, *Mysticism*, 95–108.

22 The "unseen" may be defined more prosaically as stuff "beyond the reach of present sensation": al-Akiti, "Three Properties," 190n8.

23 Avicenna, *al-Ishārāt*, 4.119–20.

24 Avicenna, *al-Ishārāt*, 4.120. On Avicenna's regular position that this (and other) typically "prophetic" proficiency is not "exclusive to prophets," but attainable for all, see al-Akiti, "Three Properties," 190.

souls with respect to the knowledge of particulars. "Particulars are inscribed (*manqūsha*) in the intelligible world as universals," but because of their particular perceptions, volitions, and unique point of view, celestial souls can conceive of these universalised inscriptions according to their corresponding particular concomitants in the "elemental" world, just as we would perceive them – that is, in time.[25] Thus Avicenna establishes an epistemological continuum whereby an instance of knowledge[26] may be realised in different states: that is, as a universal and as a particular. In either state, it is manifest as an "inscription" (*naqsh*) conditioned by or manifested in the guise of "concomitants." (Bear in mind that, as we saw in the Introduction, the objects of this mode of knowledge in the *Healing* are "conceptual realities" – *maʿānī*.)

Our human souls may acquire such inscriptions if properly disposed.[27] Here, Avicenna introduces the variable attitudes of the psychic faculties: the internal senses may exhibit attraction or repulsion with respect to the external senses,[28] meaning that the inscriptions under consideration in the sensible world may or may not be registered. Moreover, the proper receptacle for these inscriptions is the common sense: upon this "tablet for inscription" (*lawḥ al-naqsh*) they are observed, while their sources need no longer be present (indeed, the very senses which bore them may be dormant or no longer functioning). One might suspect that Avicenna means that we can imagine, say, a cat, even when there is no cat in our visual field.[29] As it turns out, however, he believes that some phenomena can be observed which never occurred as such in the external world: phenomena such as the straight line observed in the case of the falling rain-drop, or the circle observed in the case of a single revolving point, may be observed even though their sources (a rain-drop, or a point) do not in themselves suggest such an inscription.[30]

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25 Avicenna, *al-Ishārāt*, 4.121–24.

26 That the particulars are "instances of knowledge" is Fakhr al-Dīn al-Rāzī's interpretation: see Fakhr al-Dīn al-Rāzī, *Sharḥ al-Ishārāt*, ed. A. Najafzadeh (Tehran: Anjoman-e Āthār va Mafākher-e Farhangī, 2005), 641.

27 Avicenna, *al-Ishārāt*, 4.124.

28 Avicenna, *al-Ishārāt*, 4.125–26.

29 This is an issue discussed in the abstraction/emanation dispute, at least when it is transposed to the case of intelligible forms: these cannot be "stored" in the (human) intellect, or it would constantly be engaged with them; rather, they are on loan from the Active Intellect (Alpina, "Intellectual Knowledge," 139).

30 Avicenna, *al-Ishārāt*, 4.128. On the raindrop phenomenon, see Jari Kaukua, "Avicenna on the Soul's Activity in Perception," in *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*, ed. J. F. Silva and M. Yrjönsuuri (Dordrecht: Springer, 2014), 103–4. This process involves the estimative faculty (*al-wahm*), which is used to fix such images for the other internal faculties.

Such inscriptions occur regularly: the imagination may inscribe observable content in the common sense, or such content may be resurrected by means of memory. In such cases, they correspond to an original sensory acquisition, as an Aristotelian might require. But Avicenna immediately introduces exceptional cases:

> A group of sick and bile-ridden people may observe sensible forms as manifest and present which have no relation to a sensible external object. The inscription of these forms is due to an internal cause, or to a cause which influences an internal cause. The common sense may also be inscribed due to wandering (*al-jā'ila*) forms originating in the imaginative and the estimative [faculties].[31]

Such inscriptions may then bounce back into those faculties "like what happens between facing mirrors."[32] So at least *some* objects observed in the common sense need have no relation to "sensible, external" reality.[33]

Now, since sleep "preoccupies the external senses," it presents an opportunity for an unpreoccupied imagination to imprint observable content upon a quiescent common sense.[34] Throughout, Avicenna is careful to refer to such content as "observed" (*al-mushāhada*) phenomena, presumably in deference to the Aristotelian rule that the external senses do not function in sleep – at least not in terms of registering "new" sensible forms; rather, for Aristotle, dreams consist of delayed sense impressions. In this Pointer, he asserts that "states (*aḥwāl*) are seen (*turā*) in the dream as observed content (*fī ḥukm al-mushāhada*)."[35] Illness impedes, corrupts, or disfigures the forms received in the common sense, but a strong psychic faculty (here unspecified) is able to resist the pull of influences from either side – that is, from the external senses and from the unhelpful imaginings of the internal senses. And the stronger the faculty, the stronger the obtained object.[36] In this case, Avicenna specifies that what is obtained – that is, that which can be made stronger – is *al-maʿnā*,

31 Avicenna, *al-Ishārāt*, 4.129–30.

32 Avicenna, *al-Ishārāt*, 4.130: the same metaphor is used in *Nafs/Shifā'*, as we will see below (section 4.1), to describe the imitative action of the imagination.

33 On the related case of hallucinations, see Ahmed Alwishah, "Avicenna on Perception, Cognition, and Mental Disorders: The Case of Hallucination," in *Forms of Representation in the Aristotelian Tradition, Volume One: Sense Perception*, ed. J. Toivanen (Leiden: Brill, 2022), 124–47.

34 Avicenna, *al-Ishārāt*, 4.132–33.

35 That is, with the "property" (*ḥukm*) of something observed; Avicenna, *al-Ishārāt*, 4.133.

36 Avicenna, *al-Ishārāt*, 4.135.

the particular content to be cognised. A strong psychic faculty can be further fortified through spiritual discipline, so that the well-trained and undistracted soul, freed from the (ordinary) business of the imagination, inclines towards holiness (*ilā jānib al-quds*), obtaining inscriptions from the "unseen," which are then inscribed in the common sense.[37]

For the imaginative faculty to accomplish such things in the dreaming state, it must be dormant enough that the soul will be able to access the intelligible world without distraction, but precise enough to inscribe them accurately upon the common sense.[38] Mastering this technique means that the knower can accomplish it in waking life as well.[39]

The epistemological model according to which this discourse operates posits unlimited cognisable content accessible by means of psychic training. That such content is obtained in dreams is taken as given and used to support the argument that it must be obtainable in waking life. What is to be obtained is of the "unseen"; this process is not necessary when tackling sensible objects. That the contents of this "unseen" category are not like sensible objects is suggested by the inclusion of examples from delusional perceivers (hallucinations) and concoctions found in the common sense that represent sensible objects (the raindrop) with a figure not derived from the senses thereto applied (a line). Sometimes, what is observed in the common sense is a "trace" (*al-athar*),[40] suggestive of some facet of the "unseen." Whatever it may be, the "unseen" is not perceptible by means of the external senses alone. What is "seen" is a particular concomitant inscribed in the common sense, more or less accurately representing cognisable content; the stronger the imaginative faculty, the stronger the content and the better its inscription.

This account of knowledge resting on the empirical(!) evidence of dreams and involving objects of knowledge which are not found in the mundane sphere of experience raises some difficulties for anyone attempting to resolve the long-running dispute concerning Avicenna's empiricism. In a certain way,

37 Avicenna, *al-Ishārāt*, 4.135–36.

38 Avicenna, *al-Ishārāt*, 4.137–38. When al-Rāzī speculates about why this is easier for some people than for others, he points out that one may be quite clever and well-trained and yet still fail to attain "knowledge of the 'unseen.'" He characterises the successful knower as one who is as though "dead, such that his motion and perception ceases." We might think such things are counterintuitive, al-Rāzī says, until we consider that this is precisely how it happens to one dreaming (al-Rāzī, *Sharḥ*, 638–39).

39 The calibration of the imagination is discussed at some length, with examples: Avicenna mentions "the Turkish sorcerer" who sprints to the point of exhaustion in order to curtail the influence of the imagination upon the reception of information from the higher world; children and imbeciles are also more susceptible to insights of this sort, although they lack the intellectual capacity to recount them (see Avicenna, *al-Ishārāt*, 4.137–38).

40 Avicenna, *al-Ishārāt*, 4.139.

because of the emphasis on "experience," the use of dreams to support the viability of prophecy is quite empirical: as Gutas translates a later passage in the *Ishārāt*,

> Know that the way to profess and attest to these things is not [to say], "they are merely plausible conjectures at which one arrives from intelligible matters only," [...] rather they are experiences of which, once confirmed, one seeks the causes.[41]

That is, indeed, the empirical method, assuming the experiences can be confirmed. Yet the apparent preference, in this unit of the *Pointers*, for inscriptions derived from the "unseen" over forms abstracted from the (sublunar) external world has fed the enthusiasm of those who suspect Avicenna of being an emanationist.[42] Nevertheless, as Gutas has insisted for decades now, all of these acts of imagination belong to the individual human soul, and every step in Avicenna's process demonstrates where the imagination can get things wrong or right: however eerie we may find the appeal to dream experience, it is an ineradicable part of this process.

3 The Downward Flow of Conceptions in Earlier Arabic Philosophy

Towards the end of *The Metaphysics* of the *Healing*, while speculating about the state of souls after death, Avicenna again emphasises the power of "imagined," as opposed to sensed, forms: "Forms in the imagination are not weaker than the sensible [forms] but are greater in influence and clarity, as one sees in sleep" (i.e., in a dream: *fī l-manām*).[43] This is not to say that dreamt imaginal forms are necessarily more real or valid; this passage occurs in a discussion of how it is that more foolish folk suffer (after death – this is an eschatological issue) more keenly the pains they imagine are due to them, inasmuch as those pains were imaginatively described to them in life. Accordingly, their torment seems all the more horrific to them, as they register imagined forms more strongly than sensed forms (if they could sense forms at all). Moreover,

41 Avicenna, *al-Ishārāt*, 4.149, using the translation of Dimitri Gutas, "Imagination and Transcendental Knowledge in Avicenna," in *Arabic Philosophy, Arabic Theology: From the Many to the One*, ed. J. Montgomery (Leiden: Brill, 2006), 352.

42 On how this enthusiasm tends towards mystical readings of Avicenna, see Alpina, "Intellectual Knowledge," 136–38.

43 Avicenna, *The Metaphysics of the Healing* (hereafter, *Ilāhiyāt/Shifā'*), ed. and trans. M. Marmura (Provo: Brigham Young University Press, 2005), 356. I use Marmura's translation throughout, with occasional bracketed interventions.

the core idea of Avicenna's emanative scheme, as presented in texts like the *Metaphysics*, is that conceptions (*al-taṣawwurāt*) flow from celestial causes as "principles for the existence of these forms here."[44] We have seen something of the mechanics of this in the *Ishārāt* passages discussed above, and we shall return to them in the *Psychology* of the *Healing* below (section four). In claiming that imagined forms are "stronger" than sensed forms, and in suggesting that some sort of information is received from higher realms, Avicenna is working entirely within the Neoplatonising scheme of earlier Arabic philosophy. In this section, we will consider earlier Arabic accounts of the intelligible content of dreams and its origin.

In his treatise "On the Essence of Sleep and Dreams,"[45] al-Kindī started from the same epistemological claims evinced by Avicenna: when the imagination (here *al-quwwa al-muṣawwira*; "what the Greeks called *phantasía*"[46]) acts free from sensation, it obtains and "composes" forms more clearly. The material nature of sense objects confounds the senses; thinking using the imagination yields forms "more pure, cleaner, and more unadulterated […]." "Dreams," al-Kindī concludes, "are the soul's use of thought when it has ceased to use the senses."[47] Citing Plato as his authority, al-Kindī holds that it is within the individual human soul that knowledge occurs; the soul is the site for "all sensible and intelligible things."[48] As such, the soul may "see signs about things before they occur, or announce them exactly as they will be (*bi-aʿyānihā*)."[49] As in the *Pointers*, this is a skill developed by the individual: the imagination may not be

44 Avicenna, *Ilāhiyāt/Shifāʾ*, 360.

45 Al-Kindī, *Risāla fī māhiyyat al-nawm wa-l-ruʾyā*, in *Rasāʾil al-Kindī al-falsafiyya*, ed. M. Abū Rīda (Cairo: Dār al-Fikr al-ʿArabī, 1950), 1:293–311, trans. P. Adamson and P. E. Pormann, in *The Philosophical Works of al-Kindī* (Karachi: Oxford University Press, 2012), 122–33. I use Adamson and Pormann's translation, hereafter cited as "Al-Kindī, 'Essence.'"

46 Al-Kindī, "Essence," 125. See also Helmut Gätje, "Philosophische Traumlehren in Islam," *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 109 (1959): 262–64.

47 Al-Kindī, "Essence," 126–27.

48 Al-Kindī, "Essence," 129. As Pavel Gregoric pointed out to me, it is not clear how al-Kindī would base this claim in Plato; it does resonate with *De anima* 3.8, however: see 3.8, 431b21–23 and 3.8, 432a1–3. Nevertheless, the process of soliciting knowledge from the celestial intellects by means of the imagination (*al-quwwa al-muṣawwira*) is reiterated in another Kindian treatise dealing with Platonic "recollection" of these higher forms: see Gerhard Endress, "Al-Kindī's Theory of Anamnesis," in *Islām e arabismo na península ibérica: Actas do XI congresso da união europeia de arabistas e islamólogos*, ed. A. Sidarus (Évora: Universidade de Évora, 1986), 393–402.

49 That is, according to their essences: precisely in the same way Avicenna put it (see 11 above). Al-Kindī, "Essence," 129.

ready to read the knowledge of the soul, and in such cases the (individual) soul may use "symbols" to break through to the field of the imagination.[50]

Thus al-Kindī's theory prefigures an empirical reading of Avicenna's. Dream-visions yield true knowledge when the imagination is sufficiently strong because it is sufficiently uninhibited. Yet the source of this knowledge is not so ontologically remote: it is the "soul's natural knowledge,"[51] ready and waiting for our interpretation.

Rotraud Hansberger has documented the origins and influence of the Arabic adaptation of the *Parva naturalia* called *Kitāb al-Ḥiss wa-l-maḥsūs*; it is dated from the time of al-Kindī.[52] The section supposed to "translate" Aristotle's sleep and dream treatises, *Bāb al-nawm wa-l-yaqaẓa* ("Chapter on sleep and waking"), which makes up more than half of the Arabic text,[53] favours "spiritual" over "corporeal" modes of knowing: experiences in dreams are "nobler" than those in waking life. The author is unequivocal on the supernatural origin of dreams:

> True dream vision, the cause and reason of which is the true Deity [...] occurs through the mediation of the intellect. For whatever the Deity [...] wanted to become manifest in this world He gave form to in the Intellect at one stroke, and gave form to the forms in this world at one stroke, together with what they imply rationally. The intellect then made [them] manifest to the soul and to each one of its faculties, according to the measure in which the soul decided that [each] faculty could receive [them].[54]

This passage strikes a chord that we will hear resonating throughout the rest of this chapter: the unrelenting broadcast of information from above, relayed via the (Active) intellect, is stymied only by the failure of the internal senses to receive it. The sleeper's internal sensation is clearer, as it were, "more apt and more correct."[55] Yet the adaptor retains an Aristotelian model of potentiality and actuality: in his words, "the sense-perception of the sleeper is

50 Al-Kindī, "Essence," 129–30.

51 Al-Kindī, "Essence," 128.

52 See Rotraud Hansberger, "How Aristotle Came to Believe in God-given Dreams: The Arabic Version of *De divinatione per somnum*," in *Dreaming Across Boundaries*, ed. L. Marlow (Boston: Ilex Foundation, 2008), 50–77. See also Hansberger's chapter in this volume.

53 Hansberger, "How Aristotle," 52.

54 Aristotle [pseud.], *Kitāb al-Ḥiss*, MS Rampur 1752, ed. and trans. R. Hansberger, fol. 42a; see chapter four below. All references to this work depend upon Hansberger's unpublished edition, following her translation.

55 Aristotle [pseud.], *Kitāb al-Ḥiss*, fol. 21b.

sense-perception potentially," and therefore objects are harder to perceive; in the waking state it is actual, and objects are more easily perceived and known.[56] As Hansberger has shown, the rest of the treatise is the adaptor's attempt to reverse this polarity, instructing the dreamer to unite his internal faculties (by means of the "subtlest things").[57]

There is a text attributed to Avicenna called *Risālat al-manāmiyya*, that is, on "dream-states"; it exists in several manuscripts under various titles and was published along with an English translation.[58] Gutas has rejected the authenticity of this work.[59] In it, "Avicenna" cites the *Kitāb al-Ḥiss wa-l-maḥsūs*; Hansberger has demonstrated the overall reliance of the *Risāla al-Manāmiyya* on the *Kitāb al-Ḥiss* (especially with respect to the "three-faculty" model), and John Lamoreaux has shown its further dependence on Artemidorus.[60] In this text, "Avicenna" adopts an unmistakeably "emanationist" attitude towards reception of information: he "ascribes true dream-vision to a 'divine power' outside the dreamer, which sends veridical dreams to people in order to inform and warn them about things to come."[61]

Other works on dreams were ascribed to Aristotle, including one which epitomises themes found later in al-Fārābī's work. As an aspect of his theory of prophecy, al-Fārābī had introduced a special act of the imagination which allowed it to recreate sensible and intelligible forms: "imitation" (*muḥākāh*).[62]

56 Aristotle [pseud.], *Kitāb al-Ḥiss*, fol. 21b.

57 Aristotle [pseud.], *Kitāb al-Ḥiss*, fol. 22a. This process is described in Rotraud Hansberger, "The Arabic *Parva Naturalia*," in *Noétique et théorie de la connaissance dans la philosophie arabo-musulmane des IX^e–XVII^e siècles*, ed. M. Sebti and D. De Smet (Paris: Vrin, 2020), 45–75.

58 Avicenna [pseud.], *Risāla al-Manāmiyya* ["A Unique Treatise on the Interpretation of Dreams"], ed. Muhammad ʿAbdul Muʿid Khan, in *Avicenna Commemoration Volume* (Calcutta: Iran Society, 1956): 255–307, for the Arabic text and critical introduction; Muhammad ʿAbdul Muʿid Khan, "*Kitāb Taʿbīr al-ruʾyā* of Abū ʿAlī Ibn Sīnā," *Indo-Iranica* 9 (1956): 43–57, for an English translation.

59 Dimitri Gutas, "The Study of Avicenna: *Status quaestionis atque agenda*," *Documenti e studi sulla tradizione filosofica medievale* 21 (2010): 51. Nevertheless, it is cited as the work of Avicenna in Hansberger, "How Aristotle," 65; its authenticity is unquestioned in the lengthy treatment in Lamoreaux, *Early Muslim Tradition*, 69–76; Gätje ("Traumlehren," 267–68) treats it as authentic, as do other modern scholars (e.g., Luis Xavier López-Farjeat, "La versión árabe del *De divinatione per somnum* de Aristóteles y su impacto en Avicena y su teoría profecía," *al-Qanṭara* 38:1 (2017): 45–70).

60 Hansberger, "How Aristotle," 65–66; Lamoreaux, *Early Muslim Tradition*, 72–75.

61 Hansberger, "How Aristotle," 65, paraphrasing Avicenna [pseud.], *Risāla al-Manāmiyya*, 294–95.

62 On "Nachahmung," see Hans Daiber, "Prophetie und Ethik bei Fārābī (gest. 339/950)," in *L'homme et son univers au moyen âge*, ed. C. Wenin (Louvain-La Neuve: Éditions

In a *Maqāla* ("discourse") attributed to Aristotle, "On Dreams" (*fī l-ruʾyā*),[63] we find a short description of how this activity is applied. According to this treatise:

> A dream is a motion due to the persistence of something from objects of sensation: that is, when the imaginative faculty (*al-quwwa al-mutakhayyila*) is isolated by itself and idle, in the state of sleep, it returns to the objects of sensation it has at its disposal. It composes them, one to another, and separates them, one from another, imitating (*taḥākī*) the objects of intellect [...] or whatever chances upon the body in terms of its temperament (*al-mizāj*).[64]

Muḥākāh is a technical term in Arabic philosophy of language invoking the telling of a story or the reporting of verbal evidence. Although the imagination is working in a familiar way here with respect to the composition and separation of forms, to speak of the faculty as "imitating" an object is new. This internal imitation can have external consequences, as when sexual acts (*afʿāl al-jimāʿ*) are imitated during sleep; in such cases, memorably, "the limbs may be hoisted in preparation directed toward such an act."[65]

From the passage just cited, it might seem as though the imagination can only play with sensible objects already at hand (indeed, with sensible forms

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de l'Institut supérieur de philosophie, 1986), 2:729–53; see also Hansberger, "How Aristotle," 73.

63 The text and translation of this short treatise are presented in Helmut Gätje, *Studien zu Überlieferung der aristotelischen Psychologie im Islam* (Heidelberg: Carl Winter, 1971), 132–35. Daiber has shown that it is nothing more than a paraphrase of a few passages in al-Fārābī's *Kitāb Ārāʾ ahl al-madīna al-fāḍila* (hereafter "*Ārāʾ*"): see Daiber, "Prophetie," 729n1. References below to *Ārāʾ* are to al-Fārābī, *Kitāb Ārāʾ ahl al-madīna al-fāḍila*, ed. A. Nader (Beirut: Dār al-Mashriq, 1986).

64 Gätje, *Studien*, 133.3–6 (my translation):

الرؤيا حركة للبقايا التي بقيت من المحسوسات، يعني أنّ القوة المتخيلة إذا انفردت بنفسها فارغةً في حال النوم فإنها تعود إلى ما عندها من المحسوسات فتركّب بعضها على بعض وتفصّل بعضها عن بعض وتحاكي المعقولات [...] وما يصادف البدن من المزاج.

65 Gätje, *Studien*, 133.8 (my translation). This is an interesting passage, insofar as whoever composed this little treatise skipped over a lot of explanation in al-Fārābī to get to this one example: the passage ending at Gätje, *Studien*, 133.3–7, is parallel to *Ārāʾ*, 108.8–109.4; this next passage (Gätje, *Studien*, 133.8) is parallel to *Ārāʾ*, 111.6–8. Al-Fārābī used a different term for the sexual acts – namely, *al-nikāḥ* – but I doubt that is significant. The Arabic text in Gätje:

وربما حاكت القوة النزوعية بأفعال الجماع فينهض أعضاؤه للاستعداد نحو فعله.

"persisting" in the system, as in Aristotle). Yet in the ensuing lines, as with al-Kindī earlier and Avicenna later, we have the notion of the "strengthening" of the faculty of imagination: whereas the "desiring faculty" led to sexualised expressions,

> The rational faculty might imitate objects of intellect (*al-ma'qūlāt*) which it has attained in the extreme of perfection, such as the first cause (*al-sabab al-awwal*), or things separated[66] from matter. When the imagination is strengthened in a person, objects of sensation are not established in him; his state in waking becomes like his state in sleep. When he returns [from such a state], impressions (*rusūm*) are impressed in the common [sense], and the faculty of vision is affected by them, such that the impressions occur in the air connected to [the organ of] vision. Or he might return having impressed [these impressions] in the imaginative faculty, becoming like one united with the Active Intellect, having seen things great and wondrous.[67]

Now, this passage is a paraphrase of two passages in al-Fārābī's *Ārā'*,[68] and, as in the previously cited passages, the author skips over a lot of the mechanics of how these impressions are passed between the imagining faculty and the common sense. But once again we find the "strengthening" of the imagination: at this point, the paraphrast has leapt to the beginning of the next section of al-Fārābī's text, on "divine inspiration and the visions of the king" (*fī l-waḥy wa-ru'yat al-malik*). All of the elements of al-Fārābī's theory of prophecy[69] are present in this summary: the faculty of imagination "mediates between the sense organs and the rational [faculty]";[70] imagination is less busy with the

66 Reading *wa-l-ashyā' al-mufāriqa* instead of *wa-l-ashyā' wa-l-mufāriqa*, which is presumably just a typographical error in Gätje, *Studien*, 133.10; my reading is supported in *Ārā'*, 111.14.

67 Gätje, *Studien*, 133.9–14 (my translation):

وتحاكي القوة الناطقة بما يحصل فيها من المعقولات التي في نهاية الكمال كالسبب الأوّل والأشياء <و> المفارقة للمادّة. ومتى قويت المتخيلة في شخص لا يستوى عليه المحسوسات فكان حاله في اليقظة كحاله في النوم فإنّه يعود ويرسم رسومًا في المشترك وانفعلت عنها القوّة الباصرة فيحصل رسومها في الهواء الواصل للبصر، ثم يعود فيرسم في القوة المتخيلة ويصير كالمتّحد بالعقل الفعّال ويرى أشياء عظيمًا عجيبة.

68 That is, al-Fārābī, *Ārā'*, 111.12–14 (through "separated from matter"), and 114.3–115.7.

69 On this theory, see the classic study of Richard Walzer, "Al-Fārābī's Theory of Prophecy and Divination," *Journal of Hellenic Studies* 77 (1957): 142–48, and Daiber, "Prophetie."

70 Al-Fārābī, *Ārā'*, 108.3: this is the first sentence of the relevant section in *Ārā'*, "on the cause of dreams" (*fī sabab al-manāmāt*).

incessant activity of the senses in sleep; there is a process involving impressions and – most Farabianly – "imitating"[71] those higher things which have no sensible forms; and the proficient user of his imagination may find himself able to do these things as ably in the waking state as in his dreams.

To this framework the paraphrast added two distinctive elements. First, as noted above, he began with the point about the persistence of objects of sensation; this genuinely Aristotelian flourish (recall that the text is attributed to Aristotle) is immediately contradicted by the various ways in which non-sensed objects are imitated and impressed in sleep and then in waking. Second, at the end of the short treatise, he added a summarising statement that (1) speaks of the "soul" as a wandering agent (instead of the acts of the imagination which direct Farabian prophecy) and (2) quickly explains the appearance of the Qurʾānic "mixed-up dreams" (*aḍghāth aḥlām*), which do not appear at all in al-Fārābī's text:

> When the soul moves toward its highest domain[72] on account of its divine contemplation and its freedom from the senses, it sees simple, spiritual things. When it moves towards its "first" domain on account of its natural contemplation, it regards particular things which are prepared for it among the objects of sensation, things which have no order and no use. Perhaps it composes these forms into some silly composition: these are called the "mixed-up dreams."[73]

Al-Fārābī, too, was quite happy to speak of things being "seen" once the imagination has impressed them upon the common sense. "Separate objects of intellect and other noble existents" are seen in this way.[74] This summary in the treatise ascribed to Aristotle seems to epitomise the Farabian doctrine fairly. For al-Kindī, it is *al-quwwa al-muṣawwira* (the faculty of "formative" imagination)

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71 Scholarship has been consistent in rendering *ḥ-k-y* expressions as "imitation" (see, e.g., Daiber, cited above, 100n62), but at this point, especially given the context of prophecy, we might well be reminded of the "narrative" aspect of the concept: a *ḥikāya* is a story.

72 *ufqihā*: Gätje (*Studien*, 132), correctly, translates this as "Horizont." The invocation of the "higher realm" does have some resonance in other spurious sources: cf. the *malakūt aʿlā* in pseudo-Fārābī, *Risālat Fuṣūṣ al-ḥikma*, cited in Gätje, "Traumlehren," 267.

73 Gätje, *Studien*, 133.15–135.2 (my translation):

فإنّ النفس إذا تحرّكت نحو أفقها الأعلى بحسب نظرها الإلهي وتجرّدت عن الحواسّ رأت الأشياء البسيطة الروحانيّة، وإذا تحرّكت نحو افقها الأولى بحسب نظرها الطبيعيّ فإنّها تتصفّح الأشياء الجزئيّة التي استعدّت لها من المحسوسات التي لا نظام لها ولا فائدة فيها، وربّما ركّبت هذه الصور تركيبًا عبثًا ويسمّى اضغاث أحلام.

74 Al-Fārābī, *Ārāʾ*, 115.10.

which mediates between sensation and the intellect; in this concluding summary, al-Fārābī's imagination (*al-quwwa al-mutakhayyila*) is not specified, but the Kindian formative function is implied: it composes forms (*al-ṣuwar*).

4 Back to Avicenna

In the final section of this chapter, we return to Avicenna's systematic presentation of his epistemology in the *Healing.*

The second chapter of the fourth treatise of the *Psychology* of the *Healing* is entitled: "On the acts of the formative and cogitative [faculties … including] the discourse on sleep and waking, true and false vision (*al-ruʾyā al-ṣādiqa wa-l-kādhiba*), and one variety of the characteristics of prophecy." This formative faculty is immediately described as the imagination (*al-khayāl*); it "stores" (by way of *istikhzān*, "storage") what it gets from the common sense, on the one hand, and also "things which are not taken from sensation," that is, things taken from the cogitative faculty (*al-quwwa al-mufakkira*) on the other.[75] Certain people can develop a stronger imagination (here *al-quwwa al-mutakhayyila*) more "inclined to the intellect"[76] and less apt to be distracted by the senses. In this section, we will explore how this works.

Avicenna's explanatory scheme aims to account for all experienced phenomena. So it is axiomatic that, due to the machinery of the internal senses, forms can be "impressed upon the common sense itself [so that] one hears and sees colours and sounds which have no existence externally, nor are their causes external."[77] These experienced forms present themselves only under certain conditions: when a governing faculty is quiescent, or when they are not properly directed by the rational soul – for the latter may be distracted, as in cases of (mental) injury, weakness, sickness, extreme fear, and (of course) sleep.[78] Although some of these may seem like minor aberrations in sensory experience, the point here is that the forms themselves are not inherently attended by the "relation" (*nisba*) which indicates whether they are coming from outside or within.[79]

75 Avicenna, *Nafs/Shifāʾ*, 169.8–15 (unless otherwise indicated, all passages from this text are my translations, but see also Deborah Black's unpublished translation which indicates this pagination).

76 Avicenna, *Nafs/Shifāʾ*, 173.9–11.

77 Avicenna, *Nafs/Shifāʾ*, 170.9–11 (Black's translation).

78 Avicenna, *Nafs/Shifāʾ*, 170.11–14, 171.13–16.

79 See Avicenna, *Nafs/Shifāʾ*, 173.2.

Of far greater significance are the "notions" (*khawāṭir*), which occur to everybody on occasion, in the dreaming and waking states, "all at once to the soul."[80] These notions appear unconnected – logically or temporally – to anything else in mental experience. They may be objects of intellect or flashes of poetry, "rare things," or "like secret hints which are not fixed and remembered," though the soul "hits upon them with a firm grasp."[81] These notions come to us from the celestial realm, from the *malakūt*.[82] Unlike in al-Kindī, they are not present already in our soul.

The presentation of intelligible realities is conditioned by the (bodily) internal faculties, whose disposition helps or hampers the process. It is the imagination (*al-quwwa al-mutakhayyila*) that, in Gutas' words, "converts this knowledge into audible and visual images"[83] for the common sense, just as a computer receives transmitted data and subsequently materialises them as sounds and images. When working from notions stored in the memory, this may be easier; but the translation process is fraught for the imagination, which apparently intervenes as the soul tries to fix a notion in the memory:

> The imagination (*al-quwwa al-mutakhayyila*) aligns (*tuwāzī*) each individual object seen in sleep with an individual or composite[84] image (*khayāl*), or aligns a composite object seen in sleep with an individual or composite image, while continuing to oppose (*tuḥādhī*) what it has seen there to an imitation (*muḥākāh*) compiled out of forms and *maʿānī*.[85]

This is how disruptions occur. The playfully parallel verbs (*tuwāzī*[86] and *tuḥādhī*) both describe a mirror-like imaging of some object, a replication. The confusion that follows from some inadequacy in the internal senses produces dream-visions which are missing certain important properties; they will resist interpretation at any level. When nothing but gibberish remains, we have "mixed-up dreams."[87] When the forms are properly lodged in the memory and the mirroring effects described above do not present further confusion – this

80 Avicenna, *Nafs/Shifāʾ*, 174.1–3 (Black's translation). See also Gutas, "Imagination," 349.
81 Avicenna, *Nafs/Shifāʾ*, 174.5–10 (Black's translation).
82 Thus Avicenna, *Nafs/Shifāʾ*, 176.11: "what is seen from the [celestial] realm." See also 103n72.
83 Gutas, "Imagination," 344.
84 "Or composite" omitted in four manuscripts (and in Black's translation): see Avicenna, *Nafs/Shifāʾ*, 176n3.
85 Avicenna, *Nafs/Shifāʾ*, 176.5–8.
86 Black (p. 11) translates *both terms* as "to oppose."
87 Avicenna, *Nafs/Shifāʾ*, 176.15.

is the case for such souls as are "habituated to the truth, and have subdued false imaginings"[88] – there is the promise of the "soundest dreams" (*aṣāḥḥ aḥlām*). In most cases, however, the composition of the body (including the *rūḥ*, that is, the spirit) and the complications this presents to the inner senses result in lazy or zany imitations of whatever is vouchsafed us from above: thus we think we dream of what concerns us in the life of the senses, and Avicenna describes for us the phenomenon of nocturnal emission.[89]

The most striking constant throughout this discourse is that while so much, and such diverse, interpretive and imitative work takes place in the (bodily) internal senses, the kernel of the dream-image is that which is broadcast (i.e., emanated) freely, universally, and uninterruptedly from the realm of the celestial intellects. This is one of the reasons Gutas has dismissed "mystical" appreciations of Avicenna: "knowledge of past, present, and future events," bestowed from above, "can come to every man, even simpletons and fools."[90]

I have argued so far that Avicenna naturalised the dream experience as part of his epistemology in gnomic (*Pointers*) and in normative (*The Healing*) texts. Yet aspects of Avicenna's epistemology received differing emphases in the imaginations of his readers. There are quite a few claims about "knowing the unseen" in Avicenna's *Dāneshnāme-ye ʿAlāʾī*, a text written in Persian for his patron after 1023.[91] This text was fairly faithfully repurposed in Arabic by al-Ghazālī as the latter's *Maqāṣid al-falāsifa* ("The Aims of the Philosophers"), whence it was introduced to medieval Europeans in a well-known Latin translation.[92] As is well-known, al-Ghazālī was hostile to certain aspects of Avicennan philosophy, yet the overall tendency of Ashʿarite theologians to adopt what they could use from Avicenna began with efforts, such as that in

88 Avicenna, *Nafs/Shifāʾ*, 177.8 (Black's translation).

89 Avicenna, *Nafs/Shifāʾ*, 179.8–180.1: it will be noticed that Avicenna's language and choice of examples follows the Ps.-Aristotle treatise (i.e., the al-Fārābī paraphrase) described above; this may be why *muḥākāh* (imitation) is his term of choice in this passage. The dreaming subject imitates "hot," "cold," and sexy forms.

90 Gutas, "Imagination," 350.

91 On this work, see Gutas, *Avicenna*, 118–19, and Jules Janssens, "Le Dānesh-Nāmeh d'Ibn Sīnā: un texte à revoir?" *Les Études philosophiques* 28 (1986): 163–77.

92 Al-Ghazālī, *Maqāṣid al-falāsifa*, ed. S. Dunyā (Cairo: Dār al-Maʿārif, 1965). On the nature of the reproduction by al-Ghazālī, see Janssens, "Le Dānesh-Nāmeh," and Ayman Shihadeh, "New Light on the Reception of al-Ghazālī's *Doctrines of the Philosophers* (*Maqāṣid al-Falāsifa*)," in *In the Age of Averroes: Arabic Philosophy in the Sixth/Twelfth Century*, ed. P. Adamson (London: Warburg, 2011), 84–85. For a concise account of the Latin reception of the text, see Jules Janssens, "al-Ġazālī's *Maqāṣid al-Falāsifa*, Latin Translation of," in *Encyclopedia of Medieval Philosophy*, ed. H. Lagerlund (Dordrecht: Springer, 2011), 1:387–90.

the *Maqāṣid*, to articulate what the philosophers had said in a shared technical language: if there was a philosophical taxonomy of prophecy to be appropriated, so much the better.[93]

In the Fifth Discourse in the *Physics* of the *Maqāṣid*, the overall aim is to show how the transaction of intelligible such-and-such between the celestial and human domains takes place: the Discourse is concerned with "what emanates upon the souls from the Active Intellect."[94] It is instructive to enumerate the topics in this Discourse as al-Ghazālī presents them:

> (1) Directing the soul towards the Active Intellect; (2) the quality of the emanations of instances of knowledge upon [the soul] from [the Active Intellect]; (3) concerning the happiness of the soul by virtue of [the Active Intellect] after death; (4) the weariness of the soul veiled from [the Active Intellect] due to faulty morals; (5) the cause of true dream-visions; (6) the cause of the soul's perception of knowledge of the "unseen" (*'ilm al-ghayb*); (7) [the soul's] connection with the world of objects of knowledge; (8) the cause of [the soul's] waking observation and vision (*ru'yā*) of forms that don't exist externally; (9) the meaning of prophecy and miracles, and their levels; (10) the existence of prophets, and the need for them.[95]

The fifth section, on the causes of dream-visions, begins with the physiology of sleep: the spirit (*al-rūḥ*) withdraws from the outside to the inside. While the spirit goes about its business, which involves a lot of constitutional affectations, the soul is free first to contemplate that which the senses have previously presented to it, and then (if it is so inclined) to commune with the spiritual substances.[96] This leads to specific instances of knowledge obtained from the "unseen" (literally, "perception," *idrāk*, of such knowledge) in dreams and in the waking state,[97] and the opportunity for "connection" (*ittiṣāl*) with the Active Intellect so that such instances of knowledge may be emanated upon

93 See al-Akiti, "Three Properties," for a recent survey of this phenomenon in al-Ghazālī. For the later tradition, see Ayman Shihadeh, "Aspects of the Reception of Avicenna's Theory of Prophecy in Islamic Theology," *Proceedings of the American Catholic Philosophical Association* 86 (2012): 23–32.

94 Al-Ghazālī, *Maqāṣid*, 371–85. This section corresponds to the final sections of Avicenna, *Ṭabī'iyyāt, Dāneshnāme-ye 'Alā'ī*, ed. M. Meshkāt (Tehran: Anjoman-e Āthār-e Mellī, 1952), 123–46.

95 Al-Ghazālī, *Maqāṣid*, 371.

96 Al-Ghazālī, *Maqāṣid*, 376.

97 Al-Ghazālī, *Maqāṣid*, 378.

the purified soul.[98] It is fair to say that al-Ghazālī's reading of Avicenna was distinctly Farabian.

5 Conclusion

In light of all of this material, we may conclude by revisiting Gutas' defence of Avicenna's credentials as a rationalist:

> Avicenna's philosophical system, rooted in the Aristotelian tradition, is thoroughly rationalistic and intrinsically alien to the principles of Sufism as it had developed until his time. It is also self-consistent and unified, and therefore free of any other mystical or esoteric aspect – however these terms are understood – that would represent a different form or body of knowledge and create a dichotomy within the system.[99]

This position unequivocally rejects those who would celebrate a "mystical" side of Avicenna. Although there are forms of knowledge that may be quite unlike those obtained through everyday sense perception, they are all made to fit into Avicenna's system as exoteric facts, demonstrable, classified, and explained. Jules Janssens, commenting on the "natural" rules governing even the most impressive feats of the archetypal "knower" (in *Pointers*), concurs: "There is absolutely no place for any supernatural intervention or experience. That some of these acts are perceived as extraordinary is only due to a lack of knowledge."[100]

Many commentators have remarked upon this naturalising tendency in Avicenna when confronted with the claims about veridical dreams.[101]

98 This is from the ninth section, describing the second of three "sources" (*uṣūl*) of miracles. This second case "applies to the rational faculty"; the Arabic text (al-Ghazālī, *Maqāṣid*, 382) reads:

هي أن تصفو النفس صفاء يكون شديد الاستعداد والاتصال بالعقل الفعال حتى يفيض عليها العلوم.

This is not exactly how Avicenna put it in the Persian text: see Avicenna, *Ṭabīʿiyyāt*/*Dāneshnāme*, 141–45. There are other notable discrepancies between al-Ghazālī and his original.

99 Dimitri Gutas, "Avicenna v. [that is, the fifth section of the larger article] Mysticism," in *Encylopaedia Iranica* 3:1 (1987), 79.

100 Jules Janssens, "Ibn Sīnā: A Philosophical Mysticism or a Philosophy of Mysticism?" *Mediterranea* 1 (2016): 50.

101 See, for example, Jon McGinnis, *Avicenna* (Oxford: Oxford University Press, 2010), 148: Prophecy "is a wholly natural phenomenon"; the prophet is simply that human whose soul is prepared or properly conditioned for such work.

Nevertheless, I have argued that it is important to see *how* this naturalisation took place. As we have seen, his predecessors swayed between an internal process (al-Kindī) and reliance on celestial intervention (in the Farabian tradition). Plenty of aspects of Islamic "religious" thought were dismissed by Arabic philosophers: the most famous cases being those abhorred by al-Ghazālī (for example, non-resurrection of the body and the temporal creation of the world).[102] Yet the general view exhibited in Avicenna's works, and conditioned by their immediate context, asserts (1) the existence of a broad, atemporal knowledge base accidentally hidden from people (until they look), (2) that this knowledge may be obtained, and (3) that the evidence for this eventuality is that it occurs, manifestly, in dreams. Given the importance of that last point, it is worth wondering whether Avicenna's epistemology could have been conceived *without* the conviction that we receive new information about the external world from unknown celestial sources in our dreaming states.

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102 Interestingly, the third arch-heresy of Arabic philosophers, according to al-Ghazālī, was the denial that God can know particulars. Somewhere in the economy of *maʿnā*-imitation there may be something that could be said to "naturalise" that theological maxim: but that is a topic for another paper.

CHAPTER 4

Averroes on Divinatory Dreaming

Rotraud Hansberger

1 Introduction

In *De divinatione per somnum*, Aristotle explicitly rejects the idea that a deity might send us divinatory dreams[1] in order to inform us of things that will happen to us in the future.[2] In the Arabic tradition, however, Aristotle's name is linked to a theory that strives to explain veridical dreams on exactly such a basis – as has been pointed out already in the previous chapter.[3] While the firm place assigned to prophetic dreams within the religion of Islam (as well as Judaism and Christianity) and their general acceptance as a regular fact of life within medieval Muslim society[4] will have contributed to the positive reception and further development of this theory among philosophers such as al-Fārābī, Avicenna,[5] and Ibn Bājja, its origins – and those of its attribution

1 In this chapter, the terms "veridical dreams" and "predictive dreams" are used to refer in a general way to dreams that convey knowledge about future events, where the cause or origin of such dreams is left undetermined, while the term "divinatory dreams" as well as, occasionally, "prophetic dreams," indicates that such dreams are supposed to be of (in a broad sense) divine origin. The (not in itself necessary) restriction to dreams that foretell the future is due to the fact that the Arabic texts discussed in this chapter conceive of veridical dreams in this way, rather than including the possibility that they may inform the dreamer about any other normally inaccessible truths.

2 *Div.Somn.* 1, 462b12–28. Acknowledging the existence of dreams that predict future events (or notify the dreamer of something he or she could not possibly have known for other reasons), Aristotle insists that it must be possible to account for them within the framework of natural explanation. See section two of the Introduction to this volume, and chapter two by Filip Radovic in this volume.

3 See ch. 3, pp. 99–100 above. See further Rotraud Hansberger, "How Aristotle Came to Believe in God-given Dreams," in *Dreaming Across Boundaries: The Interpretation of Dreams in Islamic Lands*, ed. L. Marlow (Washington: Ilex Foundation and Center for Hellenic Studies, 2008), 50–77.

4 See, e.g., John C. Lamoreaux, *The Early Muslim Tradition of Dream Interpretation* (Albany, NY: SUNY Press, 2002); Pierre Lory, *Le rêve et ses interprétations en Islam* (Paris: Albin Michel, 2003); the classic treatments of the topic in Toufic Fahd, *La divination arabe: études religieuses, sociologiques et folkloriques sur le milieu natif de l'Islam* (Leiden: Brill, 1966); and Gustave E. von Grunebaum and Roger Caillois, eds., *The Dream and Human Societies* (Berkeley: University of California Press, 1966).

5 Cf. ch. 3 by David Bennett in this volume.

to Aristotle – lie in the Arabic adaptation of Aristotle's *Parva naturalia* (*Kitāb al-Ḥiss wa-l-maḥsūs*).[6] In this adaptation, the original Aristotelian text, present only in often-distorted fragments, fades into the background in favour of more Neoplatonic and Galenic ideas, especially where the topics of memory and dreaming are concerned. It is therefore not really surprising that we find such a theory of divinatory dreams even in the work of a staunch Aristotelian like Averroes (Ibn Rushd, 1126–98). His thoughts on divinatory dreams are expressed in his *Explanatory Paraphrase of Aristotle's Parva naturalia* (*Talkhīṣ Kitāb al-Ḥiss wa-l-maḥsūs*, completed in 1170)[7] – that is, in a text based on the very adaptation in which we find the deviant theory of veridical dreaming presented in Aristotle's name.

This may be a quite straightforward explanation for Averroes' uncharacteristic divergence from Aristotelian doctrine. It does not, however, resolve the puzzle entirely: it still seems to call for an explanation that Averroes, of all people, should not have blinked at the ideas transmitted in the *Parva naturalia* adaptation, which, after all, are not exactly similar to those he would have encountered in other Aristotelian works. In this contribution, I want to take a closer look at some aspects of Averroes' thoughts on divinatory dreaming in comparison with *Kitāb al-Ḥiss* and to investigate exactly how he responds to his source text. As I hope to show, in the manner in which he interprets and reshapes the doctrine of divinatory dreaming that he finds in the pseudo-Aristotelian text he demonstrates himself once more to be a committed Aristotelian.

6 Ps.-Aristotle, *Kitāb al-Ḥiss wa-l-maḥsūs*, extant in MS Rampur, Raza Library, Ar. 1752, fol. 7a–54b (henceforth *Kitāb al-Ḥiss*). An edition and translation is being prepared by the author.

7 Averroes, *Talkhīṣ Kitāb al-Ḥiss wa-l-maḥsūs: Die Epitome der Parva naturalia des Averroes*, ed. H. Gätje (Wiesbaden: Otto Harrassowitz, 1961); Averroes, *Talkhīṣ Kitāb al-Ḥiss wa-l-maḥsūs*, ed. H. Blumberg (Cambridge, Mass.: The Medieval Academy of America, 1972); the text will henceforth be referred to as *Talkhīṣ K. al-Ḥiss*. An English translation is available in Averroes, *Epitome of Parva naturalia*, trans. H. Blumberg (Cambridge, Mass: The Medieval Academy of America, 1961). (Translations of excerpts in this chapter, however, are my own.) Scholars often refer to this text as an "epitome," even though it is named *Talkhiṣ* (traditionally rendered as "middle commentary") in the manuscripts. A comparison with its source text warrants, I believe, the use of the term "explanatory paraphrase." See also Rotraud Hansberger, "Averroes and the 'Internal Senses'," in *Interpreting Averroes*, ed. P. Adamson and M. Di Giovanni (Cambridge: Cambridge University Press, 2019), 139n5.

2 *The Source: Kitāb al-Ḥiss wa-l-maḥsūs* and Its Theory of Divinatory Dreaming

We do not know the names of the people involved in translating and adapting the *Parva naturalia*; in all likelihood, though, the adaptation was produced in the ninth century in the circle of al-Kindī, the group of translators responsible for the Arabic Plotinus and Proclus.[8] The most striking characteristic of this adaptation, and the most important thing to note in our context, is that only a relatively small proportion of the text actually goes back to the *Parva naturalia* at all; and even in passages which do reflect the Aristotelian text, preserving more or less coherent pieces of translation, this does not mean that its philosophical content is in any way accurately represented. What the adaptation conveys in terms of doctrine therefore is, on the whole, rather different from what we find in the original *Parva naturalia*.[9]

Thus the most significant feature of the adaptation's account of divinatory dreaming (as well as of memory) is a theory of three "spiritual faculties."[10] These are three post-sensatory faculties located in the three ventricles of the brain, the imaginative or formative faculty (*muṣawwir*), the faculty of thought (*fikr*), and the faculty of memory (*dhikr*). These faculties process the sense perceptions that have been perceived by the five external senses and collected by the common sense. What is particularly remarkable about the way the adaptation describes their respective functions is that it conceives of them as consecutive stages of a process of purification that, step by step, removes all corporeal aspects of a sense perception. The first, corporeal stage is the perceptible object itself; the second stage is achieved with sense perception, which separates the perceptible form from the object; this form is then passed on to the formative faculty, which retains it in the absence of the sense object and

8 See, e.g., Gerhard Endress, "The Circle of al-Kindī," in *The Ancient Tradition in Christian and Islamic Hellenism: Studies on the Transmission of Greek Philosophy and Sciences, Dedicated to H. J. Drossaart Lulofs on His Ninetieth Birthday*, ed. G. Endress and R. Kruk (Leiden: Research School CNWS, 1997), 43–76.

9 For general information on *Kitāb al-Ḥiss* see Rotraud Hansberger, "*Kitāb al-Ḥiss wa-l-maḥsūs*: Aristotle's *Parva Naturalia* in Arabic Guise," in *Les Parva naturalia d'Aristote: Fortune antique et médiévale*, ed. C. Grellard and P.-M. Morel (Paris: Sorbonne, 2010), 143–62.

10 See Rotraud Hansberger, "The Arabic *Parva naturalia*," in *Noétique et théorie de la connaissance dans la philosophie arabe du IX^e^ au XII^e^ siècle*, ed. M. Sebti and D. De Smet (Paris: Vrin, 2019), 45–75; ead., "Representation of Which Reality? 'Spiritual Forms' and '*ma'ānī*' in the Arabic Adaptation of Aristotle's *Parva naturalia*," in *The Parva naturalia in Greek, Arabic and Latin Aristotelianism*, ed. B. Bydén and F. Radovic (Cham: Springer, 2018), 103–9.

passes it on further to the faculty of thought. Stripping away the remaining corporeal aspects (at times described as "shells" or "crusts"), this faculty then distinguishes between the form and its *maʿnā* (the "core"). This term seems to stand for something like the cognitive content of the perception, the thing in so far as it is purely thought (rather than imagined).[11] At the last, fifth stage this *maʿnā* is passed on to the faculty of memory, which stores it. The *maʿnā* is entirely spiritual, as no corporeal aspect is left at this point in the process. Nevertheless it is not a universal concept; remaining tied to the original perception, it retains its *particular* character.

When the adaptation calls the three post-sensatory faculties (or their objects) "spiritual," this goes back, in the first instance, to their roots in medical theory: located in the ventricles of the brain, they run on pneuma or spirit (*rūḥ*). However, the anonymous adaptor of the *Parva naturalia* does not stick to this (lastly material) concept of spirit. In a move that we also know from other texts related to the Kindī circle,[12] he presents spirituality as the opposite of corporeality, aiming for a strict dichotomy between things belonging to the spiritual realm and things belonging to the corporeal realm (see pp. 117–19 below). Nevertheless the fact remains that the "spiritual" faculties (which, after all, belong to the animal soul) and their objects are somehow to be distinguished from the intellectual and divine. As a result the concept of spirituality vacillates between something that is situated in between corporeality and incorporeality, and something that is equated with incorporeality. This tension is observable in particular in the context of the discussion of divinatory dreaming, where the text on the one hand strives to emphasise the sublimity of the phenomenon, while on the other maintaining that it is bound to the "spiritual" faculties of the animal soul.

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11 The term is notoriously problematic to translate; it will be left untranslated here. For the concept of *maʿnā* within *Kitāb al-Ḥiss*, cf. Hansberger, "The Arabic *Parva naturalia*," 62–66. Averroes uses *maʿnā* in a somewhat wider sense, covering also mental representations that *Kitāb al-Ḥiss* would call "forms." For a discussion of *maʿnā* (not just) in Averroes, see, e.g., David Wirmer, "Der Begriff der Intention und seine erkenntnistheoretische Funktion in den *De anima*-Kommentaren des Averroes," in *Erkenntnis und Wissenschaft: Probleme der Epistemologie in der Philosophie des Mittelalters*, ed. M. Lutz-Bachmann, A. Fidora, and P. Antolic (Berlin: Akademie Verlag, 2004), 35–67; Deborah L. Black, "Averroes on Spirituality and Intentionality of Sensation," in *In the Age of Averroes: Arabic Thought in the Sixth/Twelfth Century* (London: The Warburg Institute, 2011), 159–74. Cf. also David Bennett, "Introducing the *Maʿānī*," ch. 2 in vol. 3 of this collection.

12 See Gerhard Endress, "Platonizing Aristotle: The Concept of 'Spiritual' (rūḥānī) as a Keyword of the Neoplatonic Strand in Early Arabic Aristotelianism," *Studia graeco-arabica* 2 (2012): 265–79.

This is because in dreaming it is again the same three faculties that play the leading roles.[13] During sleep they are not confronted by any fresh external perceptions that would require their attention; this gives them the freedom to occupy themselves with the stored forms and *maʿānī* resulting from prior perceptions. *Veridical* dreams that predict future events, however, cannot originate in such earlier perceptions. Instead *Kitāb al-Ḥiss* stipulates that in their case, the "Universal Intellect" conveys the dream-image, the "spiritual form" constituting the dream, to the faculties of the dreamer. It also conveys the corresponding *maʿnā*, that is, the knowledge of what the dream signifies, to the dream interpreter. Since these two *and* the actual corporeal form that will at some later point appear in the world are related to the same "intellectual form" and hence to each other, dream, interpretation and the actual future event will correspond to each other. The ultimate cause behind all this is, however, God:

> [T_1] The sound, spiritual dream-vision is the one which occurs from intelligibles of the Universal Intellect, not from intelligibles of the acquired intellect, [i.e., it comes from intelligibles] which are unknown to the common sense and have not been imagined by the formative [faculty]; the *maʿnā* of which [the faculty of] thought does not know, and which are not deposited in [the faculty of] memory. [...]
>
> This [kind of] true dream-vision, the cause and reason of which is the true Deity, great be His praise, occurs through the mediation of the Intellect. For whatever the Deity, great be His praise, wanted to become manifest in this world He gave form to in the Intellect at one stroke, and gave form to its forms in this world at one stroke, together with what they imply rationally. The Intellect then made [them] manifest to the soul and to each one of its faculties, according to the measure in which the soul decided that [each] faculty could receive [them]; with the Supreme Cause, I mean the Deity, great be His praise, having created [them] in this way, when He created the Intellect at that time, in order to make manifest what is within it; because the Deity moved [the intellect] at that time in order to make manifest what is in it.[14]

Obviously, this theory has nothing at all to do with what Aristotle says in *De divinatione per somnum*. In contrast to us, however, Averroes did not have the

13 See Hansberger, "Representation of Which Reality?" 109–14; ead., "How Aristotle," 54–64.

14 *Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 41a, 42a; cf. Hansberger, "The Arabic *Parva naturalia*," 72. All translations from the Arabic are mine unless otherwise indicated.

advantage of being able to read Aristotle's Greek original. When he composed his paraphrase of *Kitāb al-Ḥiss wa-l-maḥsūs*, he seems to have done so on the assumption that the work was by Aristotle; at least, he never expresses any doubt in this respect. He explicitly refers to Aristotle as the author of the text, not just in his paraphrase of *Kitāb al-Ḥiss* itself, but also, twenty years later,[15] within his *Long Commentary* on *De anima*.[16] Moreover, in *The Incoherence of the Incoherence* (1180), Averroes uses the text as his reference point for true Aristotelian doctrine when he attacks Avicenna's system of five internal senses;[17] and he generally models his own epistemological psychology more closely than the latter on the theory of the "spiritual faculties" found in *Kitāb al-Ḥiss*.[18]

This does not mean that Averroes was unaware of the vagaries of translation and textual transmission. For instance, he notes that *Kitāb al-Ḥiss* does

15 The final redaction of the *Long Commentary on De anima* is dated to 1190. See Matteo Di Giovanni, *Averroè* (Rome: Carocci editore, 2017), 153–55, 251.

16 See esp. Averroes, *Commentarium magnum in Aristotelis De anima libros*, ed. F. S. Crawford (Cambridge Mass.: The Medieval Academy of America, 1953), 415, 476 (hereafter *Long Comm. on De anima*), translation in Averroes, *Long Commentary on the De Anima of Aristotle*, trans. R. C. Taylor (New Haven: Yale University Press, 2009), 331–32, 379, where direct reference is made to the theory of the three faculties.

17 Averroes, *Tahāfut al-Tahāfut*, ed. M. Bouyges (Beirut: Imprimerie Catholique, 1930), 547; Averroes, *Tahāfut al-Tahāfut* (*The Incoherence of the Incoherence*), trans. S. van den Bergh (London: E. J. W. Gibb Memorial Trust, 1969), 1:336. See also Hansberger, "Averroes and the 'Internal Senses'."

18 For general information on Averroes' psychology see, e.g., Alfred Ivry, "Arabic and Islamic Psychology of Mind," *The Stanford Encyclopedia of Philosophy*, ed. E. N. Zalta (2012), https://plato.stanford.edu/archives/sum2012/entries/arabic-islamic-mind/; Deborah L. Black, "Psychology," in *The Cambridge Companion to Arabic Philosophy*, ed. P. Adamson and R. C. Taylor (Cambridge: Cambridge University Press, 2005), 308–26; ead., "Models of the Mind: Metaphysical Presuppositions of the Averroist and Thomistic Accounts of Intellection," *Documenti e studi sulla tradizione filosofica medievale* 15 (2004): 319–52; Di Giovanni, *Averroè*, 119–75. Averroes' theory of the post-sensatory faculties has been the subject of several studies in particular by Deborah L. Black (e.g., "Memory, Individuals, and the Past in Averroes's Psychology," *Medieval Philosophy and Theology* 5 (1996): 161–87); Helmut Gätje (e.g., "Die 'inneren Sinne' bei Averroes," *Zeitschrift der deutschen morgenländischen Gesellschaft* 115 (1965): 255–93); Richard C. Taylor (e.g., "Remarks on *Cogitatio* in Averroes' *Commentarium magnum in Aristotelis De anima libros*," in *Averroes and the Aristotelian Tradition: Sources, Constitution and Reception of the Philosophy of Ibn Rushd (1126–1198)*, ed. G. Endress and J. A. Aertsen (Leiden: Brill, 1999), 217–55; id., "*Cogitatio*, *Cogitativus* and *Cogitare*: Remarks on the Cogitative Power in Averroes," in *L'Élaboration du vocabulaire philosophique au moyen âge*, ed. J. Hamesse and C. Steel (Turnhout: Brepols, 2000), 111–46; id., "Averroes and the Philosophical Account of Prophecy," *Studia graeco-arabica* 8 (2018): 287–304.

not transmit *all* treatises of the *Parva naturalia*;[19] and in his *Long Commentary* on Aristotle's *De anima*, he occasionally makes use of a second Arabic translation of the source text wherever he thinks that its readings can help to clarify matters.[20] Given his awareness of problems associated with translation and transmission, he may well have entertained doubts as to certain details of the theory propagated by *Kitāb al-Ḥiss*, even if, as we may have to assume, he accepted its general tenets as part of Aristotelian doctrine.[21] In the remaining sections of this chapter, we will encounter several instances where he did not in fact follow his source text on every point.

3 Veridical Dreaming as "Potential Sense Perception"

The Arabic adaptation of the *Parva naturalia* is structured into three treatises or *maqālāt*: while the first and the last contain the equivalents of *De sensu* and *De longitudine et brevitate vitae* respectively, the second *maqāla* comprises the equivalent of *De memoria* on the one hand, and a "Chapter on Sleep and Waking" on the other, in which the topics of the three Aristotelian treatises *De somno et vigilia*, *De insomniis*, and *De divinatione per somnum* are

19 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 5; ed. Blumberg, 2–3; trans. Blumberg, 4. *Kitāb al-Ḥiss* comprises equivalents of the first six treatises of the *Parva naturalia*. Averroes obviously infers that this represents an incomplete set from Aristotle's remarks at the beginning of *De sensu* (1, 436a6–17, cf. Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 4; ed. Blumberg, 1; trans. Blumberg, 3).

20 See, e.g., Averroes, *Long Comm. on De anima*, 86 (trans. Taylor, 75), where he uses the second translation to supplement a phrase that has dropped out of the first translation.

21 As far as we presently know, *Kitāb al-Ḥiss* is only extant in the (incomplete) Rampur MS (see n6 above); this obviously makes it hard to judge to what extent, if any, the version available to Averroes was different from the text we have today. This is a pertinent question insofar as the text we find in the Rampur MS is not in the best of conditions; it has many "rough edges" and does not seem to have undergone a final revision. If Averroes' text was of similar quality, this in itself may have aroused suspicion of problems with translation and/or textual transmission, and may have created room for interpretative efforts, and even prompted them in order to reconstruct what seemed to be its correct original meaning.

dealt with together.[22] The arrangement is the same in Averroes' *Explanatory Paraphrase*.[23] Furthermore, in both texts the topic of divinatory dreaming is not confined to the last part of the treatise, but is present from the start. Thus, our first pair of textual examples is taken from the beginning of the section on sleep. The passage from *Kitāb al-Ḥiss*, which will be quoted first, reflects a few lines from the first chapter of *De somno et vigilia*.[24] Italics indicate a relation, however tenuous, to the Greek text:

> [T_{2a}] (1) [...] *Therefore, the privation* [*or: absence*] (*ʿadam*) *of sleep is waking. This can be verified and recognised when* [*we consider*] *the waking and the sleeping person*. For a sleeping person will perceive many things while having no doubt that those things he is perceiving in his sleep are there [perceived by him in reality] in his waking state. (2) The difference between the perception of the waking and that of the sleeping person is that the sleeper *perceives internally* only – and that [kind of] perception of his [takes place] without any movement on his part – whereas

22 With respect to the second *maqāla*, the Arabic version thus corresponds to the list of works from the pen of Ptolemy al-Gharīb, a not yet finally identified and dated scholar who compiled his list after and in knowledge of Andronicus' redaction of the Aristotelian corpus. In this list, which survives in an Arabic translation, the work is noted as "his book on memory and sleep, in one *maqāla*" (*kitābuhu fī l-dhikr wa-l-nawm wa-huwa maqāla wāḥida*). However, there are also discrepancies in so far as in Ptolemy's list the treatise on length and shortness of life follows not directly but only after the so-called "animal books" (as in parts of the Western manuscript tradition, where in particular *De motu animalium* is often placed before *De longitudine*). See Christel Hein, *Definition und Einteilung der Philosophie* (Frankfurt a. M.: Peter Lang, 1985), 388–439, esp. 426–27, cf. 295; Paweł Siwek, *Les manuscrits grecs des Parva naturalia d'Aristote* (Rome: Desclée, 1961), 29–136.

23 In H. Blumberg's edition, we find a subdivision into sections (*fuṣūl*) which separates the part on dreams from that of sleep and waking (66). However, this subdivision is missing in H. Gätje's edition (70), which suggests that it is not present in the manuscripts.

24 "Again, the point is clear from the following. We recognize a person as sleeping by the same mark as that by which we recognize someone as waking. It is the person who is perceiving that we consider to be awake; and we take every waking person to be perceiving either something external or some movement within himself. If, then, the waking state consists in nothing else but perceiving, it is clear that waking things are awake, and sleeping things are asleep, with the same part as that whereby they perceive. But given that perceiving belongs neither to the soul nor to the body solely (for what owns any capacity also owns its exercise; and what is called perception, in the sense of exercise, is a certain movement of the soul by means of the body), it is plain that the affection is not peculiar to the soul, nor is a soul-less body capable of perceiving." (*Somn.Vig.* 1, 453b31–454a11; Aristotle, *On Sleep and Dreams: A Text and Translation with Introduction, Notes and Glossary*, trans. D. Gallop, 2nd ed. (Warminster: Aris & Phillips Ltd, 1996), 61–63.)

> *the waking person perceives externally*, that [kind of] perception [taking place] through *movement*. (3) Let us therefore say: the difference between the sense perception of the sleeping and that of the waking person has become clear, [i.e.] which one of the two [types of] sense perception is more apt and more correct; this ought to be recognised and known. (4) Let us therefore say: the sense perception of the sleeper is sense perception *potentially*, whereas the sense perception of the waking person is sense perception *actually*. (5) Whatever is potential is hard to perceive, whereas what is actual is perceptible and can be known. (6) However, the sleeper's sense perception, even though potential, may well emerge into actuality; although some of it will emerge in a clear and plain manner, while some of it will be difficult and unclear. (7) As for [the question of which one is] the most perfect and the noblest of the two: the spiritual is nobler than the corporeal. However, the spiritual is not considered nobler than the corporeal by the corporeal, nor is the corporeal considered nobler than the spiritual by the spiritual; rather, the spiritual is considered nobler than the corporeal by the spiritual, whereas the corporeal is considered nobler than the spiritual by the corporeal; yet it is not at all possible that the spiritual should be considered nobler by the corporeal, whereas it may indeed be possible that the spiritual, which we have said to be potential, is considered nobler by man than the corporeal, which we have said to be actual. (8) Evidence for the spiritual being nobler than the corporeal is that the spiritual indicates what will come to be in the future, whereas the corporeal only indicates what has come to exist at the present time. (9) When a person unites his faculties through the subtlest of things and makes them one, he will see the very thing he is seeing potentially in the same way as someone would see it actually. It is just because his faculties are separated that a man is prevented from seeing things in potentiality in the same way as the things he sees in actuality [...].[25]

Elsewhere,[26] I have demonstrated in detail how in this passage the adaptor uses a string of keywords taken from the Greek text (note the words in italics) in order to create a strict dichotomy according to which sleep is associated, among other things, with the "internal" perception of the future (i.e., veridical dreams) and with spirituality, whereas the waking state is associated with "external" perception of the present and with corporeality – which renders it

25 *Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 21b–22a; cf. Hansberger, "*Kitāb al-Ḥiss wa-l-maḥsūs*," 154, 161.
26 Hansberger, "*Kitāb al-Ḥiss wa-l-maḥsūs*," 153–58.

less "noble" than the state of sleep. Here, I want to focus on one particular aspect of this dichotomy: the association of the sleeping state (and of veridical dreaming) with "potential sense perception" (4, 6).

In the corresponding passage of the original *Parva naturalia*, Aristotle explains sleep with reference to waking – it is, as it were, the absence or privation[27] of waking – and to sense perception: waking is characterised by sense perception, sleep by the absence of it.[28] Hence, sleep is an affection of the perceptive part and applies to all beings with sense perception, i.e., to all animals.[29] While the Arabic adaptation preserves aspects of this idea, there are stark and crucial differences. In our passage it is not the case (as in Aristotle) that during waking, both internal and external perceptions are taking place, whereas they are absent during sleep; instead the adaptor distinguishes between two different kinds of perception, "external" versus "internal" perception (2). Internal perception during sleep constitutes potential perception, external perception during waking actual perception (4). The second half of this latter claim seems quite innocuous, but what does the adaptor mean by talking of a sleeper's sense perception as "potential"? In the parallel passage in *De somno et vigilia*, potentiality (or capacity) and actuality (*dýnamis*/*enérgeia*) are employed within a context where Aristotle argues that sleep and waking are common to body and soul: if waking and sleep are characterised in terms of the presence or absence of perception, then, given that perception affects both body and soul, both these states must belong to body *and* soul, too: waking as the state in which the perceptive capacity is actualised, and sleep as the state in which this capacity of the soul is present but not actualised (and, in fact, temporarily inhibited).[30] This argument is not taken up in the

27 στέρησίς τις (*Somn.Vig.* 1, 453b26): David Gallop (Aristotle, *On Sleep and Dreams*, 190) suggests that this formulation may indicate that we are not looking at a regular kind of privation (such as blindness), which would constitute a lack that is contrary to nature.

28 At least by the absence of perception "in the chief and unqualified sense" (*Somn.Vig.* 1, 454b13–14; cf. 2, 455a9–10). Aristotle allows for perceptions somehow reaching the perceptive part during sleep, causing dreams (*Somn.Vig.* 2, 456a24–26; *Insomn.* 3, 460b28–461a8; *Div.Somn.* 1, 463a10–17; 2, 464a6–19). A slightly different case are perceptions experienced dimly just before waking up; see *Insomn.* 3, 462a19–31.

29 *Somn.Vig.* 1, 453b31–454a4, 454a7–11.

30 In which sense exactly the state of sleep constitutes potential perception in Aristotle is not a trivial question. Since the capacity to perceive is still present, it ought to be potentiality in some sense of first actuality/second potentiality. On the other hand, it cannot be second potentiality *simpliciter*, given that sleep constitutes an impediment to sense perception (even in the presence of a perceptible object, e.g., a sound or a light touch, the sleeper's perception would not be activated). For discussions of the problem, though mainly related to knowledge rather than to perception, see Frans A. J. de Haas, "Recollection and Potentiality in Philoponus," in *The Winged Chariot: Collected Essays on*

passage from *Kitāb al-Ḥiss*,[31] which here merely picks out the keywords *dýnamis*/*enérgeia*. It furthermore seems clear that *Kitāb al-Ḥiss* does not refer to sleep, or to "potential perception," in the sense of a merely unactualised or temporarily suspended capacity of sense perception. "Potential perception" is rather set up positively as a different, alternative type of perception. It takes place during sleep and without movement, is "internal," more difficult, and has different objects from regular perception taking place during waking, which themselves are described as "potential" in contrast to the "actual" objects of perception (5). It is linked to "spirituality" (7), and as the adaptation explains further on, its objects are future things or events, which have not yet materialised in the corporeal world (8). This is a clear reference to veridical dreams,[32] which the adaptor thus prominently introduces into this passage at the beginning of the chapter.

In a broad sense this idea might yet be seen as derived from, or at least not entirely alien to, Aristotelian notions of sleep and dream. After all, in *De anima* sleep is linked to the potentiality of perception in so far as Aristotle uses sleep in order to illustrate that perception is spoken of in actuality as well as in potentiality.[33] On the other hand, Aristotle also speaks of dreaming as some kind of perception:[34] dreams, though not constituting perception in an unqualified way,[35] belong to the perceptual part (in its imaginative function);[36] they are appearances (*phantásmata*) based on affections previously produced

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Plato and Platonism in Honour of L. M. de Rijk, ed. M. Kardaun and J. Spruyt (Leiden: Brill, 2000), 165–84, and Miles F. Burnyeat, "'De Anima' II.5," *Phronesis* 47:1 (2002): 28–90. The case of the perceptive faculty seems to differ from that of knowledge in so far as there is no realistic scenario in which an animal in full possession of all its perceptive powers, and in a waking state, could be said to have an entirely unactualised capacity for sense perception: even if we were able to imagine a total absence of external sense objects, there would still be internal movements of the body to perceive, cf. *Somn.Vig.* 1, 454a3–4. Sleep thus seems to be the only obvious example Aristotle could use to illustrate an existing but unactualised perceptive capacity.

31 The conclusion is present in another fragment of the translation of this passage further down in the text (fol. 24b), but the argument itself is not reproduced.

32 In *Kitāb al-Ḥiss*, veridical dreams are described as dreams about future events only; this may be motivated, at least in part, by the possibility of creating a neat system where memory relates to the past, perception to the present, and veridical dreaming to the future (cf. *Kitāb al-Ḥiss*, *maqāla* 2.1, fol. 10b, and *Mem.* 1, 449b10–15). They furthermore must relate to *perceptions* (rather than intellectual knowledge) in order to fit within the remit of things that are dealt with by the post-sensatory faculties.

33 *De An.* 2.5, 417a9–13.

34 *Somn.Vig.* 2, 456a24–26.

35 *Insomn.* 1, 459a9–14.

36 *Insomn.* 1, 459a14–22.

by sense objects, which linger on in the sense organs when the perception is no longer actualised.[37] However, explaining the notion of "potential perception" that we find in *Kitāb al-Ḥiss* as a somewhat rough-and-ready combination of these two aspects of Aristotelian doctrine fails to capture some of the more significant points of the idea developed by the adaptor in our passage, in which he clearly deviates from Aristotle. To start with, the text here refers to predictive dreams only, i.e., to dreams that in fact do *not* go back to previous perceptions[38] as described in *De insomniis*.[39] This raises the question of whether the adaptor regards the term "perception" as implying that something constituting a perceptible object *is* in fact being perceived, which would not be the case in an ordinary dream. Ordinary dreams would then be missing from the account simply because they do not belong to the class of things the text is discussing in the passage. However, the description in T_{2a} (1), which is supposed to justify labelling dreams as "perceptions," fits both ordinary and veridical dreams. Furthermore, where the existence of non-veridical ("vain") dreams is acknowledged in other parts of *Kitāb al-Ḥiss*, they are explained in an exactly analogous way to veridical dreams, the only difference being their source (i.e., earlier perceptions as opposed to forms conveyed by the Universal Intellect).[40] Nowhere does *Kitāb al-Ḥiss* claim that veridical dreams are perceptions while other dreams are not; and ordinary dreams are described in the language of perception (especially that of seeing), just as veridical dreams.[41] It hence would perhaps go too far to assume that the adaptor holds a positive, explicit theory about ordinary dreams not counting as perceptions. It seems more likely that he simply ignores non-veridical dreams in this passage because they do not fit the strict dichotomous approach he is following here, contrasting perception of the present during waking with perception of the future occurring during sleep. In this system there is no room for ordinary dreams, even if they were excluded from the label "perception": it would still upset the adaptor's neat dichotomy to have to explain another perception-like phenomenon that also happens during sleep. However, this dichotomy not only means that perception during sleep is identified with veridical

37 *Insomn.* 2, 459a24–28.

38 Cf. T_1 above.

39 The relevant passage from *Insomn.* is not reproduced directly anywhere in *Kitāb al-Ḥiss*, but the thought that ordinary, non-veridical dreams are the result of previous perceptions is present in the text (see the following note).

40 See *Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 40b–41a, 46a–47a.

41 For instance: "Then the person who is having the dream-vision will believe that dream-vision to be true, and that thing he is seeing to be a reality, whereas it is entirely vain, and does not have any *maʿnā*." (*Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 40b.)

dreaming; the adaptor also spends much ink on driving home the point that this "potential" perception during sleep is "spiritual" and hence "nobler" than actual, "corporeal" perception (7). This fits in with another important aspect of the passage: the thought that sleep, by virtue of the absence of perception, constitutes a privation of the waking state – central to the point Aristotle is making in the corresponding passage – is being lost. Not only does potential perception seem to denote an actually occurring activity (i.e., veridical dreaming) rather than the mere potentiality or capacity for such an activity; in (1), waking is furthermore explicitly described as the absence of sleep rather than the other way round. This is not a slip of the pen: the potential is indeed considered primary ("nobler") in comparison with the actual (7), again a clear break with Aristotelian doctrine.[42] Here the text is reminiscent of the idea of a "potency higher than act" which the Arabic Plotinus claims for the intellectual realm:[43] in order to perform their acts of intellection, intellectual substances do not need to transfer from potentiality to actuality. That is only necessary for perception in the corporeal world – where things are wrapped in "shells" that first have to be penetrated.[44] There are enough points of contact with *Kitāb al-Ḥiss* – the involvement of the "Universal Intellect" in veridical dreaming, the adaptor's emphasis on its sublimity and "spirituality" in comparison with "corporeal" perception, and, of course, the notion of the "shells" that have to be stripped away – for us to assume that this concept of a "potency higher than act" may very well have been looming in the back of the adaptor's mind when working on the passage quoted above. This is all the more plausible given that, as mentioned above, *Kitāb al-Ḥiss* generally shares some characteristic traits

42 See the discussion of the priority of actuality at *Metaph.* 9.8, 1049b4–1051a3; cf. also the discussion at the beginning of *Metaph.* 9.9, 1051a4–19, of whether actuality or potentiality are "better." Aristotle does not only give a different, but also a more differentiated answer than *Kitāb al-Ḥiss*: actuality is better only in the case of good things; bad things are worse when actualised than when merely potential. However, actual bad things are by nature posterior to their potentiality; priority lies only with the actuality of the *positive* member of any pair of contraries.

43 See Peter Adamson, *The Arabic Plotinus: A Philosophical Study of the Theology of Aristotle* (London: Duckworth, 2002), 94–102; id., "Forms of Knowledge in the Arabic Plotinus," in *Medieval Philosophy and the Classical Tradition in Islam, Judaism and Christianity*, ed. J. Inglis (London: Routledge, 2002), 112–18. This is not the same as Plotinus' own distinction between the potential (*to dynámei*) and potency as power (*dýnamis*), for which cf., e.g., Richard Dufour, "Actuality and Potentiality in Plotinus' View of the Intelligible Universe," *The Journal of Neoplatonic Studies* 9 (2004): 193–218. The double use of the term *dýnamis* may, however, have been a contributing factor in the development of the Arabic adaptor's thoughts on this point (cf. Adamson, "Forms of Knowledge," 113).

44 See Plotinus (ar.), *Uthūlūjiyya Arisṭūṭālīs* (*Theology of Aristotle*), in *Aflūṭīn ʿinda al-ʿArab*, ed. A. Badawī, 3rd ed. (Kuwait: Wikālāt al-Maṭbūʿāt, 1977), 99–100.

with other texts produced in the circle of al-Kindī, and in particular with the Arabic Plotinus.[45] Nevertheless, it is not a complete fit: after all, the "potential perception" at issue here, that is, veridical dreaming, is still an activity carried out by the "spiritual faculties" rather than the (Universal) Intellect, and certainly is not something that would be going on incessantly. Nor is it completely detached from the Aristotelian concept of potentiality. Thus we read in (6) that "the sense perception of the sleeper, even though being potential, may emerge into actuality; although some of it will emerge in a clear and plain manner, while some of it will be difficult and unclear."

How are we to understand this sentence? What exactly is supposed to be actualised here? According to one possible option the remark would refer to the fact that in veridical dreaming the dreamer perceives something that is still potential but is guaranteed to become actual in the future, when it will also be *actually* perceived by the person who is now dreaming about it. It would hence focus on the potentiality/actuality of the perceived *object*; this would go well with clause (5), which in fact addresses the potentiality and actuality of objects of perception. However, on this reading it is problematic that in (6) the adaptor speaks of the *activity* of sense perception (*ḥiss*) rather than of the perceived and its emergence from potentiality into actuality. Hence one may ponder another interpretative option: that the text is referring here to the activity of veridical dreaming (i.e., of perceiving the form of a future perceptible), which may or may not become actualised during sleep. In any case, the idea that there may be some difficulty or lack of clarity connected with the actualisation (as suggested in (6)) could more easily be explained as signifying that a *dream* may be more or less clear (i.e., as a symbolic representation of the future event), than having it refer, as in the first interpretation, to the possibility that there might be some obscurity connected with the actual occurrence of the event in question or that it might be difficult to relate it back to the corresponding dream.

On this interpretation, (6) would therefore refer to *potential potential sense perception* as turning into *actual potential sense perception* – suggesting that the adaptor perhaps got somewhat entangled in his own notion of potential sense perception, a notion that vacillates between an unactualised capacity of sense perception and a higher form of perception in its own right. This does not, incidentally, need to invalidate or exclude the first interpretative option. In fact, the status of the object as still "potential" (in terms of its existence in the world) might yet have played a part in the adaptor's thoughts: if the object responsible for the actualisation of the perception is itself not actual but still

45 Cf. Hansberger, "*Kitāb al-Ḥiss wa-l-maḥsūs*," 148–51.

in potentiality, how could the resulting activity turn out to be anything but "potential"? Sentence (6) may well be an attempt on the adaptor's part to reaffirm the thought that in a veridical dream we *are* indeed having some kind of perception or perceptual awareness; this would also accord with the spirit of (9), where it is emphasised that such perceptions are on a par with and as valid as "actual" perceptions during waking. However, even here the adaptor balks at recognising the dream itself as something actual (in the sense in which dream images, once they are seen, would be actual in an Aristotelian reading): having a veridical dream only means seeing something "in the same way" as one would see it in actuality, i.e., if it were a regular sense perception.[46] Actuality proper is reserved for the perception of the sensible object that has actual existence in the outside world.

How, then, does Averroes deal with this passage and the tension it creates for the concept of potentiality? In the parallel passage of his *Explanatory Paraphrase*, correspondences can be clearly identified (and are indicated by the numbers referring to various phrases of T_{2a}), but there are also significant departures from the source text:

> [T_{2b}] (1, 4a) We say that sleep and waking can be given various descriptive accounts (*rusūm*). One of them is that sleep is potential sense perception. For it is apparent that the sleeper sees [or: believes] [in his dream] that he is eating and drinking and perceiving with all his five senses. Waking, however, is actual sense perception. From these two descriptive accounts it emerges clearly that sleep is the privation of waking. For what is potential is the privation of what is actual; (6, 8) but the sense perception that is potential during sleep may happen to emerge into actuality; this occurs in the case of true dreams and miraculous warnings. (7a) In these cases potential sense perception is nobler than actual sense perception. False potential sense perception, however, is lowly; the one that is actual is nobler than it. (4b) It seems to be the case, as Aristotle says, that actual perception is corporeal and potential perception spiritual. (7b) The corporeal is nobler for the corporeal perceiver, whereas the spiritual is nobler for those who are spiritual perceivers. The spiritual is not nobler than the corporeal in the eyes of the corporeal, nor is the corporeal nobler in the eyes of the spiritual perceiver. In an absolute sense, the spiritual is nobler than the corporeal. (9) Spiritual perception is not only found during sleep alone, but may also be found during waking

46 This could refer to the content of the dream, to the way it is subjectively perceived, or to both.

> when the three faculties are joint and united, as has been said before. (10) From these two descriptive accounts it emerges that these two potencies [i.e., sleep and waking] are one with respect to their subject, but two in essence and definition; their location is the sensually perceiving faculty, and they are common to soul and body.[47]

Rather than passing over the problematic notion of "potential sense perception" (given that it does not play much of a role in the rest of *Kitāb al-Ḥiss*, this would have been a possible option to consider), Averroes focuses directly on the claim that sleep is potential perception and waking actual perception (1). He neglects the point about internal and external perception made in *Kitāb al-Ḥiss* (2), and does not follow the adaptation in assuming that perception during sleep is generally "more apt and more correct" (3), nor in emphasising that "whatever is potential is hard to perceive, whereas what is actual is perceptible and can be known" (5). With all these points the adaptor suggests that there are two kinds of perception, one linked to sleep, one to waking, which can be distinguished by their objects (the spiritual – the future; the corporeal – the present), employ different methods (and "organs": internal vs. external senses), and can be compared with each other in terms of their "correctness." Averroes, by contrast, emphasises a more Aristotelian understanding of the relation between sleep and waking as well as between potentiality and actuality: "sleep is the privation of waking. For what is potential is the privation of what is actual" (1). It may not be unproblematic to describe the potential as the privation of the actual[48] (and Averroes has in fact a much more nuanced understanding of potentiality and actuality).[49] However, faced with the claim of his source text that waking is the privation of sleep (T_{2a} (1)), Averroes here clearly feels the need to rectify this, not just by returning to the reverse, original Aristotelian position, but also by supporting it argumentatively in pointing out that (if anything) it is potentiality that is the defective state, not actuality. In doing so, he also corrects the claim of *Kitāb al-Ḥiss* that the potential takes priority over the actual (T_{2a} (7)).

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47 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 57–58; ed. Blumberg, 52–53.

48 See, e.g., Mark Sentesy, "Are Potency and Actuality Compatible in Aristotle?" *Epoché* 22:2 (2018), esp. 243–47.

49 Cf., e.g., Averroes, *Middle Commentary on Aristotle's De anima: Talkhīṣ Kitāb al-Nafs*, ed. and trans. A. Ivry (Provo, Utah: Brigham Young University Press, 2002), 61–64 (ad *de An.* 2.5–6), and Averroes, *Long Comm. on De anima*, 135–36, trans. Taylor, 110–11 (ad *de An.* 2.1, 412a21–26), where waking and sleep are discussed as examples for actuality and potentiality.

Nevertheless, Averroes does not quite confine himself to this understanding of potentiality and actuality, according to which potential perception would mean merely the *absence* of all perception coupled with the possibility that it will occur when the sleeper awakes. Consider the third sentence of our passage. Where we would expect a straightforward explanation of why sleep is the privation of waking, we read instead: "For it is apparent that the sleeper sees [in his dream] that he is eating and drinking and perceiving with all his five senses." This seems to indicate that there must be more to "potential perception during sleep" than a mere lack of sense perception. Some activity *is* going on that somehow is a candidate for being described positively as "perception."

However, the continuation of the sentence (parallel to the difficult clause no. 6 in the adaptation) shows that for Averroes this does not preclude but rather reaffirms the understanding of sleep as a state of unactualised sense perception: in the case of veridical dreams, "the sense perception that is potential during sleep may happen to emerge into actuality."[50] While during sleep I see something *only* as a dream, I will perceive it actually in the waking state. Here the difference between potential and actual appears indeed to attach to the act of sense perception rather than to its object, even if the act's emerging into actuality also naturally presupposes the presence of the actually existing object.[51]

By defining potential sense perception in relation to actual perception, as perceiving something in a dream that one may or may not perceive later on in actual reality, Averroes also leaves room for ordinary dreams in his account: they are the (acts of) perception during sleep that will *not* emerge into actuality (in the sense of becoming actual in waking life). While this move makes the account more convincing than that of *Kitāb al-Ḥiss* in this respect, it also means that perception during sleep cannot *per se* be called "noble" except in the case of veridical dreams (in fact, false, deceptive dreams rank lower than actual sense perception during waking, (7a)). However, this then must also

50 *wa-l-ḥiss al-ladhī bi-l-quwwa fī l-nawm qad yattafiqu an yakhruja ilā l-fiʿl wa-dhālika fī l-manāmāt wa-l-indhārāt al-ʿajība*. Technically, the second part of the phrase could also be taken to mean "this occurs during dreams and miraculous warnings," in which case Averroes would be speaking of the actualisation of a potential for veridical dreaming during sleep. However, this would jar with the first part, where the position of *fī l-nawm* emphasises that during sleep the perception has the status of potentiality (whereas the point to be made would be that they are actualised even during sleep). It would further be at odds with (7a), where the potential status of veridical dreams is clearly maintained.

51 It should be noted, though, that the Hebrew translation of *Talkhīṣ K. al-Ḥiss* has a (probably spurious) reading of T_{2b} (1) which adds that "sense perception in potentiality" means sense perception "of things that are existent in potentiality" (Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 57; ed. Blumberg, 52).

apply to the epithet of spirituality, which is closely linked to that of "nobility." Thus, potential perception cannot simply be equated with spiritual perception, as the adaptor of *Kitāb al-Ḥiss* would have it. Perhaps this is one reason why Averroes expresses himself somewhat carefully on this last point: "It *seems to be* the case, *as Aristotle says*, that actual perception is corporeal and potential perception spiritual" (4b). For in Averroes' account, "potential perception" covers true *and* false dream-visions, whereas the attribute "spiritual" is preserved for true dream-visions only. This can be gathered from the information that "spiritual perception" may also occur during waking (9), a reference to prophetic visions, as can be gleaned from another passage of the text[52] (where, incidentally, the notion of potentiality does not play any role).

Averroes here risks disagreeing with (ps.-)"Aristotle" for the sake of maintaining the basic Aristotelian concept of potentiality and actuality. This also enables him immediately to get to the point that is in fact at stake in the passage from *De somno et vigilia*: sleep and waking both affect the faculty of sense perception, and therefore belong both to soul and body.[53] Rather than following *Kitāb al-Ḥiss* in establishing a second, metaphysically loaded, "spiritual" kind of perception, Averroes insists that potential perception during sleep is related to actual perception during waking in the usual way, as it were: in the case of veridical dreaming, potential perception has an equivalent actual perception in the waking state.

What about the mental activity taking place during dreaming, which has been labelled "potential perception" but which is more than just the absence of actual sense perception (1)? Taking the five-stage process "from perception to *maʿnā*" described in *Kitāb al-Ḥiss* (see section two above) as his starting point, Averroes describes dreams as reversed perceptions:

> [T_3] (1) We shall say that since the sleeper senses as if he were seeing, hearing, smelling, tasting, or touching while there are no external sense objects present, it must follow that in sleep this movement must have its origin where it ends up in waking. (2) And since in waking this movement originates with the external sense objects and finally ends up at the faculty of memory (which is the fifth stage), it follows that its origin must lie with that faculty – (3) except that the only faculty active during sleep is the imaginative one, since the faculties of thought and memory are not active during sleep. For this [imaginative] faculty is in permanent

52 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 88–89; ed. Blumberg, 84; trans. Blumberg, 49.

53 *Kitāb al-Ḥiss* takes considerably longer to get to that point (fol. 23a and, again, fol. 24b), after a rather more complicated argument; cf. n31 above.

> movement and unceasingly active conceptualising, creating similes, and transitioning from one image to the other [...] (4) From all this it is clear that, of all faculties of the soul, dream-vision, whether true or false, is primarily related to the imaginative faculty.[54]

During the regular perceptive process, the senses are affected ("moved") by the perceptible objects; this "movement" is then passed on to the common sense, the imaginative faculty, and so forth (2). In dreaming, however, the process runs in the reverse direction. It is not a strict reversal, though, as Averroes has to admit: rather than the faculty of memory, it is the imaginative faculty that drives the process, as this is the only faculty that remains active during sleep (3).[55] As Averroes goes on to explain, it takes a *maʿnā* of some previously perceived thing and represents it as an imaginative form, as the perceived form of a perceptible object. It thus "moves" the common sense faculty, which in turn "moves" the senses, so that the sleeper will get the impression that he is perceiving something with his senses.[56] This is possible in sleep and also, during waking, in states of fear or illness because the cogitative faculty is not active and has ceased to control the imaginative faculty.[57] Also, there is no constant stream of new perceptions to be processed by the imagination during sleep.

In this account of dreaming as reverse sense perception Averroes goes beyond his source text, which contains some of its elements – for example, the idea that the post-sensatory faculties are left freely to pursue their own actions during sleep, and that the "formative faculty" presents dream images to the common sense faculty – but does not string them together in the same systematic fashion. However, Averroes may have found inspiration in the works of al-Fārābī and Avicenna, who conceive of the dreaming process in similar ways.[58] One aspect in which Averroes' account (as well as those of his prede-

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54 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 73–74; ed. Blumberg, 68–69.

55 The reverse process furthermore does not go as far as to end up at the starting point of the perceptive process (i.e., the perceptible *object*), although Averroes does not comment upon this.

56 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 74–75; ed. Blumberg, 70; trans. Blumberg, 41. For the use of this passage by Albert the Great, see ch. 5 by Christina Thomsen Thörnqvist, 156–66.

57 The idea that the incapacitation of thought or reason plays a decisive role in dreaming is found also in Michael of Ephesus (see ch. 1 by Pavel Gregoric, 53–55), where, however, it affects the sleeper's judgement about the status of dream-perceptions rather than their occurrence in the first place.

58 Cf. Abū Naṣr al-Fārābī, *On the Perfect State* (*Mabādiʾ ārāʾ ahl al-madīna al-fāḍila*), ed. and trans. R. Walzer (Oxford: Clarendon Press, 1985), 210–27; Avicenna, *al-Shifāʾ* 2.6: *Avicenna's De anima, Being the Psychological Part of Kitāb al-Shifāʾ*, ed. F. Rahman (London: Oxford

cessors) departs from *Kitāb al-Ḥiss* is the thought that the imaginative faculty alone stays active during sleep (3); in *Kitāb al-Ḥiss* the faculties of thought and memory remain active as well as the formative faculty. Curiously, all three thinkers share the adaptation's assumption that the common sense also continues to be active, in its function as "screen" on which the dream images are played out – a striking development considering that Aristotle argues, in *De somno et vigilia*, that sleep must affect the primary perceptive part.[59]

For Averroes, the activity of dreaming is therefore an activity of the imaginative faculty: "dream-vision, whether true or false, is primarily related to the imaginative faculty" (4). The question whether it is, as such, actual or potential *sense perception* therefore seems to be misplaced. How, then, could Averroes justify his going along with his source in applying the label of "potential sense perception" to dreaming? First of all, Averroes may have regarded it as trivially true that every dreamer, *qua* sleeper, is in a state of potential sense perception. In thinking, beyond that, of the *dreaming activity* as "potential sense perception," two points may have made this move at least tolerable for Averroes: even if dreaming is primarily a matter for the imaginative faculty, the common sense faculty is still involved, albeit in an "inverted" fashion. Furthermore, the sense faculty's state of potentiality is, from this perspective, being considered in relation to specific, particular acts of perception concerned with specific objects. It is easy to see why this is an attractive move in the context of veridical dreaming, since it allows to formulate a relation between dream and future event: what is seen in a dream while it is as yet potential will later be seen in actuality. As indicated by the last phrase, this relation, however, only works via a reference to the *object* of perception.[60]

Averroes, then, does in the end leave firm Aristotelian ground with his take on dreams as potential sense perception. However, considering the starting position provided by *Kitāb al-Ḥiss* I think it is fair to say that he does much to

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University Press, 1959), 172–80. The process of reverse perception is furthermore similar to the way in which Avicenna accounts for hallucinations; cf. Ahmed Alwishah's contribution to vol. 1 (ch. 4, pp. 131–32).

59 *Somn.Vig.* 2, 455b2–13. This passage is, however, not properly rendered in *Kitāb al-Ḥiss* (there is just one insignificant fragment on fol. 33b). A point on which Averroes sticks with Aristotle (against Avicenna and also, it seems, against *Kitāb al-Ḥiss*, although there the evidence is less clear) is the seat of the common sense faculty, which he locates in the heart rather than the brain. The issue remains vague in *Talkhīṣ K. al-Ḥiss* (ed. Gätje, 46; ed. Blumberg, 42; trans. Blumberg, 26), but is stated clearly in *al-Kulliyāt fī l-Ṭibb* (*The Canon of Medicine*), ed. M.A. al-Jābirī, 2nd ed. (Beirut: Markaz Dirāsāt al-Waḥda al-'Arabiyya, 2008), 191–93; cf. Hansberger, "Averroes and the 'Internal Senses'," 139 and n11.

60 This would very well explain the presence of the alternative reading in the Hebrew translation (see n51 above).

"re-Aristotelianise" the concept. It is also worth noting that Averroes' misgivings about the idea seem to have won the day in the end: in both his *Middle* and *Long Commentary* on *De anima*, written in the early 1180s,[61] he gives up on applying the label "potential perception" to dreaming, explaining instead that it is neither perception in act nor in potency:

> [T_4] There is a sort of imagination which is not sensation in act or in potency, namely, the imagination which comes about in sleep. For it is evident that the imagination which is in sleep, insofar as it is in act, is not sensation in potency, and insofar as that act belongs to it without the presence of the sensible things, [imagination] is also not sensation in act.[62]

4 Veridical Dreaming as Acquisition of Knowledge

Characterising veridical dreaming as a kind of sense perception has a certain immediate plausibility to it, not just because of the perceptive quality that dreams have when we experience them, but also because veridical dreams are supposed to concern particular (future) events,[63] that is, things that we would normally access through sense perception. A perhaps more general and usual way to capture what veridical dreams are and do is to say that they provide the dreamer with knowledge about the future. What makes them so special is, of course, that this is a sort of knowledge we are not capable of achieving on our own, exactly because we cannot perceive things that are as yet non-existing.

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61 For the dating see Ruth Glasner, review of *Averroës: Middle Commentary on Aristotle's De anima*, ed. and trans. by A. L. Ivry, *Aestimatio* 1 (2004): 57–61.

62 Averroes, *Long Comm. on De anima*, 366–67 (trans. Taylor, 280). Cf. also Averroes, *Middle Commentary on De anima*, 103–4 (trans. Ivry): "Firstly, since there are two kinds of sensation: potential sensation, like sight in the dark when its activity is not functioning, and actual sensation, like sight in the light – and since something may occur in imagination which is neither of these (that is, [not] potential and [not] actual sensation), namely, the imagination which obtains in sleep, it is clear that imagination is other than sensation."

63 Averroes stresses that veridical dreams only concern particular things – *umūr kā'ina*, "matters that are coming-to-be" (*Talkhīṣ K. al-Ḥiss*, ed. Gätje, 72, 77; ed. Blumberg, 67, 73; trans. Blumberg, 40, 43); furthermore, these particulars lie in the future at least "in most cases" (ed. Gätje, 76, 93; ed. Blumberg, 71, 88; trans. Blumberg, 42, 51). Such dreams cannot convey theoretical knowledge: if it were possible to gain theoretical knowledge in this way, it would make human intellection useless (ed. Gätje, 93–94; ed. Blumberg, 89–90; trans. Blumberg, 51–52). This interesting point is discussed, within the wider context of Averroes' account of prophecy in general, in Taylor, "Averroes and the Philosophical Account of Prophecy," 295–304.

While traditional accounts of veridical dreaming content themselves with gesturing towards a deity or other supernatural figure that simply sends such dreams to selected people, *Kitāb al-Ḥiss* undertakes to give a more ambitious philosophical explanation of how this would actually work.[64] Nevertheless it retains a strong sense of the supernatural, divine, and unaccountable character of veridical dreams, emphasising the gap that exists between the "spiritual" knowledge they supply and the ordinary type of information we access through our senses and faculties.

Averroes is apparently not entirely satisfied with the explanation offered by *Kitāb al-Ḥiss*, especially when it comes to the ultimately unaccountable "flow" of forms and *maʿānī* from the Universal Intellect to sleeper and interpreter. He undertakes to investigate in a more systematic fashion what causes veridical dreams – and he does so with reference to the normal process of knowledge acquisition.[65] Given this approach, it seems only natural for Averroes to resort to two other Aristotelian works, *Analytica posteriora* and *De anima*, in order to sort out the question that he finds insufficiently treated in *Kitāb al-Ḥiss*:

> [T_5] (1) Let us now consider the productive causes of these two classes of dream-vision.[66] (2) We shall say: since a true dream-vision indicates knowledge of the existence of something whose existence is naturally unknown to us before we gain this knowledge, and which, at the time when the knowledge is gained, is mostly not [yet] existent, and since this newly gained assent (*taṣdīq*) belongs to us after we have been ignorant of it, it does not come [to us] as the result of previous knowledge that we had and that could have produced it, nor after a process of thinking and deliberation in the manner in which assenting or conceptual knowledge is [usually] generated, which comes to us as a result of premises. (3) For it has been stated clearly in *Analytica posteriora* that assenting or conceptual knowledge (*taṣdīq/taṣawwur*) is naturally preceded by two kinds of knowledge: the productive (*fāʿil*) and the preparatory (*muwaṭṭiʾ*). (4) However, this [kind of] knowledge gained during sleep clearly is not preceded by the productive kind [of knowledge]. Whether it is preceded by the preparatory kind will need to be examined.[67]

64 See section two and T_1 above.

65 For Averroes' account of knowledge acquisition and its relation to *Talkhīṣ K. al-Ḥiss*, cf. also Richard C. Taylor, "Averroes on the Attainment of Knowledge," in *Knowledge in Medieval Philosophy*, ed. H. Lagerlund (London: Bloomsbury Academic, 2019), esp. 60–62.

66 I.e., true and false dreams; the latter are dealt with briefly on the last two pages of the chapter (*Talkhīṣ K. al-Ḥiss*, ed. Gätje, 95–96; ed. Blumberg, 91–92; trans. Blumberg, 52–53).

67 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 75–76; ed. Blumberg, 71.

Averroes here labels the knowledge conveyed by a veridical dream as "assent" (*taṣdīq*), thus referring to the division of knowledge into the two categories of assenting and conceptual knowledge (*taṣdīq/taṣawwur*) common in Arabic logic since al-Fārābī.[68] A veridical dream deals in truths, it tells us that something is (or will be) the case, rather than just helping us with the conceptualisation of things. The reference to this distinction already evokes *Analytica posteriora* 1.1–2, which is likely to be one of the Greek source texts behind it.[69] However, Averroes' explicit reference to *Analytica posteriora*[70] (3) aims at another point: Aristotle's claim that all newly gained knowledge must be based on pre-existing knowledge. Aristotle here furthermore declares that we need "to be already aware of things in two ways,"[71] either by knowing *what* something is, or by knowing *that* it exists (or by both). This differentiation is already captured by the distinction between assenting and conceptual knowledge, but Averroes goes one step further and introduces yet another distinction that does not map exactly onto the first one. Both types of knowledge, he finds, are produced from "preparatory" (*muwaṭṭi'*) knowledge and "productive" (*fā'il*) knowledge.[72] Averroes does not explain the distinction any further, but what he seems to have in mind in the present context is the distinction between knowledge of the necessary concepts and the particular, sensible premises on the one hand (i.e., the preparatory knowledge),[73] and the decisive piece of knowledge that brings about a new insight on the basis of that preparatory knowledge, thus effecting the move from ignorance and potential knowledge to actual knowledge, on the other.[74] In the case of true dream-visions foretelling the future, we are dealing with something that could not be produced naturally by our previous knowledge (2). In particular, we do not possess knowledge that could act as a productive cause of such knowledge (4) (or else we could not remain ignorant about it). Where does it come from, then? Averroes concludes that we must acquire it in a manner analogous

68 Cf., e.g., Harry Austryn Wolfson, "The Terms *taṣawwur* and *taṣdīq* in Arabic Philosophy and Their Greek, Latin and Hebrew Equivalents," *The Moslem World* 33:2 (1943): 114–28.

69 See Wolfson, "The Terms *taṣawwur* and *taṣdīq*," 121–23 (on 121, Wolfson refers to *APr.* 1, 1–2 by mistake).

70 *APo*. 1.1, 71a1–17.

71 *APo.* 1.1, 71a11; Aristotle, *Posterior Analytics*, trans. J. Barnes, in *The Complete Works of Aristotle*, ed. J. Barnes (Princeton: Princeton University Press, 1984), 114.

72 Averroes also makes this distinction in his *Long Commentary* on *Analytica posteriora*; see Averroes, *Sharḥ kitāb al-Burhān wa-Talkhīṣ al-Burhān*, ed. ʿA. Badawī (Kuwait: al-Majlis al-Waṭanī li-l-thaqāfa wa-l-funūn wa-l-ādāb, 1984), 166–67, 171.

73 See below, T_{11}.

74 The way in which knowledge is "productive" differs according to whether it precedes conceptualisation or assent (Averroes, *Sharḥ kitāb al-Burhān*, 168).

to the one other case in which we obtain knowledge without possessing the productive knowledge ourselves: the first principles that are fundamental to our intellectual operations, and that are provided by the Agent Intellect:

> [T_6] (1) If this knowledge is gained by us after we have been ignorant of it, and is actually present after having been in the state of potentiality, and if there is no knowledge in us that could produce this knowledge, it is clear that our acquisition of this knowledge is like the acquisition of the first premises. (2) If it is so, then it follows necessarily that both have one and the same productive [cause], belonging to one and the same genus. (3) And since it has already been explained in the general accounts[75] that every thing that emerges from potentiality into actuality has a productive cause that lets it emerge [into actuality] and that must needs be of the same genus as the thing which is emerging from potentiality into actuality, it follows necessarily that the productive [cause] of this knowledge is actual intellect (*ʿaql bi-l-fiʿl*), and the very same one that provides [us with] the universal principles in theoretical matters, and whose existence has been explained in *De anima*; (4) for both instances of giving belong to the same genus.[76]

Placing the knowledge acquired in a veridical dream on a par with the knowledge of first principles, just on account of the fact that both types of knowledge are gained in the absence of any previous knowledge that could produce them, turns out to be an ingenious move on Averroes' part. The argument, developed in (3), leading to the conclusion that the productive cause of such knowledge must be the Agent Intellect, would not that obviously have worked for a type of knowledge that concerns particulars rather than intelligible universals. It is thus only by piggy-backing on the primary principles that true dream-visions can claim their cause to be the Agent Intellect – under the assumption (4) that "both instances of giving belong to the same genus" (a point we will come back to below). The crucial difference is touched upon by Averroes in the continuation of the text, where he states – as if it were an issue of minor importance – that in the case of a divinatory dream, the Intellect furnishes us not with principles for acquiring knowledge, but directly with the specific instance of knowledge itself:

75 A reference to Aristotle's *Ph.* 3, 1–3.

76 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 76–77; ed. Blumberg, 71–72.

> [T_7] The only difference between them is that in the field of theoretical knowledge, it provides the universal first principles that produce the as yet unknown knowledge, whereas in our case here it provides the as yet unknown knowledge [itself], without mediation.[77]

The most problematic aspect of this knowledge (masked here somewhat by Averroes' formulation), and perhaps the most problematic aspect of the entire theory of divinatory dreaming that springs from *Kitāb al-Ḥiss*, is, however, its *particular* nature. The adaptation of the *Parva naturalia* does not broach the question of how the Universal Intellect is supposed to convey particular forms or *maʿānī* to dreamer and interpreter; the text does not show any awareness of the problem.[78] Within the argument in texts T_6 and T_7, Averroes may seem to play down the difficulty; later, however, he addresses it head-on, laying out the difficulty in clear detail:

> [T_8] (1) We say: if it appears that what provides this knowledge is an intellect free from matter, and given that it has been explained in the divine sciences that these separate intellects only think universal natures and can only provide things similar to what is within their own substances, it will not be possible for them to provide [us with] an individual *maʿnā* at all, since the perception of such a particular *maʿnā* is not in their natures. (2) Those universal forms are only individualised in matter, I mean in the sense that they can only subsist in matter. (3) If the separate intellects possessed individual perception, they would necessarily be material, so that they could only perform their activity through active and passive contact. (4) If, however, those intellects do not think the individual *maʿānī*, then how, I beg to know, does the Agent Intellect (*al-ʿaql al-fāʿil*) provide this individual form that is specific to a certain time and location and to one [particular] group of people, or to one individual of that group?[79]

This question is then linked to a second one: why is the knowledge conveyed in a veridical dream only ever granted to someone concerned with the events and things in question, rather than to any or every person, in the way in which knowledge of universals is open to any human being?

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77 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 77; ed. Blumberg, 72.

78 It is furthermore not as explicitly addressed in al-Fārābī or Avicenna. For the latter's approach, cf. ch. 2 by David Bennett, 92–97.

79 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 78–79; ed. Blumberg, 74.

> [T_9] (1) For we see that a man only perceives such things, and gets warnings in [his] sleep about their occurrence before they happen, in so far as they are specific to his body or soul or to his relations or the people of his city or nation, or generally to what he knows. (2) Thus there are doubts here on two counts: for one thing, how are particular things acquired from the universal nature; and secondly, why are these acts of providing specific particulars specific to the person to whom the knowledge about them is given?[80]

Averroes devotes a lengthy and careful discussion to the first problem, in a long passage that is completely independent of *Kitāb al-Ḥiss*,[81] but in which he again makes explicit use of other works from the Aristotelian corpus: the *Physica* and *De generatione et corruptione*,[82] as well as what Averroes here calls *Kitāb al-Ḥayawān wa-l-nabāt* (*Book of Animals and Plants*), the specific reference probably being to book one of *De partibus animalium*.[83]

Briefly put, Averroes explains that the concrete particulars which are predicted by veridical dreams have determinate causes (rather than occurring by chance). Therefore they have a "universal intelligible nature"[84] which is their primary cause and can be comprehended intellectually. As it happens, we cannot in fact comprehend these things because their origins are too far removed from us in time and we do not know their determinate causes (even though these do exist).[85]

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80 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 79; ed. Blumberg, 75.

81 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 80–85; ed. Blumberg, 75–80; trans. Blumberg, 44–47.

82 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 80–81; ed. Blumberg, 76; trans. Blumberg, 44. The references seem to be to *Ph.* 2.5 and *GC* 1.1 and 2.10; cf. Blumbergs annotations in Averroes, *Epitome of Parva naturalia*, 106–7.

83 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 81–82; ed. Blumberg, 76–77; trans. Blumberg, 45. The Arabic *Kitāb al-Ḥayawān* comprises translations of *Historia animalium*, *De partibus animalium*, and *De generatione animalium*. Averroes' *Middle Commentary on the Book of Animals* (*Talkhīṣ Kitāb al-Ḥayawān*), completed in 1169, i.e., around the same time as *Talkhīṣ K. al-Ḥiss*, only deals with the parts equivalent to *De partibus animalium* and *De generatione animalium* (see Di Giovanni, *Averroè*, 243). It is not clear whether the unusual title is meant to refer to the spurious *De plantis* as well, or whether it merely reflects that the claim Averroes wants to refer to specifically also applies to plants: the reference here seems to be to the first book of *De partibus animalium* (*The Arabic Version of Aristotle's Parts of Animals: Book XI–XIV of the Kitāb al-Ḥayawān*, ed. R. Kruk (Amsterdam: North Holland Publishing Company, 1979), 11–12, cf. *PA* 1.1, 641b26–642a1), where Aristotle explains that living beings are not generated by chance, but each from its seed, i.e., from definite causes.

84 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 82; ed. Blumberg, 77.

85 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 82–83; ed. Blumberg, 78; trans. Blumberg, 45.

What takes place when a veridical dream occurs, Averroes goes on to argue, is not that the Intellect provides us with the particular form and/or *maʿnā* of the event concerned (as it is seemingly claimed in *Kitāb al-Ḥiss*). Instead the Intellect conveys the "universal nature" accounting for the causation of the particular future event; the imaginative faculty of the soul will receive it as a particular, since the faculty is itself enmattered – in an analogous way to the reception of forms (specifically souls) in matter. The process thus resembles very much that of regular knowledge acquisition:[86]

> [T_{10}] (1) If all this has been confirmed, it will not be objectionable [to claim] that the separate Intellect provides the imaginative soul with the universal nature which belongs to that individual thing that will come into being, I mean: the intelligible [account] of its causes; then the imaginative soul will receive it as a particular by virtue of its [i.e., the soul's] being in matter. (2) Sometimes it will receive the individual of that intelligible itself in reality, and sometimes it will receive an imitation of it. (3) Just as [the Intellect] provides the perfections of the soul as universals and matter receives them as particulars, so it gives, in this case, the final perfection to the imaginative faculty as a universal, and the soul receives it as a particular.[87]

With this account of divinatory dreaming, can Averroes maintain what he has said in T_7, that is, that in the case of a veridical dream, the Intellect gives us knowledge about the particular thing or event concerned, without mediation? Strictly speaking, no, if one considers the issue from the perspective of the giver: the Intellect *gives* a universal (3). However, the matter looks different when regarded from the perspective of the recipient. The imaginative faculty receives the knowledge as a particular, and directly so. It does not need to perform any intermediary steps of deliberation and thinking in order to arrive at the result. In that sense, it is indeed given a specific instance of particular knowledge, without mediation. At the same time, Averroes' move to say that the Intellect *gives* a universal helps with the argument in T_6, especially with the important premise that "both instances of giving [i.e., primary premises and divinatory dreams respectively] belong to the same genus" (4).

This solution to the first puzzle raised in T_9 would allow Averroes to hold on to the thesis that divinatory dreams reveal knowledge about particulars, while at the same time avoiding the ascription of knowledge of particulars

86 Cf. Taylor, "Averroes on the Attainment of Knowledge," 61–62.

87 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 84; ed. Blumberg, 79.

to a separate intellect. However, his suggestion is not entirely unproblematic. To begin with, there is the question how the truth of the prediction can be guaranteed – usually the task of the divine source of a veridical dream. In *Kitāb al-Ḥiss* this is achieved by positing a direct relation of representation holding between "intellectual form" and dream as well as between "intellectual form" and future perceptible (T_1), with the unacknowledged difficulty that this seems to require "intellectual forms" of particular character (the very problem Averroes is trying to redress). As Averroes apparently envisages the process, the Agent Intellect provides a universal intelligible that, in combination with knowledge of certain sensible premises, brings about perfect knowledge of the causal chain[88] leading up to a certain event – manifesting itself in the dream representing the outcome. (Averroes compares this to a physician drawing inferences concerning a patient's future state of health by applying his universal knowledge of medicine to the particular situation of the patient.)[89] The necessary sensible, particular premises are, however, not conveyed as part of the dream (and certainly not by the Intellect) but are supplied by the dreamer's "preparatory knowledge."

This preparatory knowledge, which was touched upon briefly in T_5, is brought up by Averroes explicitly in relation to the second puzzle raised in T_9, that is, why veridical dreams only occur to people concerned with their subject matter. As it turns out, the preparatory knowledge is the decisive factor in this respect: only those people who have a link to and an interest in the particular event that is being foretold will have the necessary preparatory knowledge which, together with the productive knowledge supplied by the Intellect, will result in actual knowledge about the event.

> [T_{11}] Why is it that of [all] these things, a person will only perceive what is specific to his time and place, land, and people, but not all the other particular things that share with them [their] universal nature? The reason for this is that in case of such a perception, one of the two types of knowledge that precede assent must doubtless be present in the person, namely the knowledge that prepares for the assent, I mean the knowledge of prior conceptualisation. For such information and knowledge will only occur to a person as far as it concerns individuals he has known

88 As in *Kitāb al-Ḥiss*, the possibility of veridical dreaming presupposes that the events predicted by the dream are fully determined. However, Averroes has already excluded things that occur by chance from being possible objects of veridical dreaming (see above). Nevertheless, his account seems to imply that it should be impossible to substantially alter or avoid the fate that such dreams predict.

89 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 85; ed. Blumberg, 80; trans. Blumberg, 47.

> before and in particular those for whom he has already developed a concern. With respect to those [individuals] that are unknown to him, however, knowledge as to what will happen to such an individual cannot possibly come to him. For even though it is not a condition for such an assent that it be preceded by any productive knowledge in the person [concerned], it inevitably is a condition for it that it be preceded by preparatory knowledge.[90]

This contrasts with *Kitāb al-Ḥiss*, where the fact that a divinatory dream is experienced by a specific individual is seen as the direct result of God's providential care, the cause behind such dreams, which come about quite independently of any previous knowledge of the dreamer. Moreover, Averroes' source does not even conceive of such dreams as restricted to people who are directly affected by their content, but is more open as to the scope of their message:

> [T_{12}] If someone says: "Why does God let these [forms] appear within dream-vision?," we say: because their appearance constitutes signs (*āyāt*) and indications (*'alāmāt*) and an alert for the particular soul. Sometimes such a dream-vision is an alert for a particular soul only; sometimes it is a sign and an indication of some event that will happen in the [whole] world, and sometimes it is [a sign] of something that will happen to a certain man specifically, be it a punishment, or some good that will come to him, or some evil that will befall him. Sometimes the dream-vision concerns both him and the [whole] world together, and sometimes it concerns something else.[91]

In restricting dreams to people with the relevant preparatory knowledge, Averroes thus deviates once again from his source. He does so for a reason, though: this step is vital for his explanation of veridical dreaming as analogous to ordinary knowledge acquisition through the interplay of the necessary preparatory knowledge and the universal knowledge provided by the Agent Intellect. His account further contrasts with *Kitāb al-Ḥiss* in that it goes beyond a mere reliance on the thought that those who will be affected by a future event will benefit most from foreknowledge about it – which would make divine providence the sole decisive factor in the matter. Within Averroes' attempt to explain veridical dreaming as a case of knowledge acquisition there is not much room for such an element. After all, the mere fact that we may

90 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 85–86; ed. Blumberg, 80–81.

91 *Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 41a–b; cf. Hansberger, "How Aristotle," 55.

reap benefit from gaining knowledge as such, sadly, plays no causal role in our success in acquiring it. The appropriate previous "preparatory" knowledge, however, obviously does. Averroes thus has identified a factor that can plausibly explain why the universal provided by the Intellect will be converted into a veridical dream in the case of one person, but not the other – and why veridical dreams only ever concern matters that the dreamer is directly involved with (as is his contention).

However, the notion of preparatory knowledge also introduces certain problems. It is not intuitively plausible that the truth of such a divinatory dream could be guaranteed convincingly, if so much work is to be done by the preparatory knowledge of the dreamer – especially considering that divinatory dreaming was supposed to be an ubiquitous phenomenon, experienced by all and sundry rather than by particularly well-informed people or trained experts (like the physician featuring in Averroes' comparison).[92]

Another worry in this context concerns once again the claim that in a veridical dream the Agent Intellect conveys the particular knowledge directly, "without mediation" (T_7). Perhaps Averroes merely refers to the fact that there is no conscious thinking process involved; nevertheless it is hard not to see the final outcome, the knowledge conveyed by the dream, as somehow or other mediated by the preparatory knowledge of the dreamer.

This point touches on the question of what exactly must happen in order to bring such a dream about and what renders it the miraculous phenomenon that it is supposed to be.[93] It is the Agent Intellect that is portrayed as the source of the revelation, the giver of the dream. However, considering that its contribution is simply an intelligible universal, this cannot take the form of a separate, specific act of conveying that intelligible to the dreamer; in principle, this universal will be constantly and universally available. This seems to give the preparatory knowledge an even more crucial role. Do we have to assume a certain automatism, with veridical dreams ensuing once people have acquired the suitable preparatory knowledge? Not quite; as Averroes points out, the ability to have true dreams also depends on a person's imaginative faculty, which again is dependent on his or her humoural constitution;[94] a further

92 According to Averroes, "there is not a human being who has not seen a dream-vision warning them about what will happen to them in the future," which is why denying the existence of such dreams would be as absurd as denying that of sense perceptions (Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 71; ed. Blumberg, 66).

93 The possibility of obtaining knowledge through a dream gives, Averroes says, occasion for astonishment and intense investigation (*Talkhīṣ K. al-Ḥiss*, ed. Gätje, 77; ed. Blumberg, 72; trans. Blumberg, 43).

94 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 91–92; ed. Blumberg, 86–88; trans. Blumberg, 50–51.

factor is the specific situation of the imaginative faculty during sleep.[95] But in any case it seems that no further *divine act* is required and, moreover, that there is no specific act solely responsible for the occurrence of a particular divinatory dream, which instead appears to be the outcome of the interplay of several factors. While this may well be regarded as a manifestation of the general workings of divine providence in the world,[96] it would still constitute a quite radical revocation of the idea, maintained in *Kitāb al-Ḥiss*, that such dreams are individually intended manifestations of God's solicitude for mankind. (If anything, such solicitude must manifest itself more in ensuring that a person assembles the necessary preparatory knowledge than in the supply of the anyway generally available intelligible universal through the Intellect.) However, this may well have been a price that Averroes was very willing to pay.[97]

With his investigation into the causes of divinatory dreams Averroes therefore develops an interpretation of the theory found in *Kitāb al-Ḥiss* that alters it considerably. Discussing veridical dreams as cases of knowledge acquisition and grounding them in Aristotelian epistemology allows him not only to clarify (and rectify) a number of points that are problematic or unsatisfactory in his source text, but also to reduce the aura of the sublime, miraculous, and unaccountable that at times surrounds the topic in *Kitāb al-Ḥiss*. Veridical dreaming becomes, at least in principle, fully explicable within Averroes' Aristotelian framework, without leaving the need to appeal to a deity that would determine the receivers of such dreams on an individual basis, or having to leave open the question of how exactly the individual instances of veridical dreams could be caused if a providential force operating in nature were solely responsible for them. As with knowledge acquisition in general, veridical dreams are a result of the activity of the Agent Intellect, and of our own individual aptitude, preparedness, and situation. What gives this kind of knowledge acquisition its miraculous air is that it circumvents the normal processes of deliberation and learning (which makes it available to people of all shades of intellectual aptitude), resulting in a dream image that may well be enigmatic rather than in propositional knowledge, and taking place at a time when

95 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 87–88; ed. Blumberg, 82–84; trans. Blumberg, 48–49. In exceptional cases, however, such visions can also be seen during waking (Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 88–89; ed. Blumberg, 84; trans. Blumberg, 49).

96 This divine providence Averroes assumes to be responsible for the phenomenon in general (Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 78, 89; ed. Blumberg, 73, 84; trans. Blumberg, 43, 49); see also below section five.

97 Cf., e.g., Peter Adamson, "Averroes on Divine Causation," in *Interpreting Averroes*, ed. P. Adamson and M. Di Giovanni (Cambridge: Cambridge University Press, 2019), 198–217.

intellectual operations are shut down.[98] However, it is miraculous in the sense of being unusual rather than being inexplicable;[99] Averroes at least attempts to account for every aspect and detail within his epistemological and psychological framework. In this, he shows himself to be very true to the Aristotelian spirit of *De divinatione per somnum*, and rather detached from that of *Kitāb al-Ḥiss*. One may hence wonder how much of the "divine" veridical dreams really retain in his view. However, while the general sentiment of his treatment is pretty close to Aristotle's – veridical dreams ought to be explained within the rational limits of philosophy – there is a difference that may be crucial here. Aristotle attempts to explain veridical dreams within the framework of perception and imagination, whereas Averroes does so within the framework of knowledge acquisition. He thus takes much more seriously the claim to an independently guaranteed truth that attaches to these dreams; and given that in his world, knowledge and truth, and the intellectual source of the dream belong to the realm of the divine, the label "divinatory" may yet be merited by veridical dreams within his system of thought.

5 Veridical Dreams as Imitations of Reality and Their Miraculous Character

Divinatory dreams, especially if considered as vehicles of knowledge acquisition, have an inconvenient feature: they are not always easily understood (hence the need for dream interpreters). This point has been touched upon already in T_{10} (2), and leads to the question in which way exactly a true dream "indicates knowledge." Put differently: why does a veridical dream sometimes show us things not as they really "look like," but in a different form? The problem reflects the circumstance that people did not expect veridical dreams to depict future events exactly, but understood them as symbolic dreams that needed to be interpreted.[100]

98 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 73; ed. Blumberg, 69; trans. Blumberg, 41.

99 Cf. n93 above, where Averroes combines the presence of just astonishment with the exhortation to investigate these matters thoroughly. This attitude also fits Averroes' discussion of miracles in *The Incoherence of the Incoherence*: when a prophet performs a miracle, he does not break the laws of nature, but does something which, though possible in itself, is impossible for normal human beings to do. See Averroes, *Tahāfut al-Tahāfut*, 515, trans. van den Bergh, 1:315.

100 Cf. section six of chapter two by Filip Radovic in this volume.

The question of why divinatory dreams do not depict things exactly as they will present themselves in real life, once they come to pass, is already broached by *Kitāb al-Ḥiss*:

> [T_{13a}] Now if someone says: "[Assuming] a man sees the land of the Franks, the land of the Greeks, or Africa in a dream, without ever having seen them with [his] sense[s]. Then perhaps when he later does see them with [his] sense[s], they will not be as he has seen them in his dream. In that case, one of two alternative explanations must apply: either the form he has seen in his dream is not like the one he has seen during waking; or it is the same, but the formative [faculty] has committed a mistake" [...].[101]

Averroes puts it more dryly:

> [T_{13b}] Why, in most cases, does the imaginative faculty not convey the real individual *maʿnā* which falls under the universal which the intellect emanates, but only conveys the *maʿnā* that imitates it?[102]

Kitāb al-Ḥiss suggests as a solution that the three elements concerned – "intellectual form," "spiritual form" (dream), and "corporeal form" (actual event) – stand in a relation of representation to each other, being images of each other:

> [T_{14a}] [...] we will answer: (1) The formative [faculty] has not been mistaken about the form of this city which he has seen within the confines of dream-vision, <as> it is indeed the one which he has [later] seen during waking, (2) because every corporeal object of perception has two forms, one spiritual and one corporeal, the spiritual form being inside the corporeal form. Just as the corporeal form of the city is an image of the spiritual form of the city, which is inside it, likewise the spiritual form is an image of the intellectual form. Hence, if you see a form within the confines of dream-vision in the way I have described then you will only see your internal form, because the intellect has dressed up its own [i.e., the intellectual] form, and has embellished it with spiritual words, whereupon the common sense conveys those words to the formative [faculty] so that it represents that form. Hence when the common sense sees those words and recognises them as it here recognises corporeal

101 *Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 42a; cf. Hansberger, "The Arabic *Parva naturalia*," 72.
102 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 86; ed. Blumberg, 81.

> words and their written representation (*rasm*), it presents them to [the faculty of] memory.[103]

Remarkably, this approach places the spiritual form "inside the corporeal form," while regarding the corporeal form as an image of the spiritual form (which again is an image of the intellectual form) (1). This has to do with the adaptor's spiritual-corporeal hierarchy: the corporeal form is equated with "shells" that have to be cleared away to arrive at the pure reality of the spiritual "core." The existence of these two forms explains why the representation one sees in a dream may not look identical to the "corporeal" manifestation of the thing in question. What is particularly interesting for us in this context is the rather Platonic concept of imitation: the corporeal is the image of the spiritual, which means: the "real" event in this world will be the imitation of the dream (or at the very least of the corresponding "intellectual form") rather than the other way round.[104]

Averroes reinterprets the two-form-solution offered by *Kitāb al-Ḥiss*, dropping the Platonism in the process:

> [T_{14b}] This is because the perceptible object has two forms: a spiritual one, which is the form that imitates it; and a corporeal one, which is the form of the perceptible thing itself, not the form that imitates it. The form that imitates [it] is more spiritual, because it is closer to the universal nature than the real form of the thing. Therefore the imaginative soul receives the intelligible *maʿnā* with the most perfect spirituality its substance is capable of receiving. Sometimes it may receive it in a corporeal manner, so that the dreamer sees the form itself in his sleep, not what imitates it.[105]

Thus, he emphasises explicitly and repeatedly that the spiritual form (i.e., the dream) is the image, whereas the corporeal form is the reality, the "real form of the thing." The imitating form[106] is "spiritual" because it is closer to the universal; this proximity, however, does not mean that it is "imitated" by

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103 *Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 42b; cf. Hansberger, "The Arabic *Parva naturalia*," 72–73.

104 On this point, cf. also Hansberger, "Representation of Which Reality?" 113–20.

105 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 86–87; ed. Blumberg, 81–82.

106 *al-ṣūra al-muḥākiyya*. Here again Averroes will have drawn on al-Fārābī, who was the first to describe the activities of the imaginative faculty in terms of "imitation" (*muḥākāt*); see al-Fārābī, *On the Perfect State*, 214–27; cf. Hans Daiber, "Prophetie und Ethik bei Fārābī (gest. 339/950)," in *L'homme et son univers au moyen âge*, ed. C. Wenin (Louvain-la-Neuve: Institut supérieur de philosophie, 1986), 2:729–53.

the corporeal form. Averroes' additional remark that sometimes the imagination does receive the *corporeal* form itself (i.e., the dream depicts things just as they will look like in real life) leaves it open to speculation whether a greater degree of spirituality is always a better (or at least more useful) thing – after all, veridical dreaming is all about gaining information about one's real future life, and from this point of view an imitation may well seem only second-best to a true depiction. Thus, the term "spiritual" again appears much less elevated in Averroes than in the text he is paraphrasing.

Averroes still acknowledges the special achievement of the imaginative faculty during sleep, linking it to spirituality: "the action of the imaginative faculty is more perfect and more spiritual during sleep."[107] However, he does not seek the reason for this perfection in the loftiness of the faculty's objects (i.e., veridical dreams), but merely in the fact that during sleep the external senses are at rest, which allows the imaginative faculty to grow stronger because "the soul" can now concentrate on it.[108] Thus, the perfection achieved by imagination during sleep appears to be grounded solely in the fact that the imaginative faculty can now carry out its proper function uninhibited.

The knowledge of the future a veridical dream can offer is miraculous because it fills a gap at the point where our normal mental faculties, in particular the rational faculty, reach their limits. It is also particularly beneficial because it allows the person concerned to prepare for things to come. It is, Averroes says, due to providence.[109] While this is not far from the contention expressed in *Kitāb al-Ḥiss* that God, with His providential care for mankind, is the ultimate cause behind veridical dreams,[110] Averroes' invocation of an abstract principle of providence instead of a direct reference to God nevertheless bespeaks a rather reserved attitude towards the traditional religious ways of accounting for such dreams.[111]

Nevertheless Averroes does not hesitate to embed veridical dreams within a religious context; he mentions, for example, the story of Joseph interpreting

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107 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 87–88; ed. Blumberg, 83.

108 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 87–88, cf. 75; ed. Blumberg, 82–83, cf. 70–71; trans. Blumberg, 48–49, cf. 41–42. Cf. T_3, where Averroes singles out the imaginative faculty as the only faculty to perform its function during sleep. It is the faculty of thought which, during waking, not only uses the imaginative faculty for its purposes, but also absorbs the attention of the soul, which cannot concentrate on the activities of all its faculties at the same time.

109 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 89, cf. 77–78; ed. Blumberg, 84, cf. 73; trans. Blumberg, 49, cf. 43.

110 See T_1 and T_{12}.

111 Cf. section three above.

Pharaoh's dream from Sura 12 of the Quran,[112] and a tradition concerning a vision seen by the caliph ʿUmar Ibn al-Khaṭṭāb.[113] However, where Averroes does mention God as possibly involved in veridical dreaming, he does so in a rather guarded manner, as if wanting to dissociate himself from the suggestion: "people believe that dream-visions come from the angels, divination from the jinn, and revelation from God";[114] "[prophecy] has been related to the Deity and to the divine beings, that is, the angels."[115] In any case it is the angels that are here named as causes of prophetic *dreams*. Since angels can be read as standing for the cosmic intellects, this would not take Averroes far away from his philosophical account of divination caused by the Agent Intellect.

6 Dream Interpretation and the Interpreter

When it comes to the question of dream interpretation and the figure of the dream interpreter, we can again observe a significant difference between Averroes' account and *Kitāb al-Ḥiss wa-l-maḥsūs*. According to *Kitāb al-Ḥiss*, the Intellect conveys to the interpreter the *maʿnā* of the dream that it conveys to the dreamer; that is, the interpreter will know about the future perceptible event in question without being given an image-like representation of it. In addition, he will also be able to relate dream and *maʿnā* correctly to each other. It is because dream and *maʿnā* as well as the corporeal form of the future perceptible share the relation to the intellect that the interpretation will be correct.[116] Like the dreamer, the interpreter is entirely dependent on the revelation from the Intellect:

> [T_{15}] Sometimes the Intellect flows upon the interpreter with [those] spiritual words, then his tongue will pronounce them, while he will see that he is the one who [correctly] interprets that dream-vision. At other times the Intellect does not flow upon the interpreter; then he will commit mistakes and will not know what to say or what he should interpret.[117]

112 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 89; ed. Blumberg, 84–85; trans. Blumberg, 49. The reference is to Sūra 12:43–49.

113 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 89; ed. Blumberg, 84: "O Sāriya, [to] the mountain!"; cf. Abū Bakr Aḥmad ibn al-Ḥusayn al-Bayhaqī, *Dalāʾil al-nubuwwa wa-maʿrifa aḥwāl ṣāḥib al-sharīʿa*, ed. S. Ibrāhīm (Cairo: Dār al-Ḥadīth, 2006), 6:322.

114 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 72; ed. Blumberg, 67.

115 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 78; ed. Blumberg, 73.

116 Cf. Hansberger, "Representation of Which Reality?" 112–13.

117 *Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 43a.

In accordance with its focus on the corporeal-spiritual divide, *Kitāb al-Ḥiss* describes the interpreter and his qualifying features first and foremost in terms of "spirituality":

> [T_{16}] The Intellect only flows upon the interpreter for one of two reasons: either the interpreter is spiritual, then the Intellect flows upon him because of his spirituality. Or it flows upon him because of signs (*āyāt*) that [shall?] become manifest in the world.[118]

Kitāb al-Ḥiss does not expand on the exact meaning of "spirituality" here. Again the vacillating term allows the adaptor to bring several associations into play:[119] it suggests an affinity with (and hence competence for) the "spiritual" forms and *maʿānī*, perhaps by virtue of having particularly well developed "spiritual faculties," or good quality "spirit"; it intimates concern for, and familiarity with "spiritual," that is, incorporeal (intellectual and divine) things. However, this close association with the realm of the spiritual and divine also has a distinct ethical ring, implying a disregard for, or even the renunciation of, worldly, corporeal things in favour of striving for a life untainted by sin. This idea is underpinned by further remarks indicating that the interpreter is supposed to "purify and refine his soul" and "free his body from dirt and impurities."[120]

The second possible explanation presented for the Intellect's "flowing" unto the interpreter is somewhat more obscure. It could mean that regardless of the interpreter's preparedness in terms of spirituality, the interpretation of a dream could be revealed in order to secure fulfilment of the providential purpose of divinatory dreams, that is, the transmission of information about particular future events. In this case it would point once more to God's providential care that lies behind the entire phenomenon in the first place.[121] Alternatively, it could suggest another kind of preparedness on the part of the interpreter: the ability to read the dream in the light of other signs that he has observed in the world. While a plausible reading of the sentence in itself, it is

118 *Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 43a.

119 Cf. n12 above.

120 *Kitāb al-Ḥiss*, *maqāla* 2.2, fol. 44b–45a. The purification of the soul also plays a prominent role in al-Kindī's *Discourse on the Soul*, where it is linked not to dream interpretation, but to the ability to see "marvellous dreams," talk to the souls of the deceased, and receive direct revelations from God during sleep. See Abū Yūsuf Yaʿqūb b. Isḥāq al-Kindī, *Discourse on the Soul, Summarized from the Book of Aristotle, of Plato, and of Other Philosophers*, trans. P. Adamson and P. E. Pormann, in *The Philosophical Works of al-Kindī* (Karachi: Oxford University Press, 2012), 111–18, esp. 116. I owe the reference to Peter Adamson.

121 Cf. T_{12} above, where veridical dreams are described as "signs" (*āyāt*).

not particularly convincing in the context of *Kitāb al-Ḥiss*, where this point is not picked up anywhere else, and where there is little indication that observations about this world could make any positive contribution in this matter.

Whether correct or not, this would probably have been a reading more to the liking of Averroes, who provides a slightly different account of the interpreter's qualifications:

> [T_{17}] (1) The interpreter is a man whose soul is naturally disposed to understand the imitations that occur in a dream-vision; (2) he is the person on whom the intellect emanates the corporeal *maʿānī* which in sleep are imitated by spiritual *maʿānī*. (3) Among the conditions applying to him is that he be knowledgeable about the [dream-]imitations that are common to all nations, and about the imitations that are specific to each nation and to each class of people [...]. (4) Also, as Aristotle says, it behoves the interpreter to put his soul in proper condition through thinking and theoretical reflection, and his body through cleanliness, and to be chaste and not to incline to traits of the animal soul, and to be spiritual.[122]

Rather than merely invoking "spirituality," Averroes thinks that successful dream interpretation requires first of all a natural aptitude to understand dream images as imitations (1). However, talent is not everything: the interpreter must also know what the various types of dream images stand for (3). As Averroes describes this knowledge, it seems to be something one has to learn rather than understanding it intuitively, or receiving it through revelation. With an apparent nod to the oneirocritical tradition which seeks to classify dream images as symbols for various types of events or things, Averroes explains that what dream images signify (i.e., imitate) may vary from nation to nation or from one social group to the other. This is partly due to natural characteristics obtaining in the mental faculties of such groups as well as in their environment, but also to differences in culture and traditions.[123] Nevertheless such preparedness on the part of the interpreter is only a necessary rather than a sufficient condition (3) for his ability to interpret a particular dream, given that the Agent Intellect is crucially involved in Averroes' account too: it provides the interpreter with the "corporeal *maʿnā*" of which the dreamer has seen an imitation, a "spiritual *maʿnā*" (or form) (2).

The expression "corporeal *maʿnā*" must strike one as odd, especially given the fact that in *Kitāb al-Ḥiss maʿnā* is the most spiritual entity the post-sensatory

122 Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 90; ed. Blumberg, 85–86.

123 See Averroes, *Talkhīṣ K. al-Ḥiss*, ed. Gätje, 89–90; ed. Blumberg, 85; trans. Blumberg 49–50.

faculties deal with and is said to retain no trace of corporeality. Nevertheless, it is sufficiently clear what Averroes must mean: the interpreter can identify the "corporeal" thing or event in the real world that the dream imitates through a "spiritual" form/*maʿnā*. Obviously, there will be no "corporeal" entity in the mind of the dreamer. Averroes uses the term "corporeal" here as a marker for reality as opposed to imitation, which is "spiritual." This again confirms that Averroes does not follow *Kitāb al-Ḥiss* in its Platonic tendency to suppose that the veridical dream gives us access to a higher, more spiritual, and more "real" reality of which the corporeal world is an image, a "shell." The reality that is crucial here for him is our "corporeal" reality.

The emphasis on the interpreter's skills in reading imitations furthermore suggests that even after having been given knowledge of the unknown future perceptible event there still remains a task for the interpreter that requires him to tap into his preparatory knowledge: assigning the right meaning to the right dream. And while Averroes does cite "Aristotle" as saying that the interpreter needs to attend to cleanliness, chastity, and spirituality, he also mentions "thinking and reflection" as commendable habits (4), something we do not find as such in *Kitāb al-Ḥiss* in this context.

Again we see that Averroes interprets the phenomenon of veridical dreaming as a case of acquiring knowledge, not in the manner of a more or less passive reception of a revelation that transcends natural boundaries, but in a manner closely analogous and directly related to our usual way of gaining knowledge about our world. He furthermore does not take over the Platonic order of imitation and reality, but considers the "corporeal" perceptible, the thing or event in this world, as the relevant "reality" about which divinatory dreams help us to acquire knowledge and which may be imitated by the images of a veridical dream.

7 Concluding Remarks

Aristotle's sceptical position on veridical dreams was an unusual one to take in Greek antiquity as well as in the mediaeval Islamic world – not just within society at large, but also among philosophers. It would have been intriguing to see what Averroes, not one to shy away from defending controversial philosophical tenets, would have made of Aristotle's true stance on divinatory dreaming. Alas, thanks to the adaptor of *Kitāb al-Ḥiss* we will never know. Nor will it be possible to determine with certitude what exactly Averroes thought of *Kitāb al-Ḥiss*. That he did not simply dismiss it, or its attribution to

Aristotle,[124] is evident not just from his *Explanatory Paraphrase*, but also from the role the theory of the post-sensatory faculties – which is associated with *Kitāb al-Ḥiss* – plays within his psychology more generally. A detailed investigation of the exact shape in which the ideas contained in *Kitāb al-Ḥiss* enter, for instance, his *Long Commentary* on *De anima* may further contribute to our understanding of his attitude towards the text. Here I hope to have shown that Averroes seems to exhibit at least a degree of scepticism as to the adaptation's contents – if not concerning the main lines of its theory, then at least with respect to some of its details. Confronted with the Neoplatonising account of divinatory dreaming put forward in *Kitāb al-Ḥiss*, he does not address the problematic points openly, but silently uses his knowledge of Aristotle's works and of the interpretative efforts of his predecessors as well as his philosophical judgement to reinterpret his source in a way that allows him to preserve important Aristotelian tenets and to develop an outlook on the topic that is more in line with Aristotle's philosophy than the Arabic text transmitted under the Stagirite's name.

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124 This would not have been an outlandish view to take, as is testified by Abū Sahl al-Masīḥī, a companion of Avicenna's, who remarked about the text that "it is attributed to Aristotle but does not seem like what he would say" (*Kitāb al-Aṣnāf al-ʿulūm al-ḥikmiyya: The Categories of the Philosophical Sciences,* trans. D. Gutas, in *Avicenna and the Aristotelian Tradition: Introduction to Reading Avicenna's Philosophical Works* (Leiden: Brill, 1988), 151; 2nd revised edition (Leiden: Brill, 2014), 172).

CHAPTER 5

How Dreams Are Made: Some Latin Medieval Commentators on Dream Formation in Aristotle's *De insomniis*

Christina Thomsen Thörnqvist

1 Introduction

The reception of Aristotle's *De insomniis* in the Latin West centered around the mechanisms of dream formation. There are several reasons for this. Aristotle's account of the process contains many ambiguities and unclarities and leaves important questions unanswered. Furthermore, the question of how and where in the body dreams are formed was intimately connected with the interpretation of Aristotle's definition of dream, *enýpnion*.[1] This chapter will demonstrate how the medieval commentators' struggle with the Aristotelian text and, in particular, with reconciling Aristotle's theory of dream formation with other parts of his psychology resulted in a rather unified explanation of dream formation that included several deviations from Aristotle. Its aim is to demonstrate the most central interpretative problems and the major general tendencies in the proposed solutions to these problems in a selection of commentaries on the *Parva naturalia* dated to the thirteenth and fourteenth centuries. The following works have been consulted: Albert the Great's (1206/7–1280) exposition of *De insomniis* in his *De homine* and his commentary on the *Parva naturalia*,[2] the question commentaries on *Somn.Vig*. by Geoffrey of Aspall (d. 1287), James of Douai (fl. c.1270), Radulphus Brito (d. 1320/21), John of Jandun (1280/89–1328), Simon of Faversham (d. 1306), and John Buridan (before 1300–1361), two question commentaries in the MS Rome, Biblioteca Angelica 549

1 See below, 155; note James of Douai, *Expositio cum quaestionibus super libros De somno et vigilia,* edited by Sten Ebbesen in "James of Douai on Dreams," *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 84 (2015): 22–92, here 50.11–18. In the medieval reception, all three treatises on sleep and dreams by Aristotle circulated under the title of the first work, and *De insomniis* was usually considered to be the second book of the work; hence, the abbreviation *Somn.Vig.* here and in all other titles of medieval works in this chapter represents not only *De somno et vigilia* but also *De insomniis* and *De divinatione per somnum*.

2 On the chronology of Albert's works, see vol. 1, 185n7.

(one anonymous (1270–1300?) and one ascribed to Siger of Brabant (c.1240–1281/82)), and the *expositio* on *Somn.Vig*. by Walter Burley (c.1275–after 1344).[3]

2 Aristotle

Aristotle's theory of dreaming as put forth in *De insomniis* can be understood only against the background of his definition of sleep in *De somno et vigilia* as an immobilisation that affects not only the five particular senses, but also "the sense-organ which is master of all the rest," which is also the organ of the common sense, by which we are aware that we perceive the external world.[4] Aristotle has previously[5] defined sleep as an "immobilisation of the senses" and also stated that no living being can have any sensation in sleep.[6] Hence, when "the master sense-organ" is affected by sleep, it is immobilised and all the particular senses are immobilised with it:

> For when the sense-organ that controls all the others, and upon which the others converge, has undergone some affection, then all the rest must be affected with it; whereas if any one of the latter is disabled, the former need not to be disabled as well.[7]

3 On the *quaestiones* of Aspall, Jandun, Faversham, Buridan, the two question commentaries in the Rome manuscript, and the *expositio* by Burley, all referred to in this chapter, see vol. 1, 200–201nn58–66. For Douai, see Olga Weijers et al., *Le travail intellectuel à la Faculté des arts de Paris: Textes et maîtres* (*ca. 1200–1500*) (Turnhout: Brepols, 1994–2012), 4:100–103, and Sten Ebbesen, Christina Thomsen Thörnqvist, and Véronique Decaix, "Questions on *De sensu et sensato*, *De memoria* and *De somno et vigilia*," *Bulletin de Philosophie Médiévale* 57 (2015): 102–3. For Brito, see Weijers, *Le travail intellectuel*, 8:43–64, and Ebbesen, Thomsen Thörnqvist, and Decaix, "Questions," 107–8. A selection of Brito's *quaestiones* has been edited in Sten Ebbesen, "Radulphus Brito on Memory and Dreams: An edition," *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 85 (2016): 11–86. I have checked also the question commentary by Peter of Auvergne (d. 1304), but it proved to contain nothing of relevance to the issue here discussed. On Peter's commentary, see vol. 1, 200–201n61.

4 See *Somn.Vig.* 2, 455a12–33; 3, 458a25–32.

5 See *Somn.Vig.* 1, 454b9–11.

6 See *Somn.Vig.* 2, 455a9–12.

7 τοῦ γὰρ κυρίου τῶν ἄλλων πάντων αἰσθητηρίου, καὶ πρὸς ὃ συντείνει τἆλλα, πεπονθότος τι συμπάσχειν ἀναγκαῖον καὶ τὰ λοιπὰ πάντα, ἐκείνων δέ τινος ἀδυνατοῦντος οὐκ ἀνάγκη τοῦτ' ἀδυνατεῖν. (*Somn.Vig*. 2, 455a33–b2.) Throughout this chapter, the Greek text of the treatises on sleep and dreams is quoted from David Ross' edition: *Parva naturalia: A Revised Text with Introduction and Commentary* (Oxford, 1955). The English translation of *Somn.Vig.* quoted is, with some minor modifications, that of David Gallop in *Aristotle on Sleep and Dreams: A Text and Translation with Introduction, Notes and Glossary* (Warminster: Aris & Philips, 1996), here 69.

In other words, even if we were to lose one or several of our external senses, as long as we were awake, the common sense would still be able to inform us that we were not perceiving by the senses that we had lost. With this in mind, let us proceed to an overview of the process of dream formation as described by Aristotle in *De insomniis*.

In *Insomn.* 2, 459a23ff., Aristotle describes the first stage of the process by which dreams are formed: When we are awake and we perceive a sensible object in the outside world, the sensible object will produce sensation in our corresponding sense-organ. This affection will also remain in the organ after the sensible object is no longer present. A necessary condition for this persisting affection of the sense-organs has been defined already in *De anima*:

> [...] for each sense-organ is able to receive the perceptible object without the matter. That is why, even when the perceptible objects have gone away, sensations, and imaginings are present in the sense-organs.[8]

The persisting movements, *kinéseis* (κινήσεις), of perception in the sense-organs are compared to other examples of motion (projectiles) and alteration (heating) that continue after the agent is no longer in contact with the object.[9] In the next step, various examples of continuous perception are adduced as evidence of sensory stimuli also continuing to affect the senses after the sensible object is gone (*Insomn.* 2, 459b7–23).

The examples of continuous perception mentioned are all temporary phenomena; chain-reactions in air and liquid are described as a motion that "continues to be produced [...] until a standstill is reached."[10] It is, however, not clear from Aristotle's account whether the movements of the remnants of external sense-impressions in the sense-organs eventually reach such a standstill, nor is it clear whether they are (or can be) recirculated in the body. Surely, it must have been a well-known phenomenon to Aristotle that dreams can recur, but there is no mention of this phenomenon. The formation of dreams is

8 τὸ γὰρ αἰσθητήριον δεκτικὸν τοῦ αἰσθητοῦ ἄνευ τῆς ὕλης ἕκαστον· διὸ καὶ ἀπελθόντων τῶν αἰσθητῶν ἔνεισιν αἰσθήσεις καὶ φαντασίαι ἐν τοῖς αἰσθητηρίοις. (*De An.* 3.2, 425b23–25.) The text of *de An.* is quoted from Aristotle, *De anima: Edited with Introduction and Commentary*, ed. W. D. Ross (Oxford: Clarendon Press, 1961). The translation of *de An.* quoted is that of Fred D. Miller Jr., *Aristotle: On the Soul and other Psychological Works* (Oxford: Oxford University Press, 2018), here 49.

9 See *Insomn.* 2, 459a28–b7. For the movement described as a chain-reaction, cf. *de An.* 3.3, 428b10–17.

10 καὶ τοῦτον δὴ τὸν τρόπον, ἕως ἂν στῇ, ποιεῖται τὴν κίνησιν καὶ ἐν ἀέρι καὶ ἐν τοῖς ὑγροῖς. (*Insomn.* 2, 459a31–33.)

described by Aristotle as a one-way process: The movements generated by the persisting sense-impressions are stored in the sense-organs until they gradually start moving inward in the body.

In *Insomn.* 3, 460b28ff., Aristotle describes the next stage of dream formation as follows: when we fall sleep, the senses are deactivated and can no longer receive external stimuli. But the sense-impressions that were stored in our sense-organs when we were awake now become detectable. The reason for this is that when we are awake and the external senses are active, the remnants of earlier sense-impressions go unnoticed, because they are weaker and hence more difficult to detect than the stronger external stimuli that we perceive when we are awake. However, when we fall asleep, the flow of the bodily heat is reversed from outwards to inwards and the movements travel with the flow to the "starting-point [*archḗ*] of perception," that is, the heart, "and become apparent."[11]

Aristotle holds that the quality of the *phántasma*, that is, the degree of its resemblance to the external sense-impression that generated it, depends on the quantity of the heat and the speed with which it moves: Sometimes no *phántasma* at all appears, and sometimes it appears in a severely distorted form.[12] Sometimes, however, the *phántasma* is so clear that its sharpness, together with a certain awareness that the movements originate from the sense-organs, makes the sleeper believe that he is perceiving not a *phántasma* that is a resemblance of a real object but the real object itself:

> When in sanguineous animals the blood has subsided and its purer elements have separated off, the movement of sense-impressions persisting from each of the sense-organs makes the dreams coherent. Thus something is made to appear, and because of effects carried inward from vision one judges that one is seeing, or because of those from hearing, that one is hearing; and so on similarly for those from the other senses. For even when one is awake, it is because the movement from those sources reaches the starting-point that one judges that one is seeing, hearing, or perceiving. […] For in general the starting-point affirms the report from each sense, provided that some other, more authoritative one does not contradict it. In every case, then, something appears, yet what appears is

11 *Insomn.* 3, 461a3–8.

12 *Insomn.* 3, 461a11–25.

> not in every case judged to be real; it is, though, if the critical part is held in check or fails to move with its own proper movement.[13]

Aristotle's description of the process of the formation and "perception" of dreams leaves many questions unanswered. To start with, it is not clear precisely how and to what degree the movements are stored in the sense-organs. Aristotle says explicitly that the *páthos* (πάθος) produced in the sense-organs by the sensible objects persists in the sense-organs[14] and that it does so "both in depth and on the surface."[15] As mentioned, when the heat of the body is drawn inwards in sleep, the movements travel with the blood to the heart where they become noticeable, but apparently not all of them at the same time, because Aristotle points out that they are in the blood "some potentially, but some actually."[16] He elaborates on this phenomenon with an analogy: The movements, he says, behave like artificial frogs, "that float upwards in water as the salt dissolves":[17]

> Just so, the movements are there potentially, but become activated as soon as what impedes them is removed. Upon being released, they move in the little blood remaining in the sense-organs, while taking on a resemblance, as cloud-formations do, which people liken now to men and now to centaurs as they change rapidly.[18]

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13 καθισταμένου δὲ καὶ διακρινομένου τοῦ αἵματος ἐν τοῖς ἐναίμοις, σῳζομένη τῶν αἰσθημάτων ἡ κίνησις ἀφ᾽ ἑκάστου τῶν αἰσθητηρίων εἰρόμενά τε ποιεῖ τὰ ἐνύπνια, καὶ φαίνεσθαί τι καὶ δοκεῖν διὰ μὲν τὰ ἀπὸ τῆς ὄψεως καταφερόμενα ὁρᾶν, διὰ δὲ τὰ ἀπὸ τῆς ἀκοῆς ἀκούειν, ὁμοιοτρόπως δὲ καὶ ἀπὸ τῶν ἄλλων αἰσθητηρίων· 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 ἀφὴν δύο κινήσεις εἰσαγγέλλειν τὸ ἓν δύο δοκεῖ. ὅλως γὰρ τὸ ἀφ᾽ ἑκάστης αἰσθήσεώς φησιν ἡ ἀρχή, ἐὰν μὴ ἑτέρα κυριωτέρα ἀντιφῇ. (*Insomn.* 3, 461a25–b5.)

14 τὰ γὰρ αἰσθητὰ καθ᾽ ἕκαστον αἰσθητήριον ἡμῖν ἐμποιοῦσιν αἴσθησιν, καὶ τὸ γινόμενον ὑπ᾽ αὐτῶν πάθος οὐ μόνον ἐνυπάρχει ἐν τοῖς αἰσθητηρίοις ἐνεργουσῶν τῶν αἰσθήσεων, ἀλλὰ καὶ ἀπελθουσῶν. (*Insomn.* 2, 459a24–28.)

15 διὸ τὸ πάθος ἐστὶν οὐ μόνον ἐν αἰσθανομένοις τοῖς αἰσθητηρίοις, ἀλλὰ καὶ ἐν πεπαυμένοις, καὶ ἐν βάθει καὶ ἐπιπολῆς. (*Insomn.* 2, 459b5–7.)

16 ὅταν γὰρ καθεύδῃ, κατιόντος τοῦ πλείστου αἵματος ἐπὶ τὴν ἀρχὴν συγκατέρχονται αἱ ἐνοῦσαι κινήσεις, αἱ μὲν δυνάμει αἱ δὲ ἐνεργείᾳ. (*Insomn.* 3, 461b11–13.)

17 καὶ πρὸς ἀλλήλας δὴ ἔχουσιν ὥσπερ οἱ πεπλασμένοι βάτραχοι οἱ ἀνιόντες ἐν τῷ ὕδατι τηκομένου τοῦ ἁλός. (*Insomn.* 3, 461b15–16.) On the artificial frogs, see Philip J. van der Eijk, *Aristoteles De insomniis, De divinatione per somnum übersetzt und erläutert* (Berlin: Akademie Verlag, 1994), 233–34.

18 οὕτως ἔνεισι δυνάμει, ἀνειμένου δὲ τοῦ κωλύοντος ἐνεργοῦσιν, καὶ λυόμεναι ἐν ὀλίγῳ τῷ λοιπῷ αἵματι τῷ ἐν τοῖς αἰσθητηρίοις κινοῦνται, ἔχουσαι ὁμοιότητα ὥσπερ τὰ ἐν τοῖς νέφεσιν, ἃ παρεικάζουσιν ἀνθρώποις καὶ κενταύροις ταχέως μεταβάλλοντα. (*Insomn.* 3, 461b16–21.)

But where in the body are the movements actualised? On the one hand, Aristotle says that when we fall asleep and the blood retracts inwards, the movements travel with it, and some of them are then actualised in the blood.[19] But he also seems to claim that it is in the sense-organs when the blood retracts that the movements are actualised.[20] Furthermore, the nature or mechanisms of the "perception" of these more or less distorted remnants of sense-impressions at their final destination is not discussed, nor is it clear from the account in *De insomniis* how *phantásmata* are generated from these remnants. Instead, the remaining account focuses on how we are often deceived by our dreams because in sleep we are unaware that we are dreaming and instead believe that we are actually perceiving. The account of our "perception" of the *phantásmata* is confined to mentioning (1) how "the starting-point affirms the report from each sense, provided that some other, more authoritative one does not contradict it,"[21] and, at the same time, (2) "one's ruling and judging part"[22] in sleep often, but not always, accepts movements from the remnants of authentic sense-impressions as if we were still perceiving.[23] After some examples of authentic sense-impressions in sleep (that are non-authentic dreams and not *phantásmata*), the account finally ends in Aristotle's formal definition of the dream:

> Rather, it is an appearance (*phantasma*) that arises from the movement of the sense-impressions, while one is in the sleeping state and in virtue of one's being asleep, that is the dream proper.[24]

To sum up, Aristotle leaves us with at least the following questions: How is it possible for the sense-organs to store external sense-impressions? If these sense-impressions can remain in the sense-organs potentially, where in the body are they actualised? At what point in the process do we "perceive" these remnants of sense-impressions as dreams? Under which circumstances are we deceived by our dreams in the sense that we interpret them as external

19 See above, 154n16.

20 See *Insomn.* 3, 461b16–21 (154n18).

21 *Insomn.* 3, 461a25–b5 (154n13).

22 See *Insomn.* 3, 461b25.

23 *Insomn.* 3, 461b26–29: 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, 462a5–7: (πολλάκις γὰρ καθεύδοντος λέγει τι ἐν τῇ ψυχῇ ὅτι ἐνύπνιον τὸ φαινόμενον)· ἐὰν δὲ λανθάνῃ ὅτι καθεύδει, οὐδὲν ἀντιφήσει τῇ φαντασίᾳ. (*Insomn.* 3, 461b26–29.)

24 ἀλλὰ τὸ φάντασμα τὸ ἀπὸ τῆς κινήσεως τῶν αἰσθημάτων, ὅταν ἐν τῷ καθεύδειν ᾖ, ᾗ καθεύδει, τοῦτ᾽ ἐστὶν ἐνύπνιον. (*Insomn.* 3, 462a29–31.)

sense-impressions of the present? And under which circumstances are we aware already in our sleep that they are just dreams?

3 Albertus Magnus

There is evidence that the literal commentary on Aristotle's treatises on sleep and dreams by Adam of Buckfield (c.1220–before 1294) circulated before the commentaries by Albert the Great appeared,[25] but, as previously mentioned,[26] there is no indication that Albert used Adam's work. Be that as it may, there can be no doubt that Albert's commentaries more than any other work of the time laid the foundations of the Latin reception of the *Parva naturalia*, and the Latin tradition on Aristotle's theories on sleep and dreams is no exception.

Albert devotes the first questions in his exposition of *De insomniis* in *De homine* to the topic of *Insomn.* 1: the question of whether dreaming is an affection of the intellect, of opinion, or of perception. Albert's major argument in support of Aristotle's conclusion that dreaming belongs to the sensitive faculty in its imagining capacity[27] is a reference to the mechanisms of dream formation as described in Averroes' (which Albert, when writing the *Summa*, believes is al-Fārābī's[28]) *Compendium* on the *Parva naturalia*: When we are awake, the movements caused by the sensible species move from the senses to imagination, but when we dream, they move in the opposite direction.[29] Albert relies on the following passage in Averroes:

> While awake, the external sensibles move the sense, and the common sense moves the imaginative power. While asleep, when the imaginative power imagines the intention which it has received from outside or from the recollecting power, it returns and moves the common sense and the

25 On the date of Adam's commentary, see vol. 1, 185n6.

26 See vol. 1, 185.

27 φανερὸν ὅτι τοῦ αἰσθητικοῦ μέν ἐστι τὸ ἐνυπνιάζειν, τούτου δ' ᾗ φανταστικόν. (*Insomn.* 1, 459a21–22.)

28 See Silvia Donati, "Albert the Great as a Commentator of Aristotle's *De somno et vigilia*: The Influence of the Arabic Tradition," in *The Parva naturalia in Greek, Arabic, and Latin Aristotelianism*, ed. B. Bydén and F. Radovic (Cham: Springer, 2018), 173.

29 "Dicendum quod sicut dicit Alfarabius, in vigilia motus sensibilium est a sensu in imaginatione, ita quod principium est a sensu et finis in imaginatione. In somnio autem motus est sensibilium praeacceptorum ab imaginatione ad sensum, ita quod principium est ab imaginatione et finis ad sensum, et ideo somnium est imaginationis ut a quo est principium motus eius." (Albert the Great, *De homine*, ed. H. Anzulewicz and J. R. Söder (Münster: Aschendorff), 359.4–10.)

> common sense moves a single sense. So it happens that a human being perceives sensibles, although they are not external, since their intentions are in the organs of the senses regardless of whether they come from outside or from inside.[30]

The course of the movements here described is adopted by Albert with some modification, to which we will return in the following. As we shall see, Averroes' model and Albert's adaption of it fill in some of the blank spots in Aristotle's account but, at the same time, generate new questions.

Albert finds Aristotle's claim that stimuli are stored in the sense-organs difficult to accept and devotes a separate chapter to this discussion.[31] Averroes' claim that imagination is the starting-point of the movement of the sensible species in sleep is one of Albert's counterarguments,[32] together with the observation (attributed by Albert to Avicenna) that if the sensibilia were stored in the sense-organs, the blind would not be able to see colours in their dreams.[33] In opposition to Aristotle, Albert follows Avicenna's localisation of both imagination and the common sense[34] in the brain and concludes that the sensible species are not stored in the sense-organs, but in imagination and, hence, in the brain.[35] To reconcile this conclusion with Aristotle's explicit claim that the sensible species are stored in the sense-organs, Albert interpolates *Insomn*. 2,

30 "In vigilia enim sensibilia extrinseca movent sensus, et sensus communis movet virtutem ymaginativam. In sompno autem, quando virtus ymaginativa ymaginata fuerit intentionem quam accipit ab extrinseco aut ex virtute rememorativa, revertetur et movebit sensum communem, et sensus communis movebit virtutem particularem; et sic accidit quod homo comprehendit sensibilia, licet non sint extrinsecus, quia intentiones eorum sunt in instrumentis sensuum, et indifferenter, sive intentiones veniant ab extrinseco, sive ab intrinseco." (Averroes, *Compendia librorum Aristotelis qui Parva naturalia vocantur*, ed. A. L. Shields (Cambridge, MA.: Medieval Academy of America, 1949), 98.69–99.9.) The translation is quoted from Pekka Kärkkäinen, "Medieval Theories," in *Sourcebook for the History of the Philosophy of Mind: Philosophical Psychology from Plato to Kant*, ed. S. Knuuttila and J. Sihvola (Dordrecht: Springer, 2014), 189.

31 Albert the Great, *De hom.*, 366.65–368.40.

32 Albert the Great, *De hom.*, 368.4–8.

33 Albert the Great, *De hom.*, 368.9–11; the reference to Avicenna is probably to *Liber De anima seu Sextus de naturalibus*, ed. S. van Riet (Louvain: Peeters, 1968–72), 2:4.1, 4.45–52. "Imagines autem quae videntur in somnis, aut fiunt ex descriptione formae in thesauro retinente formas […], aut contingunt ex alia virtute, quae est aut sensus exterior aut interior: sed sensus exterior non prodest in somnis, quia aliquando qui imaginat colores est privatus oculis. Restat ergo ut hoc fiat in sensu interiore."

34 See, for instance, Albert the Great, *De hom.*, 275.11–15.

35 On the encephalocentric theory in the Arabic tradition, see Donati, "Albert the Great as a Commentator," 181–84.

460b2–3 (or follows an interpolated manuscript of the *translatio vetus*[36]):[37] "our sense-impressions persist, remaining perceptible, even after the external sense-object has gone," which he renders as follows:

> Furthermore, Aristotle states that the sensibles that have been received are stored in a ventricle (a ventricle is a cavity in the brain, as Avicenna says); hence, they do not remain in the organs of the particular senses.[38]

Earlier in *De homine*, Albert employs a somewhat less drastic method for reconciling Aristotle's position with Avicenna's. When discussing the definition of imagination,[39] Albert admits that the sense-organs do have some ability to retain the sensible forms, but that the retentive power of the senses is weaker than that of imagination because, contrary to imagination, the senses can only retain the forms as long as the matter of the sensible object is still present.[40]

Despite the fact that Aristotle does not anywhere explicitly mention that the sensible species are stored in imagination, *De insomniis* is adduced several times by Albert as evidence for the *vis retentiva* of imagination. In his long discussion of the definition of the common sense (*De homine*, 271.1–274.43), he refers to *De insomniis* to prove (contrary to Avicenna[41]) that *phantasía* and the *sensus communis* are two distinct faculties:

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36 According to Drossaart Lulofs' edition of the *translatio vetus* of *Insomn.* (*Aristotelis De Insomniis et De divinatione per somnum*, ed. H. J. Drossaart Lulofs (Leiden: Brill, 1947)), the St. Florian manuscript XI 649 (twelfth century) has the addition "in cella" after "extrinsecus" on 16.11.

37 καὶ ἀπελθόντος τοῦ θύραθεν αἰσθητοῦ ἐμμένει τὰ αἰσθήματα αἰσθητὰ ὄντα = *trl. vet.* 16.11–12: "recedenti sensibili extrinsecus commanent simulacra quae sensibilia sunt."

38 "Praeterea dicit Aristoteles quod accepta sensibilia manent in cella; cella autem est concavitas cerebri, ut dicit Avicenna; ergo non manent in organis sensuum propriorum." (Albert the Great, *De hom.*, 367.63–66.) The reference is to Avicenna, *Liber Sextus*, 1:1.5, 87.19–88.25: "Virium autem apprehendentium occultarum vitalium prima est fantasia quae est sensus communis; quae est vis ordinata in prima concavitate cerebri, recipiens per seipsam omnes formas quae imprimuntur quinque sensibus et redduntur ei. Post hanc est imaginatio vel formans, quae est etiam vis ordinata in extremo anterioris concavitatis cerebri, retinens quod recipit sensus communis a quinque sensibus et remanet in ea post remotionem illorum sensibilium."

39 Albert the Great, *De hom.*, 282.10–17.

40 "[…] dicendum quod licet sensus recipiat formas tales, et similiter imaginatio, tamen sensus proprie diffinitur per recipere, et imaginatio per retinere, vis enim retentiva debilis est in sensu, eo quod non retinet nisi praesente materia, sed vis receptiva fortis, eo quod de facili recipit, sed e contrario est in imaginatione." (Albert the Great, *De hom.*, 284.58–64.)

41 See above, n. 38.

> But the retaining function belongs to *phantasía*, as the Philosopher states in his work *On Sleep and Waking*. For there he says that the *phantásmata* that have been received by the senses remain in *phantasía* and in sleep they flow back to the sense-organs; hence, *phantasía* and the common sense are not one and the same power.[42]

As we have seen, in the Arabic commentators, and in Averroes in particular, Albert finds a description of the mechanisms of the process of dream formation that completes the fragmentary account in Aristotle. The passage from Averroes quoted above on pp. 156–57 describes a full cycle that ends where it started: with the particular senses. But to what extent and in what way are the particular senses involved in the process? Aristotle mentions in *De insomniis* that they are inactivated in sleep but not unaffected,[43] but his remaining account demonstrates that the role of the particular senses in sleep is confined to the task of storing the affections caused by the sense-impressions after the sensible objects are no longer present. Later in *De insomniis* examples are given of direct sense-impressions in sleep, but these are authentic, external sense-impressions and adduced as examples of phenomena that fall outside the definition of *enýpnion*.[44] Averroes, on the other hand, is clear about the fact that the last stage of dream formation is the stage where the particular senses are moved by the common sense. In his model, it seems that it is via the particular senses that the living being finally "perceives" the dream.[45] Albert

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42 "Sed phantasiae est retinere, ut dicit Philosophus in libro De somno et vigilia. Dicit enim ibi quod simulacra recepta a sensibus manent in phantasia et refluunt in somniis ad organa sensuum; ergo phantasia et sensus communis non sunt eadem virtus." (Albert the Great, *De hom.*, 272.9–14.) In this connection, Albert also refers to the mechanisms of dream formation in *Insomn.* to provide an etymological explanation for "imaginatio": "Quandoque etiam dicitur imaginatio vis, a qua refluunt imagines repositate super organum sensus communis, et sic accipitur ab Aristotele in secundo de somno et vigilia, ubi dicit quod in somno imagines somniales refluunt ad commune organum sensuum." (Albert the Great, *De hom.*, 284.24–28.)

43 ἐν δὲ τῷ ὕπνῳ ὑπόκειται μηδὲν ὁρᾶν μηδ' ἀκούειν μηδ' ὅλως αἰσθάνεσθαι. ἆρ' οὖν τὸ μὲν μὴ ὁρᾶν μηδὲν ἀληθές, τὸ δὲ μηδὲν πάσχειν τὴν αἴσθησιν οὐκ ἀληθές, ἀλλ' ἐνδέχεται καὶ τὴν ὄψιν πάσχειν τι καὶ τὰς ἄλλας αἰσθήσεις, ἕκαστον δὲ τούτων ὥσπερ ἐγρηγορότος προσβάλλει μέν πως τῇ αἰσθήσει, οὐχ οὕτω δὲ ὥσπερ ἐγρηγορότος. (*Insomn.* 1, 458b33–459a5.)

44 See, in particular, *Insomn.* 3, 462a15–31.

45 See also the *Versio Parisina* in Shield's edition (98–99): "Sicque sompnium secundum diversitatem formarum compositarum apud ymaginacionem, sicut videmus in infirmis (in quibus vapores resolvuntur ad cerebrum a materia morbi; in quibus vaporibus ymaginativa componit formas terribiles, quas infirmus eciam vigilans iudicat se videre extra; et tamen videt eas intra), predicto modo, quia videlicet ymaginativa offert eas sensui communi et sensus communis offert eas sensibus particularibus." On the two

categorically claims – curiously enough, referring not only to Avicenna and al-Ghazālī but also, as it would seem, to Averroes – that the particular senses are not affected by the reverse movement of the *phantásmata*, which stops at the organ of the common sense.[46] Hence, the cycle in Albert is confined to a process involving the common sense and imagination, leaving the particular sense-organs out of the picture as far as possible and completely out of it in the process in sleep. This becomes even clearer in Albert's second exposition of *De insomniis* in his commentary on the *Parva naturalia*. In the introductory chapter of the first *tractatus* on *De insomniis*, Albert states that knowledge of the process of dream formation is a prerequisite for the reader's understanding of the following treatment and summarises it as follows:

> From all this it is evident that the movement of sleep starts where the movement of waking ends, viz., in the treasury of the sensible imaginings, that it reaches the location where waking starts, viz., the first sense organ, and that it is the evaporation of sleep that transports the imaginings from one place [to another].[47]

As shown, the process described in Averroes and adopted with some modifications by Albert is circular. Albert elaborates on several occasions on the nature of the movement back and forth between the common sense and the imagination: it is an eddy (*vertigo*) consisting of a forward *pulsus* and a *tractus* in the opposite direction.[48] Whereas Aristotle's explanation of the movement of the sensible species from the sense-organs to the *archē* is tied to the inward flow of the heat of the body in sleep, Albert's explanation of the process

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versions of Averroes' *Compendium*, see David Bloch, *Aristotle on Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism* (Leiden: Brill, 2007), 154.

46 "Ad aliud dicendum quod quidam dicunt quod sensus etiam proprii immobiles quidem sunt in somno secundum actus exteriores, interius autem a quodam calore interiori solvuntur. Sed hoc non placet, sed potius secundum Alfarabium et Avicennam et Algazalem dicendum est quod motus somnii sistit ad organum sensus communis." (Albert the Great, *De hom.*, 361.53–59.) See ibid., 362.19–24 and 366.45–61, and note Albert's argument on 360.42–55 that since the sense-organs are homogenous substances, one part of them cannot be affected by motion without also the rest of the organ being affected; hence, the sense-organs cannot be immobilised externally but mobile internally; cf. *PA* 2.1, 647a.

47 "Ex quibus omnibus constat, quod motus somni incipit ubi terminatur motus vigiliae, scilicet in thesauro imaginationum sensibilium, et provenit ad locum ubi incipit vigilia, hoc est ad primum organum sensuum, et quod evaporatio somni vehit eas ab uno loco in alium." (Albert the Great, *De somno et vigilia*, ed. A. Borgnet (Paris: Vivès, 1890), 2.1.1, 159a.)

48 See, for instance, Albert the Great, *De hom.*, 361.22–34.

stretches beyond the physiological mechanisms of sleep; the *pulsus*, he claims, is due to the flow of the *spiritus animalis* from imagination to the common sense, but the *tractus* is caused by the sensible forms themselves, which by nature are attracted to imagination:

> However, the cause of the forward movement is the motion of the animal spirit and the thin blood [flowing] from the organ of imagination to the organ of the common sense (the blood that is distributed to the organs of the particular senses as nourishment). But the cause of the backward motion are the [sensible] forms' own movements, because once the forms have been apprehended by the common sense, they travel of their own nature to the organ of imagination.[49]

At what point in this cycle, then, are the movements of the sense-impressions actualised? Aristotle's account in *Insomn*. 3, 461b11–21 describes a process where the answer seems to be in the sense-organs or, at least, somewhere between the sense-organs and the heart, where the fully developed sense-impressions are then also perceived. Albert, on the other hand, seems to assume that the movements are actualised somewhere between imagination and the common sense.[50] In his commentary on the *Parva naturalia*, he describes at great length

49 "Causa autem pulsus est motus spiritus animalis et subtilis sanguinis ab organo imaginationis ad organum sensus communis, qui sanguis distribuitur in alimentum organorum sensuum propriorum. Causa autem tractus proprius motus est ipsarum formarum; formae enim apprehensae a sensu communi secundum suam naturam transeunt ad organum imaginationis." (Albert the Great, *De hom*., 372.29–36.) Surprisingly enough, Albert refers to Aristotle's metaphor for explaining the actualisation of the movements in *Insomn.* 3, 461b15–17 as support for the explanation of the *pulsus* caused by the *spiritus animalis*; see Albert the Great, *De hom*., 371.65–77: "Cum autem ipse spiritus deferens formas sit de natura humidi aërei et feratur cum humido et subtili sanguine quasi vaporabili, dicit Philosophus quod motus simulacrorum in ipso est sicut motus ramunculorum liquefacti salis in aqua calida. Cum enim aqua calida liquefit sal, subtilis elevatur sursum ex calido movente et humido liquante sicut ramunculus albus, et postea iterum residet ex natura gravis, quae est in terrestritate salis. Similiter formae imaginationis descendunt descendente spiritu et sanguine ab imaginatione ad sensum communem et revertuntur iterum ad cellam imaginationis tamquam ad locum proprium, in quo habent commanere."

50 It should be noted that this interpretation is found already in Adam of Buckfield: "Deinde cum dicit cum enim manifestat similitudinem hanc, dicens, quod in dormiendo descendit multus sanguis ad primum sensitivum, et simulacra similiter in ipsis propriis organis descendunt ad primum sensitivum, et movent ipsum: alia quidem movent in actu, sicut illa, quae proxima sunt, alia autem movent solum in potentia, quae non devenerunt ad primum sensitivum." (Adam of Buckfield, *Commentarium in De somniis*, edited in *Doctoris angelici divi Thomae Aquinatis opera omnia* XXIV, ed. S. E. Fretté (Paris: Vivès, 1875), l. 4.) Note that Albert locates the refigurations of the movements "because of obstruction"

that differences in this part of the process as the reason why the same forms may be perceived differently by individual sleepers: Different states of body and mind may affect the actualisation of the dream when it travels from imagination and hits the primary sense-organ.[51]

Albert's (following Averroes') identification of the *archḗ* in *De insomniis* with the *sensus communis* is central to his explanation of the process. It is a natural assumption; Aristotle has already stated in *Somn.Vig.* 2, 455a12–22 that it is by a certain *koinè dýnamis* associated with the particular senses that we are aware that we perceive. In *Insomn.* 3, 461a27–b5, Aristotle now claims that it is because the stimuli come from the sense-organs to the *archē*, not only when we are awake but also when we sleep, that we believe that we actually perceive by our senses when we are really dreaming. Hence, the role of the common sense in Albert's model is to receive the sensible forms from the sense-organs, process them,[52] and forward them to imagination, where the *phantásmata* are formed, then receive the *phantásmata* again from the imagination and "reflect on them," comparing them to external sense-impressions.[53]

But how is this possible? If, as stated by Aristotle in *Somn.Vig.* 2, 455a33–b2, the reason why our particular senses are deactivated in sleep is that the superior sense-organ is immobilised and this superior sense-organ is the organ of the common sense – how, then, can the common sense also be the faculty processing the *phantásmata*? Albert's solution is found in his *quaestio* on

(*Insomn.* 2, 461a8–11) to the head: "Haec autem corruptio fit propter repercussionem vaporis ad concavum capitis, ex quo reflectitur necessario in seipsum, et non tenet figuram in qua ascendit […] eo quod multus motus vaporationis fortiter repercutitur ad craneum, et in seipso refractus non tenet imagines." (Albert the Great, *De somno*, 2.2.1, 170a.) A particular variant of refiguration of the *simulacra* is described by John of Jandun: sometimes more than one *simulacrum* will reach the common sense simultaneously and combine into images of composite objects that we have never perceived with our external senses, such as a living being with the head of a horse but the body of a man; see John of Jandun, *Ioannis Gandavensis philosophi acutissimi Quaestiones super Parvis naturalibus*, ed. A. Apulus (Venice: Hieronymus Scotus, 1557), fol. 43va, and cf. Radulphus Brito, *Quaestiones super librum De somno et vigilia*, partial edition in Sten Ebbesen, "Radulphus Brito on Memory and Dreams: An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 85 (2016): 11–86, here 65.

51 "[…] et talium motuum simulacrorum quidam sunt potestate, alii vero actu: potestate quidem qui possunt elici ex figura vaporis propter aliquam convenientiam, praecipue ab eo qui passione aliqua detentus est: actu vero sicut illae quae a sensibus acceptae sunt imagines, et refluunt ad organorum principia." (Albert the Great, *De somno* 2.2.2, 172a.) In this connection, Albert also provides an alternative interpretation of *Insomn.* 3, 461b11–21 which is considerably closer to Aristotle; see ibid., 2.2.2, 172a–b.

52 See, in particular, *de An.* 3.2, 426b8–427a15; Albert the Great, *De anima*, ed. C. Stroick (Münster: Aschendorff, 1968), 161.68–165.82; *De hom.*, 278.32–281.77.

53 See, e.g., Albert the Great, *De hom.*, 368.12–31; 371.55–372.6.

Aristotle's definition of sleep and wakefulness in *De homine*. His initial objection to Aristotle's definition of sleep as an immobilisation of sensation is the following:

> Furthermore, sleep does not seem to entail a complete immobilisation of the senses, because the common sense is a kind of sense and it is not immobilised in sleep. A proof of this is that, as Aristotle claims in the second book of *On Sleep and Waking*,[54] the *phantásmata* flow from the organ of imagination to the organ of the common sense and change it.[55]

This objection against Aristotle's definition is refuted with the following solution. The common sense has two relations. One to the external senses in which it inflates these with the *spiritus* and the sensitive power. In this relation, the organ of the common sense is immobilised in sleep. The other is to the organ of imagination which is situated in a part of the brain that is by nature cold. Hence, in its relation to imagination the common sense is also by nature cold and, consequently, not immobilised in sleep. This is the reason, Albert claims, why Aristotle modifies his definition of sleep in *Somn.Vig.* as an immobilisation of the senses by saying that it is "a kind" of fetter or immobilisation.[56]

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54 However, see above, p. 155.

55 "Praeterea, somnus non videtur universaliter immobilitas sensus. Sensus enim communis est quidam sensus; et ille non immobilitatur in somno. Cuius probatio est haec quod dicit Aristoteles in secundo De somno et vigilia quod phantasmata fluunt ab organo phantasiae ad organum sensus communis et immutant ipsum." (Albert the Great, *De hom.*, 319.25–30.) The reference to *Insomn.* must be to 3, 461a6.

56 "Ad aliud dicendum quod sensus communis duplicem habet comparationem. Unam ad sensus exteriores, quibus ipse influit spiritum sensibilem et virtutem sensitivam, propter quod etiam dicitur ab Avicenna forma et perfectio sensuum particularium; et in hac comparatione ligatur organum eius, et somnus est vinculum sensus communis. Aliam habet comparationem ad organum phantasiae et imaginationis, quae sitae sunt in partibus cerebri, quae naturaliter frigidae sunt, et ideo frigiditate quae dominatur in somno, non immobilitantur, et cum organum sensus communis in comparatione illa etiam sit frigidum per naturam, non immobilitabitur in somno sed immutabitur simulacris refluentibus a loco phantasiae et imaginationis. Et hoc intendit Philosophus, quando dixit somnum esse vinculum quodammodo sensum." (Albert the Great, *De hom.*, 322.5–20.) For Albert's reference to Aristotle, see *Somn.Vig.* 1, 454b10–11 (οἷον δεσμός τις καὶ ἀκινησία) and 1, 454b26 (οἷον δεσμὸν τὸν ὕπνον εἶναί φαμεν). Albert relies on the same explanation when answering the question whether sleep and wakefulness are *per se* affections of the common sense or not: "Si quis autem subtiliter vellet intueri, diceret quod somnus non est passio sensus communis nisi per accidens, scilicet inquantum influit spiritum sensibilem sensibus propriis, et non sic, ut immobilitetur proprium organum sensus communis per somnum." (Albert the Great, *De hom.*, 333.46–50.) Note that the explanation is found in a less elaborate form already in Adam of Buckfield's commentary: "hic autem probat quod

Whereas the part of the common sense that is closest to imagination stays active in sleep, the anterior part is immobilised, and since this part of the common sense also is where the nerves connect the common sense with the particular sense-organs, the particular senses are immobilised as well.[57] As we have seen above, Albert's position is that the *phantásmata* never reach the particular senses on their way back from imagination. The argument about the location of the starting-point of the nerves in the common sense is also used by Albert in his commentary on *Somn.Vig*. to explain *Insomn.* 3, 461a25–29:[58] The reason why we so often believe that we are perceiving when we are actually dreaming is that the *phantásmata* stimulate the starting-point of the nerves.[59]

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somnium est passio sensitiva partis animae, quae non solum comparatur sensui, sed imaginationi." (Adam of Buckfield, *Comm. De somniis*, l. 1.)

57 "Et in prima comparatione nervi sensibiles, qui terminantur in organis sensuum propriorum, principiantur in organo sensus communis, et ideo frigiditas descendens a cerebro primo tangit nervos sensibiles in sui principio, quod est anterior pars sensus communis, et immobilat ipsos et oppilat non permittendo spiritum sensibilem ab organo sensus communis fluere in nervos sensibiles." (Albert the Great, *De hom.*, 333.15–22.) On the explanation that an immobilisation of the starting-point of the nerves in the heart is the reason why the particular senses are immobilised in sleep, see Averroes, *Compendium*, 87.14–19. For Albert's version of the three-cell structure of the brain, where each of the three cells in turn is divided into two compartments, see, for instance, Albert the Great, *De animalibus libri XXVI, Nach der Kölner Urschrift*, ed. H. J. Stadler (Münster: Aschendorff, 1916), 1:187.40–188.3: "Adhuc autem cerebrum secundum suam longitudinem tres habet ventres, quorum quilibet per latitudinem suam duas habet partes, dextram videlicet et sinistram propter lineam quae per longum dividitur." On the location of the *sensus communis* next to imagination in the anterior ventricle, see, e.g., Albert the Great, *De anima*, 158.4–33. Also, see Christopher Upham Murray Smith, *The Animal Spirit Doctrine and the Origins of Neurophysiology* (New York: Oxford University Press, 2012), 76–77; Peter Theiss, "Albert the Great's Interpretation of Neuropsychiatric Symptoms in the Context of Scholastic Psychology and Physiology," *Journal of the History of the Neurosciences* 6 (1997): 240–56, esp. 250; Christopher Upham Murray Smith, "Beginnings: Ventricular Psychology," in *Brain, Mind and Consciousness in the History of Neuroscience*, ed. C. U. M. Smith and H. Whitaker (Dordrecht: Springer, 2014), 8–11.

58 See 154n13, above.

59 "Ex eo enim quod discreto sanguine progreditur talis motus simulacrorum ad sensum communem, ubi contingunt se nervi sensibiles, quod est principium vigilandi, sicut saepe diximus, videtur sibi somnians videre et audire et omnia universaliter sentire. Videtur autem decipi ex hoc quod visus videtur moveri, qui non movetur a re sensibili aliqua, sed est forma motus in eo ipso." (Albert the Great, *De somno* 2.2.2, 171a–b.) Note also that according to Albert the refiguration of the movements in *Insomn.* 3, 461a8–11 takes place in the head and affects not the stimuli coming from the sense-organs but the *phantásmata* flowing from imagination to the common sense: "Saepe enim vehitur imaginatio vecta in sua propria similitudine ad principium sensus, et saepe corrumpitur in alias figuras propter fluxum humidi spiritualiter evaporantis, quae deferunt formas phantasiae: corrupto enim subjecto, necesse est corrumpi figurationem formae quae in ipso est. Haec

But if the common sense is only partly immobilised in sleep, why does it so often fail to recognise that the *phantásmata* we see in our dreams are not external sense-impressions but dreams? Aristotle claims that this is due to the power of sleep,[60] and Albert agrees and expounds on Aristotle: Not only is the common sense immobilised in sleep in its relation to the external senses, it is also immobilised in its ability to compare the *phantásmata* that it receives from imagination with external sense-impressions and to distinguish the two.[61] Also, Albert notes, although the intellect, unlike the common sense, is not generally immobilised in sleep, it can be immobilised accidentally in two ways: (1) in sleep, the soul aims first and foremost at the movement of imagination and so it happens that it disregards the movements from the intellect,[62] and (2) when we are awake, sensory stimuli pass from the external world to the senses, from the senses to imagination and from imagination to the intellect, whereas in sleep, they return to imagination without passing the intellect, which leaves the intellect unaffected.[63]

When both the common sense is immobilised and the intellect is also accidentally immobilised for any of the two reasons mentioned, the sleeper will be deceived by his dream, believing that he is actually perceiving external stimuli and not dreaming.[64] In Albert's account, the inability of the common sense in sleep to compare sense-impression and distinguish between external sense-impressions and dreams is, contrary to the accidental failure of the intellect, described as absolute.[65] Hence, in Albert's explanation the "something" (τι, *ti*) in *Insomn.* 3, 462a6 that sometimes will tell us in our sleep that we are not perceiving but dreaming, is not just one thing,[66] and the only situation where the common sense does not fail us in distinguishing dreams from real external

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autem corruptio fit propter repercussionem vaporis ad concavum capitis, ex quo reflectitur necessario in seipsum, et non tenet figuram in qua ascendit: haec enim est causa, quod immediate post multum nutrimentum, et praecipue si calidum sit, et multum vaporativum, non fiunt somnia: eo quod multus motus vaporationis fortiter repercutitur ad craneum, et in seipso refractus non tenet imagines." (Albert the Great, *De somno*, 170a.)

60 See *Insomn.* 3, 461b30.

61 Albert the Great, *De hom.*, 379.14–18.

62 Albert the Great, *De hom.*, 379.20–28.

63 Albert the Great, *De hom.*, 379.29–40.

64 Albert the Great, *De hom.*, 379.37–40.

65 "Sensus enim communis licet non immobilitetur in somno quoad actum interiorem, tamen immobilitatur quoad exteriorem et quoad comparationem interioris ad exteriorem; et hoc dicitur maior potentia somni." (Albert the Great, *De hom.*, 379.14–18.)

66 See above, 155n23.

sense-impressions is when we are close to waking, because then the power of sleep is weakened.[67]

4 Between Albertus Magnus and John Buridan

Among the commentaries here studied that were written between Albert's expositions and John Buridan's question commentary, two may be singled out as particularly interesting. One is the question commentary by Geoffrey of Aspall, because as mentioned above and elsewhere,[68] unlike the other works here studied, Aspall's work contains no clear indication that he knows of Albert's works.[69] The other is the commentary by John of Jandun, which, as we shall see, is refreshingly independent in its treatment not only of Aristotle, but also of John's predecessors' proposed solutions.

Geoffrey of Aspall devotes considerable attention to the role of the particular senses in the process of dream formation. According to Geoffrey, Aristotle's remark in *Insomn.* 1, 459a2–5 that the particular senses are affected in sleep should be understood as referring to the activity of the common sense as the "root" of each of the five particular senses: When the common sense is affected by the *phántasma*, it is affected "with respect to any of the particular senses," which is the reason why we so often believe that we are perceiving in our sleep.[70] Like Albert, Geoffrey supports Averroes' description of the process of dream formation, but also just like Albert, he seems to hold that the dreams are perceived by the common sense as the last stage of the process.[71]

Like Albert, Geoffrey of Aspall refers to *de An.* 2.5, 417b23–25, in which Aristotle claims that we cannot perceive whenever we choose to, as an objection to Aristotle's claim that the sense-impressions are stored in the particular sense-organs.[72] But whereas Albert waves the argument aside with the less sophisticated comment that Aristotle at this specific instance in *De anima*

67 "Quando autem sensus communis interius comparat ad exterius, tunc contingit ex debilitate dormitionis, quia iam sensus communis quodammodo incipit solvi ad actum exteriorem." (Albert the Great, *De hom.*, 379.78–380.1.)

68 See vol. 1, 202.

69 See Sten Ebbesen, "Geoffrey of Aspall, *Quaestiones super librum De somno et vigilia*: An Edition," *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 83 (2014): 261.

70 "Unde quod dicit Aristoteles quod sensus patiuntur in somno, hoc intelligendum est non in se sed in sua radice, ut in sensu communi […]." (Geoffrey of Aspall, *Quaest. Somn.Vig.*, 320.) Also, see ibid., 326.

71 Geoffrey of Aspall, *Quaest. Somn.Vig.*, 329 (see, in particular, 2.2: "apud somnum non moventur sensus particulares"), and 330.

72 Cf. James of Douai, *Quaest. Somn.Vig.*, 55.18–20, 56.18–21.

has only perception in waking condition in mind, Geoffrey provides several explanations aimed at reconciling the theory put forth in *De insomiis* with the conclusion in *De anima*: As Aristotle holds, the sense-impressions can be stored in the sense-organs, but they do not have the capacity to change them and, hence, as stated in *De anima*, it is not in our power to perceive whenever we choose.[73] Furthermore, the *simulacra* are contained both in the sense-organs and in the common sense, and their movements affect both, but dreams are only generated in the common sense, because in sleep the *spiritus* does not reach beyond the common sense.[74] Interestingly enough, Geoffrey also adds a fallback solution that touches upon the question of the durability of the movements in the sense-organs and keeps the question open:

> And they [= the sensible species] do not remain forever in the sense-organs, but eventually disappear, at least in such a way that they cannot [any longer] change the particular senses.[75]

The argument that the sense-organs have some limited capacity to store the sense-impressions becomes a recurrent solution to the problem of how the particular senses can store sense-impressions. As demonstrated above, Aristotle's claim that this is the case was regarded as problematic in several aspects. The most important objections seem to have been (1) the remark in *De anima* that sensation is only possible if the object is present and (2) the question of the capacity of the sense-organs to store sense-impressions in relation to the retentive power of imagination. As mentioned above, Albert had already tried to solve the problem by claiming that the retentive power of imagination was superior to that of the sense-organs.[76] This develops somewhat in the later

73 Geoffrey of Aspall, *Quaest. Somn.Vig.*, 323.

74 Geoffrey of Aspall, *Quaest. Somn.Vig.*, 326.

75 "Nec etiam semper manent [*sc.* species sensibilium] in organis sensitivis, sed tandem evanescunt, ad minus ita quod non possunt ipsum sensum particularem <immutare>." (Geoffrey of Aspall, *Quaest. Somn.Vig.*, 323.) Note that James of Douai also comments on the duration of the movements caused by the sense-impressions, referring, as Ebbesen points out, to *Ph.* 8.10, 267a5–9: "Unde tamdiu continuatur motus proiectionis quamdiu virtus primi moventis est fortior et motus eius est fortior quam sit motus naturalis proiecti, et illud latius dictum est in VIII° Physicorum." (James of Douai, *Quaest. Somn.Vig.*, 51.22–24.)

76 Cf. James of Douai, *Quaest. Somn.Vig.*, 50.29–31: "Nam si species sensibilium manent in sensibus abeuntibus sensibilibus et in absentia ipsorum, multo fortius et species sensibilium manebunt in sensibus interioribus in absentia sensibilium, sicut in phantasia." Albert's position is reflected in his tendentious interpretation of *Insomn.* 2, 459b7, where Aristotle is explicitly refering to the sense-organs (*Insomn.* 2, 459b5–7: διὸ τὸ πάθος ἐστὶν

tradition into an "easy come–easy go" argument: The particular senses (contrary to imagination) perceive the sensible species rapidly, and so they also lose them rapidly.[77]

To my knowledge, Geoffrey of Aspall does not discuss the question of at what stage in the process (and where in the body) the *simulacra* are actualised. However, his description of the last stage of dream formation seems to indicate that the actualisation takes place somewhere between the imagination in the brain and the common sense in the heart. His account suggests that he understands *Insomn.* 3, 461b11–21 as referring to the flow of cooled vapours from the brain to the stomach, which according to the Aristotelian model is the material cause of sleep. But Geoffrey's interpretation of this passage is hardly the decisive point for him; his reading of Aristotle seems rather to be an effect of the fact that he follows the brain-centered model also adopted by Albert.[78] However, it is hard to resist the suspicion that Aristotle's way of describing the blood retracting from the sense-organs to the heart as "descending" to its source and the movements "descending with it"[79] was regarded by Geoffrey as support for the interpretation that Aristotle in *Insomn.*, 3, 461b11–21 describes how the common sense perceives the movements only after receiving them from imagination.[80]

οὐ μόνον ἐν αἰσθανομένοις τοῖς αἰσθητηρίοις, ἀλλὰ καὶ ἐν πεπαυμένοις, καὶ ἐν βάθει καὶ ἐπιπολῆς = *trl. vetus*, 10.6–8: "ideo passio est non solum sentientibus per organa sentiendi, set etiam quiescentibus, et in profundo et superficie tenus"): "Ad rationes autem Aristotelis dicendum quod profundum sensuum ab ipso appellatur organum sensus communis, et per omnes illas rationes intendit probare per locum a minori quod sensibilia refluentia a loco phantastico ad organum sensus communis possunt manere in ipso re non praesente tempore somniandi, quia in superficie organorum aliquamdiu manent post impressionem" (Albert the Great, *De hom.*, 368.32–39); cf. Albert the Great, *De somno* 2.1.5, 164a: "et ideo quiescentibus jam rebus exterioribus a movendo sensus, alteratio fit adhuc et remanet tam in superficie sensus in organis, quam in profundo capitis, ubi sitae sunt aliae particulae animae sensibilis." Also, cf. James of Douai, *Quaest. Somn.Vig.*, 52.3–6: "et ideo manifestum est quod passio et species sensibilis non solum est in sentientibus sensitivis <sed> et in absentia sensibilium, et in profundo, i.e. in sensibus interioribus sicut in phantasia, et superficietenus i.e. in sensibus exterioribus."

77 See James of Douai, *Quaest. Somn.Vig.*, 55.28–56.2.

78 See Donati, "Albert the Great as a Commentator," 183–84, on Geoffrey's discussion of the location of the internal senses, including the disagreement between Aristotle and the Arabic tradition.

79 *Insomn.* 3, 461b11–12: ὅταν γὰρ καθεύδῃ, κατιόντος τοῦ πλείστου αἵματος ἐπὶ τὴν ἀρχὴν συγκατέρχονται αἱ ἐνοῦσαι κινήσεις = *trl. vetus*, 24.7–9/*trl. nova*, 25.7–9: "cum enim dormierit, descendente plurimo sanguine ad principium condescendunt et movent (+ reliqui *trl. vetus*) qui insunt motus."

80 "Et praeter hoc, Aristoteles inferius, ubi determinat modos quibus moventur ista simulacra ad organum sensus communis, dicit quod sedata turbatione sanguinis, ut post

Like Geoffrey of Aspall, John of Jandun agrees with Albert on most major points, but he also presents a number of pro and con arguments and conclusions that are not found in Albert. In the *quaestio* "utrum species sensibilium remaneant in sensibus in absentia sensibilium" ("whether the sensible species remain in the senses in the absence of the sensible [objects]"),[81] the initial objections include several of the standard counterarguments such as, for instance, the reference to *de An.* 2.5, 417b23–25,[82] but before embarking upon refuting the standard objections, John accounts for a number of, as he claims, invalid proofs for Aristotle's statement that the sensible species are stored in the sense-organs:

(1) Some claim the following in support of Aristotle: We do not only perceive external sensibles but also make a judgement about them. Perception and judgement cannot take place simultaneously. Hence, the species must be stored in the sense-organs in the time span between the two actions.[83]

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digestionem, tunc descendunt simulacra a partibus superioribus, ut a cerebro, usque ad cor; ergo secundum Aristotelem ista simulacra secundum quae fiunt somnia non currunt sive fluunt ab organis exterioribus sed ab interioribus." (Geoffrey of Aspall, *Quaest. Somn. Vig.*, 329.) Cf. James of Douai, *Quaest. Somn.Vig.*, 65.11–30.

81 John of Jandun, *Quaest. Somn.Vig.*, fol. 42va–43rb.

82 John of Jandun, *Quaest. Somn.Vig.*, fol. 42va, 43ra; cf. Radulphus Brito, *Quaest. Somn. Vig.*, 58, 60; Simon of Faversham, *Quaestiones super librum De somno et vigilia*, ed. S. Ebbesen, in "Simon of Faversham, *Quaestiones super librum De somno et vigilia*: An Edition," *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 82 (2013): 137, 139; Walter Burley, *Expositio in Aristotelis De somno et vigilia*, ed. C. Thomsen Thörnqvist, in "Walter Burley's *Expositio* on Aristotle's Treatises on Sleep and Dreaming: An Edition," *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 83 (2014): 489.13–16, 491.14–26. A recurrent objection is also the comparison between the external senses and a mirror: the relation between the sensible form and the external senses is equivalent of that of a form seen in a mirror and the mirror itself, because when the sensible object is removed, the impression of it on the senses/the mirror also disappears. The standard argument against the simile is that while it is true that both in the eye and in the mirror the sensible species represents that of which it is a species, since the mirror, contrary to the eye, does not have a soul, it does not have cognitive power and so also lacks the ability to make a judgement about the species, whereas the senses have not only the ability to perceive the species but also to make a judgement about it, and so must also have the ability to preserve it (James of Douai, *Quaest. Somn.Vig.*, 55.15–17, 56.13–17; John of Jandun, *Quaest. Somn.Vig.*, fol. 42va, 43ra; Anonymus Angelicani, *Quaest. Somn.Vig.*, MS Rome, Bibl. Angelica, 549, fol. 109rb; Radulphus Brito, *Quaest. Somn.Vig.*, 58, 59–60; Simon of Faversham, *Quaest. Somn.Vig.*, 137, 138–39; Walter Burley, *Exp. Somn.Vig.*, 489.9–12, 491.8–13). Note that Burley (491.8–13) differs from the other three by (with some hesitation) suggesting the less sophisticated explanation that the mirror receives the impression only on its surface, whereas the eye receives it in its depth and so preserves it longer than the mirror.

83 See John of Jandun, *Quaest. Somn.Vig.*, fol. 42vb. The argument which is ascribed to "aliqui" is found in Brito, *Quaest. Somn.Vig.*, 58–59.

But, John objects, for this proof to hold, it is not enough to refer to the fact that perception and judgement cannot take place simultaneously, one also has to be able to prove that the sensitive power can make a judgement about the sensible object in its absence, and the particular senses are clearly not capable of that.

(2) Others try to prove that Aristotle is right by claiming that for the sensible species to be able to change the interior senses via the particular, the species have to somehow be attached to the particular senses. But this claim is refuted, John points out, by a comparison with vision: The visible object cannot change the eye without the diaphanous acting as medium. But neither light nor colour remain in the diaphanous after the visible object is gone; still, visual sense-impressions clearly also affect the interior senses after the object is no longer present.[84] Furthermore, John adds, apparently a high number of sensible species change the imagination without remaining in the sense-organs; we are able to perceive a sensible object, remember it, and recall it after the object is gone both in the external world and in the particular senses. This would not have been possible unless the species could change imagination also after the object is gone from the particular senses.

(3) The standard solution that the sense-organs have some limited capacity of storing the species is dismissed by Jandun as a solution that those who are looking for an easy way out of the problem resort to;[85] since it would seem that there are observations that speak against such a capacity, we need a solution that explains how it is at all possible for the sense-organs to store sense-impressions. Vision is dominated by water and hearing by air, and in none of these elements do impressions remain.

Having refuted the proofs above – including rather vigorously the standard solution that the retentive capacity of the particular senses is limited –, Jandun suggests the solution that not all sensible species but only those that are unusually strong remain in the particular senses, and that even these unusually

84 "Et ideo alii dicunt aliter, quod per species inexistentes sensibus particularibus sensus particulares immutant uirtutes interiores et ideo oportet, quod species ipsae habeant aliquam fixionem et permanentiam in sensibus particularibus." (John of Jandun, *Quaest. Somn.Vig.*, fol. 42vb.) John (fol. 42vb) refers to Albert for this argument ("istam rationem tangit Albertus"); the reference must be to Albert the Great, *De somno*, 164a ("et remanet forma per spatium in organo sensus postquam alteratum est: quia aliter secundum illam formam non moveret interiores animae partes et organa").

85 "Aliqui breviter se expediunt et dant causam huius, quod organa sensuum non solum habent potentiam receptivam specierum sensibilium, sed etiam virtutem conservativam et virtutem retinendi ad aliquod tempus." (John of Jandun *Quaest. Somn.Vig.*, fol. 42vb.)

strong impressions do so only for a limited time-span. One could postulate, he claims, that in a case where such an unusually strong impression affects one of the senses, the *spiritus* would be sent in larger quantities to the respective sense-organ. This unusually large quantity of *spiritus* will make the organ unusually dry and, consequently, enhance its retentive capacity, while the sense-organs are otherwise typically moist and, hence, primarily receptive and not retentive.[86] This, according to Jandun, is the phenomenon behind the various examples of continuous perception that Aristotle adduces in *Insomn.*:

> It could also be claimed, that when some excessive sensible, such as, for instance, a bright colour, a sharp light, a loud sound, and so on, changes with great force one of the sense-organs, nature directs more spirit to that location than it would have done had the sensible in question been more proportionate and balanced, and the large quantity of the spirit dries out the sense-organ and diminishes its humidity to such a degree that for a brief time the organ has the power of retaining the species that has been impressed in it by the excessive sensible, which it would not have had if it had been moved by an object of lesser force. That the truth is such is demonstrated by Aristotle's many experiments [...].[87]

The distinction between the sensible object as the *causa in fieri* (and not as the *causa in esse*) of the sensible species in the sense-organs is central to Jandun's

86 See also John of Jandun, *Quaest. Somn.Vig.*, fol. 42va, where the objection to Aristotle's position is adduced that the conclusion that the sense-organs can both receive and store the species presupposes that the disposition of the organs is both dry (retentive) and moist (receptive) at the same time, and since dry and moist are contraries, this is not possible. Jandun here refers to Averroes on *Mem.*: "siccitas enim innata est recipere difficile; et cum receperit formam, tunc innata est retinere eam longo tempore; econtrario de humido" (Averroes, *Compendium*, 70.39–41); cf. Radulphus Brito, *Quaest. Somn. Vig.*, 58, 60; Simon of Faversham, *Quaest. Somn.Vig.*, 137; Walter Burley, *Exp. Somn.Vig.*, 490.21–491.7; also, cf. Albert on the retentive power of the soul: Albert the Great, *De hom.*, 283.26–31.

87 "Posset quoque dici quod cum aliquod excellens sensibile, ut puta fortis color uel fortis lux et sonus fortis et sic de aliis, immutat multum efficaciter organum alicuius uirtutis: tunc natura mittit ad locum illum multos spiritus plus quam si illud sensibile esset magis proportionatum et temperatum, et isti spiritus in multitudine pervenientes ad illud organum aliqualiter caliditate sua desiccant illud organum, uel eius humiditatem remittunt in tantum, quod ad aliquod paruum tempus habet illud organum uirtutem conseruandi speciem sibi impressam ab illo sensibili excellenti, quam non haberet si ab obiecto minoris efficaciae moueretur. Quod autem ueritas sic se habeat, quod species sensibilium remaneant Aristoteles multis experimentis ostendit [...]." (John of Jandun, *Quaest. Somn. Vig.*, fol. 43ra.)

treatment of the problem: The object causes the sensible species to enter the sense-organs, it does not sustain the existence of the species there; hence, the cause can be removed without the effect being removed just as the builder can be removed after the house has been built without the house being destroyed.[88]

So, can the activity of the common sense in sleep when it is moved by a *phántasma* be described as a kind of perception? Aristotle seems to believe so.[89] John of Jandun explicitly and without modification describes the activity of the common sense as a sensation; more precisely, it is, according to John, the type of sensation that Averroes in his commentary refers to as "spiritual":

> And this sensation that the common sense performs when it is changed by the images that have been stored internally is the one that the Commentator in the beginning of his treatise calls "spiritual," that is, the object that changes the common sense is something spiritual, viz. an image of some things and stored internally, and when the common sense senses in this way, he calls it a sense in potentiality, because it is not changed *per se* by the action of external things that move the particular senses, but is only in potentiality with respect to such a change, although it is actually changed by the internally stored likenesses of things.[90]

Albert's explanation in *De homine* that the common sense has two *comparationes* and is immobilised only with respect to one of them is found in the

88 "[…] non oportet quod causa in fieri remota tollatur effectus, ut domificator est causa domus in fieri et remoto domificatore non oportet domum corrumpi, licet oporteat domificationem cessare […]." (John of Jandun, *Quaest. Somn.Vig.*, fol. 42ra.) Jandun (fol. 43ra) also adds the standard solution to the problem of water and air as the dominating elements in vision and hearing, viz. the distinction between the material eye (which does not have retentive capacity) and vision as a cognitive faculty (which does); cf. James of Douai, *Quaest. Somn.Vig.*, 56.8–12; Anonymus Angelicani, *Quaest. Somn.Vig.*, fol. 109va–b; Radulphus Brito, *Quaest. Somn.Vig.*, 59–60; Simon of Faversham, *Quaest. Somn.Vig.*, 138.

89 See, for instance, *Somn.Vig.* 2, 456a24–27; *Insomn.* 1, 458b29–33; 3, 462a2–5.

90 "Et illa sensatio sensus communis, quam facit cum immutatus est ab imaginibus interius reseruatis est illa, quam Commentator in principio sui tractatus uocat spiritualem, scilicet obiectum immutans sensum communem est quid spirituale, scilicet imago rei interius reseruata, et sensum communem sic sentientem uocat sensum in potentia, quia per se non immutatur actu a rebus exterioribus mouentibus sensus particulares, sed solum est in potentia respectu talis immutationis, licet a rerum simulacris interius conseruatis actualiter immutentur." (John of Jandun, *Quaest. Somn.Vig.*, fol. 37ra.) The reference is to Averroes, *Compendium*, 25.31–27.3, but see also 75.10–77.27. On 25.31–27.3, see Jean-Baptiste Brenet, "Agent Sense in Averroes and Latin Averroism," in *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*, ed. J. F. Silva and M. Yrjönsuuri (Dordrecht: Springer, 2014), 158–60.

majority of the commentaries here studied. Geoffrey of Aspall resorts to it on the same two occasions as Albert: in a *quaestio* on Aristotle's definition of sleep[91] and when dealing with the problem whether sleep and waking are affections of the common sense.[92] James of Douai, among others, adduces it as evidence that dreaming is an affection of the common sense.[93] However, for none of the commentators here considered does the solution with the two relations of the common sense manage to solve the problem of sleepwalking, where not only some perception is possible in sleep but where there is also the ability to move while the common sense is inactivated.[94]

5 John Buridan

When Buridan enters the scene in the first half of the fourteenth century, he brings with him the first major shift from the earlier tradition by not accepting the standard arguments for locating the common sense in the brain. Instead he supports Aristotle's claim that its real location is in the heart. Buridan's arguments for the location of the common sense will not be discussed in detail here; it has already been dealt with extensively by others.[95] A few studies have also very briefly touched upon the implications of Buridan's theories on the

91 Geoffrey of Aspall, *Quaest. Somn.Vig.*, 288; cf. Albert the Great, *De hom.*, 322.5–20.

92 Geoffrey of Aspall, *Quaest. Somn.Vig.*, 298; cf. Albert the Great, *De hom.*, 333.13–50.

93 James of Douai, *Quaest. Somn.Vig.*, 47.2–19; also, see ibid., 46.1–11. Cf. John of Jandun, *Quaest. Somn.Vig.*, fol. 42va; Siger of Brabant(?), *Quaestiones in Aristotelis De somno et vigilia*, MS Rome, Biblioteca Angelica, 549, fol. 102rb/MS Munich, BSB, clm. 9559, fol. 48ra; Anonymus Angelicani, *Quaest. Somn.Vig.*, fol. 109rb; Walter Burley, *Exp. Somn.Vig.*, 484.9–13.

94 *Somn.Vig.* 2, 456a24–27. For an overview of the medieval discussion of Aristotle's remark on sleepwalking, see Christina Thomsen Thörnqvist, "Sleepwalking Through the Thirteenth Century: Some Medieval Latin Commentaries on Aristotle's *De somno et vigilia* 2, 456a24–27," *Vivarium* 54 (2016): 286–310.

95 The standard argument for placing the common sense in the brain was based on the fact that different injuries to the head resulted in corresponding psychological defects. For Buridan's position in relation to the earlier tradition, see, for instance, Simo Knuuttila, "Aristotle's Theory of Perception and Medieval Aristotelianism," in *Theories of Perception in Medieval and Early Modern Philosophy*, ed. S. Knuuttila and P. Kärkkäinen (Dordrecht: Springer, 2008), 12; Peter G. Sobol, "John Buridan on External and Internal Sensation," in *Questions on the Soul by John Buridan and Others: A Companion to John Buridan's Philosophy of Mind*, ed. G. Klima (Cham: Springer, 2017), 103–4; Egbert Bos and Stephen Read, *Concepts: The Treatises of Thomas of Cleves and Paul of Gelria: An Edition of the Texts with a Systematic Introduction* (Louvain: Peeters, 2001), 34–35.

structure of the brain and the nature and function of the interior senses on dream formation,[96] but research on the topic is so far very limited.

In Peter G. Sobol's inventory of the content of Buridan's question commentary on *De anima* 2, the following deviations from the earlier tradition may be noted as the most relevant here: According to Buridan, (1) the sensible species travel from the external senses directly to the brain via nerves in the anterior part of the brain and then from the brain to the organ of the common sense in the heart, and (2) dreams are a result of sensible species traveling via a nerve from the organ of memory in the back of the brain to the organ of the common sense in the heart.[97] Buridan adduces two reasons for (1), which both involve protecting the heart: The heart is sensitive to excessive stimuli; hence, the sensible species travel not directly to the heart but via the brain in order to protect the heart by slowing down the *impetus passionis*. But the heart must also be protected against exhaustion from emitting the *spiritus sensibilis* to the exterior senses when we are awake; hence, there has to be a mechanism to cut off the flow of the *spiritus* and the brain is the most suitable location for this mechanism because the hot vapours from food gather in the cold brain and thicken because of its coolness.[98]

Buridan's question commentary on the *Parva naturalia* contains only two questions directly related to *De insomniis*.[99] One is the question whether dreams are always generated in sleep,[100] the other one discusses the valid-

96 See, for instance, Peter G. Sobol, "Sensations, Intentions, Memories, and Dreams," in *The Metaphysics and Natural Philosophy of John Buridan*, ed. J. M. M. H. Thijssen and J. Zupko (Leiden: Brill, 2001), 183–98; id., "John Buridan on External and Internal Sensation," 104.

97 Peter G. Sobol, *John Buridan on the Soul and Sensation: An Edition of Book II of his Commentary on Aristotle's Book on the Soul with an Introduction and a Translation of Question 18 on Sensible Species*, PhD diss. (Indiana University, 1984), qu. 24, 390–409; Sobol, "John Buridan on External and Internal Sensation," 104–5. Note Buridan, *Quaest. de An. II*, qu. 24, 406: "Et notandum est quod aliquando utraque via est clausa, scilicet cordis tam ad organum anterioris capitis quam ad organum posterioris. Et tunc fit nobis sompnus sine sompnio. Aliquando clausa est via ab organum anteriori, manente alia via aliqualiter aperta que est ad organum posterioris, et tunc fiunt sompnia cum nondum valeat fieri sensatio per sensus exteriores."

98 Se John Buridan, *Quaest. de An. II*, qu. 24, 404–5.

99 The standard question on the retentive power of the sense-organs is not included in the section on *Insomn.*, but scattered remarks in his question commentary on *De anima* indicate that he, like his predecessors, follows Aristotle in granting the external senses such a power, but adds the aspect that the capacity is very limited in comparison to the retentive power of the common sense and even more so in comparison to that of imagination. See, for instance, *Quaest. de An. II*, qu. 18, 284; qu. 22, 368.

100 John Buridan, *Quaest. Somn.Vig.*, qu. vii(2), fol. XLVIrb–vb.

ity of Aristotle's definition of dreaming.[101] The former does not add much to the topic discussed here,[102] but the latter pinpoints – but does not solve – a question that arises from (2) above: According to Aristotle, both dreams and memories are generated from remnants of sense-impressions that remain in the body after the sensible object is gone. However, contrary to dreams, memories come with a consciousness that they are of the past.[103] Now if dreams are generated from sensible species traveling from memory to the heart, why are we not conscious that our dreams are sense-impressions of the past? The earlier tradition, including Aristotle himself, has categorically refrained from describing dreams as made of memories, in all likelihood precisely because in our dreams we typically believe that we are perceiving the present.

Buridan's *quaestio* on Aristotle's definition of *enýpnion* in his question commentary on *Somn.Vig.* does not address this problem directly, but it contains an account of four types of *apparitiones* that proves to be relevant in this connection. Only one of these types of apparitions – or rather a subcategory of one category – is properly called dream:[104]

(1) *Apparitiones sensuales*: external sense-impressions in sleep as exemplified by Aristotle in *Insomn.* 3, 462a19–27, which are simply perception that occurs when sleep is weak.[105]

(2) *Apparitiones intellectuales*: what Aristotle calls *alētheîs énnoiai* (ἀληθεῖς ἔννοιαι) in *Insomn.* 3, 462a28, "true thoughts" that do not only occur when we are awake but occasionally also when we sleep,

(3) *Apparitiones phantasticae*: apparitions caused by the sensible species that are stored in imagination and appear to the common sense when we are awake, as, for instance, when we imagine a place even though we are

101 John Buridan, *Quaest Somn.Vig.*, qu. vii(1), fol. XLVvb–XLVIrb. (Note that in Lockert, both *quaestiones* on *Insomn.* are numbered "VII.")

102 For an account of the causes of dreamless sleep, however, see John Buridan, *Quaest. Somn.Vig.*, qu. vii(2), fol. XLVIva–vb.

103 See, for instance, *Mem.* 1, 449b24–30 (edited by David Bloch in Bloch, *Aristotle on Memory*, 26): ἔστι μὲν οὖν ἡ μνήμη οὔτε αἴσθησις οὔτε ὑπόληψις, ἀλλὰ τούτων τινὸς ἕξις ἢ πάθος, ὅταν γένηται χρόνος. τοῦ δὲ νῦν ἐν τῷ νῦν οὐκ ἔστι μνήμη, καθάπερ εἴρηται. ἔστι γὰρ τοῦ μὲν παρόντος αἴσθησις, τοῦ δὲ μέλλοντος ἐλπίς, τοῦ δὲ γενομένου μνήμη. διὸ μετὰ χρόνου πᾶσα μνήμη. ὥσθ' ὅσα χρόνου αἰσθάνεται, ταῦτα μόνα τῶν ζῴων μνημονεύει, καὶ τούτῳ ᾧ αἰσθάνεται.

104 See John Buridan, *Quaest. Somn.Vig.*, qu. vii(1), fol. XLVIra.

105 Aristotle does not explicitly say that this is the cause of the phenomenon, but describes the sleeper's perception in these cases as weak (see *Insomn.* 3, 462a20–21, 22, 25). In the medieval tradition, however, the weakness ascribed by Aristotle to the sleeper's perception is transferred to his sleep; see Christina Thomsen Thörnqvist, "Aristotle and His Early Latin Commentators on Memory and Motion in Sleep," in *Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle's De memoria et reminiscentia*, ed. V. Decaix and C. Thomsen Thörnqvist (Turnhout: Brepols, 2021).

not there, or when small children imagine terrifying things because they are afraid of the dark. When apparitions of this type appear in our sleep, we call them dreams.[106]

(4) *Apparitiones memorativae*: Contrary to the sensible species stored in imagination, species stored in memory are stored *cum certa differentia temporis*. Hence, type (3) apparitions will typically appear to us as something that we are perceiving in the present, whereas type (4) will appear as something we perceived in the past.[107]

Buridan points out that type (3) is more common than (4) and that it is only apparitions of type (3) that are properly called dreams.[108] Hence, the distinction between memory and dream is also clear enough here: Memories, viz. sensible species stored in memory "with a certain time-distinction" (*cum certa differentia temporis*), can occasionally appear to the common sense also in sleep, but only the sensible species that are stored in imagination "without a certain time-distinction" (*sine certa differentia temporis*) are authentic dreams[109] and these are, contrary to memories, always false, in the sense that they appear to us as something we perceive in the present, even though they are not.[110]

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106 Buridan points out that there is no name for the first sub-category of (3): "et huiusmodi apparitiones fiunt etiam aliquando in somno et cum fiunt in vigilia non dicuntur somnia, quia deficit connotatum per hoc nomen somnium, sed quando fiunt in somno, tunc dicuntur somnia." (John Buridan, *Quaest. Somn.Vig.*, fol. XLVIra.)

107 A similar list covering only (1)–(3) is found in Walter Burley, *Exp. Somn.Vig.*, 501.18–502.10.

108 "Fantasia enim reservat species sensibiles sine certa differentia temporis sed memoria reservat species et intentionem sensibilium cum certa differentia temporis. Ideo per fantasiam res apparent nobis ac si sint praesentes, sed per memoriam res apparent nobis quod tunc vidimus tales res vel audivimus etc." (John Buridan, *Quaest. Somn.Vig.*, fol. XLVIrb.)

109 Buridan's description of the formation of dreams in qu. 24 of his question commentary on *de An.* 2 seem to be the reason for the conclusion in Peter G. Sobol, "Sensations," 197, that in Buridan, memories are the "raw material of dreams"; however, as demonstrated above, it is evident from Buridan's classification of *apparitiones* in his commentary on the *Parva naturalia* that this is not the case; the sensible species stored *sine certa differentia temporis* in imagination are the raw material of the dream.

110 "Somnia enim non sunt verae apparitiones, immo falsae, quia apparet praesens quod non est praesens." (John Buridan, *Quaest. Somn.Vig.*, fol. XLVIrb.) Interestingly enough, Brito, when discussing the role of the intellect in preventing us from being deceived by our dreams, claims that memory also occasionally can make us aware that we are not perceiving but dreaming: "Aliquando intellectus est in actu, quia aliquando somnium est ita terribile quod intellectus iudicat istud esse impossibile accidere, sicut quando aliquis somniat aliquod inhonestum sibi accidere credit se somniare. Etiam aliquando memoria fit in actu, et quando aliquis iudicat de praeterito ipsum esse praesens et memoratur ipsum esse praeteritum, tunc iudicat istud esse somnium, et ita deceptio non latet ipsum." (Radulphus Brito, *Quaest. Somn.Vig.*, 66.)

6 Conclusion

At least on the basis of the texts here studied, one may conclude that the medieval Latin commentary tradition on Aristotle's theories of dreaming is clearly limited compared to the interest in the physiological aspects of sleep as put forth in *De somno et vigilia*. Nevertheless, the Latins obviously found some problems in Aristotle's theory on dream formation worth exploring, no doubt because they proved to have considerable bearing on the fundamental question of the structure of the soul as well as on the interrelation of sense-perception, imagination, and cognition. The question of the retentive capacity of the sense-organs finds no convincing solution in the commentators here discussed and some new problems surface as the tradition develops, such as the question of the interrelation of dreams and memories. On the other hand, the thirteenth- and fourteenth-century Latin commentators managed – with much help from the Arabs – to make a few not unimportant contributions to the reception of Aristotle's psychology, such as a considerably more complete theory of the process of dream formation as well as some substantial clarifications of the ambiguous role of the common sense in dreaming.

CHAPTER 6

What Does a Scholastic Philosopher Do When He Disagrees with Aristotle? Commentaries on Aristotle's *Divination in Sleep*

Sten Ebbesen

1 Introduction

Medieval philosophy was scholastic in the precise sense that the vast majority of its written production had its origin in oral teaching based on reading and discussing authoritative texts. In the arts faculties of the universities, Aristotle was the authority above all others, and a very large part of the teaching activity was devoted to the interpretation and discussion of his writings. Aristotle was not thought to be infallible, but the general attitude was that apparent oddities or inconsistencies in his theories were probably just apparent, and so any sane scholastic would try to find a way to explain away the oddities or inconsistencies so as to leave an Aristotle who consistently spoke the truth.

Exactly what you would have to explain away depended on your philosophical convictions and your overall interpretation of Aristotle. Fourteenth-century nominalists had problems with Aristotelian passages that were unproblematic to most Parisian philosophers of the late thirteenth century and *vice versa*. But usually the scholastics could find a way to show that the Aristotelian text they were lecturing on was speaking the truth.

There were, of course, some well-known cases where Aristotle and standard theology seemed irreconcilable. It was hard to deny that Aristotle would reject the notion of accidents with no substances underlying them such as were postulated in the doctrine of the eucharist, according to which the accidents (colour etc.) of the bread and the wine persist without any substances to carry them after transubstantiation.

It was equally hard to make Aristotle a believer in a temporal beginning of the world or in the possibility of a bodily resurrection of the dead. However, such cases were recognised and contained, as it were, by explaining that Aristotle lacked some information that can only be had by way of revelation, and so it is no wonder he reached the only conclusions that philosophy unaided by revelation can reach.

Aristotle's views about veridical dreams were in a quite different category. On any but the most biased reading of his *Div.Somn.*, he strongly rejects any sort of supernatural mechanism that would endow people with information about the future in their dreams, and he only allows a few natural explanations of why some dreams come out true: (a) Dreams may be signs of the dreamer's bodily state, and thus also of future consequences of that state. If someone feels hot in his sleep and dreams about fire, this may be a sign that he is developing a fever, for instance. (b) Dreaming something may help trigger behaviour that leads to the realisation of the contents of the dream. (c) A dream may come true by mere coincidence.

Aristotle does, however, in chapter two, reckon with the possibility of a sort of airborne transmission of information during the night, the information being propagated like ripples in water. Sensitive persons, he suggests, may be able to pick this up and thus, for instance, learn something about what is happening to persons with whom they have a close relationship and whose "wavelength" they easily tune into. How exactly the information is carried by the air is left unexplained, but it is clearly assumed to be a physical process involving modifications (*kinḗseis*, *motus*). It is also not explained how the information can be about the future, but one should probably understand Aristotle to mean that information about someone's present state or actions can be indicative of his future state or actions, so that veridical dreams of this type fall into category (a).[1]

Aristotle's minimalism in the matter of prognostication by means of dreams was not shared by the majority of his scholastic commentators. As a matter of fact, I only know one author who fully endorses it: Boethius of Dacia, a Danish-born Parisian philosopher with a *floruit* around 1270, about whom I shall speak later on. Boethius was a loner. Everybody else, at least in the period 1260–1310, was willing to leave much more space for divination. I shall examine how a number of Parisian scholastics from that period tackled the conflict

1 This, apparently, was the opinion of Anonymus Parisini 16149, *Sententia libri II De somno*, who compares prognosticating in such cases to prognosticating illnesses to come on the basis of external signs in the body of the future patient. MS Paris, BNF, lat. 16149, fol. 75rb: "et contingit divinare circa talia idola de futuris quoniam sicut contingit prognosticare per signa corporis exteriora aegritudines venturas, et idolum e<s>t signum habitudinis exterioris quod recipitur in dormientibus vel sibi simile" = "and it is possible to divine about future events on the basis of such appearances (*idola*) in the same way that it is possible to prognosticate illnesses to come on the basis of exterior signs of the body, and the appearance that is received in sleeping persons is a sign or likeness of some external relation." The *Sententia* is a relatively early work (before c.1275), for it uses the old translation of Aristotle's text, not William of Moerbeke's revised version.

between their beliefs and Aristotle's,[2] then briefly sketch how Boethius dealt with dreams and divination, finishing with a look at John Buridan, the dominant Parisian philosopher around the middle of the fourteenth century.

2 Averroes and Albert

On Divination in Sleep was translated from Greek into Latin sometime in the twelfth century, but like the rest of the *Parva naturalia* it was rarely, if at all, taught in higher schools before the middle of the thirteenth century. It was generally considered a part of *On Sleep and Waking* (*Somn.Vig.*) rather than an independent treatise.

The commentators from the late thirteenth and very early fourteenth centuries took their cues from two authorities: Averroes and, above all, Albert the Great.

2 In this essay I make use of: (1) Anonymus Angelicanus I (= Siger of Brabant?), *Quaestiones super librum De somno et vigilia*, MS Rome, Bibl. Angelica 549, fol. 99vb–104va (edition in preparation by Christina Thomsen Thörnqvist); (2) Anonymus Vaticani 3061, *Quaestiones super librum De somno et vigilia*, partial edition in Sten Ebbesen, "Anonymus Vaticani 3061 and Anonymus Vaticani 2170 on Aristotle's *Parva Naturalia*: An Edition of Selected Questions," *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 86 (2017): 216–312; (3) James of Douai, *Expositio cum quaestionibus super libros De somno et vigilia*, partial edition in Sten Ebbesen, "James of Douai on Dreams," *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 84 (2015): 22–92; (4) Radulphus Brito, *Quaestiones super librum De somno et vigilia*, partial edition in Sten Ebbesen, "Radulphus Brito on Memory and Dreams: An edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 85 (2016): 11–86; (5) Simon of Faversham, *Quaestiones super librum De somno et vigilia*, ed. in Sten Ebbesen, "Simon of Faversham, *Quaestiones super librum De somno et vigilia*: An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 82 (2013): 90–145. Note that while Simon of Faversham was an Englishman, all of his Aristotelian works seem to have been produced in Paris. In the following, the titles of (1)–(5) will be abbreviated as *Quaest. Somn.Vig.*

A survey of the contents of the question commentaries is available in Sten Ebbesen, Christina Thomsen Thörnqvist, and Véronique Decaix, "Questions on *De sensu et sensato*, *De memoria* and *De somno et vigilia*: A Catalogue," *Bulletin de Philosophie Médiévale* 57 (2015): 59–115.

There is not very much earlier literature on the subject of this essay. The most important predecessor is Silvia Donati, "Dreams and Divinatory Dreams in Albert the Great's *Liber de somno et vigilia*," in *Contemplation and Philosophy: Scholastic and Mystical Modes of Medieval Philosophical Thought, A Tribute to Kent Emery, Jr.*, ed. R. Hoffmeister Pich, S. Dumont, A. S. Culleton, and A. Speer (Leiden: Brill, 2018), 178–215. But see also Christophe Grellard, "La réception médiévale du *De somno et vigilia*: Approche anthropologique et épistémologique du rêve, d'Albert le Grand à Jean Buridan," in *Les Parva naturalia d'Aristote: Fortuna antique et médiévale*, ed. C. Grellard and P.-M. Morel (Paris: Sorbonne, 2010), 221–37.

Averroes' compendium of the *Parva naturalia*[3] is remarkably un-Aristotelian because he worked on the basis of an Arabic text that is not a translation of Aristotle's work, although he apparently believed it was and although it does contain elements derived from the Aristotelian treatise(s). The *Arabic Parva naturalia* is heavily influenced by Neo-platonic thought.[4] Unsurprisingly, then, Averroes fully endorses the thesis that dreams can be veridical in more ways than the trivial ones listed by Aristotle, saying, for instance:

> Some have described sleep as that which happens due to a weakening of the powers of sense. But not every sleep happens due to a weakening of the powers of sense, for [sleep] happens in particular as a result of thinking about some matter, when the common sense is used up in order to aid thinking, and not via some weakening that occurs. On the contrary, its activity together with the other powers is then stronger than when awake. And a sign of this is that the powers of sense are drawn inwards in sleep, and that when someone thinks about some difficult matter, sleep is particularly likely to befall him, so much that some people suffer something similar to death due to the weakening of the external powers [caused] by the use of the internal powers in grasping noble [objects] and seeing spiritual [objects] that exist in the world, such as angels and the heavens and the like.[5]

3 Averroes, *Compendia librorum Aristotelis qui Parva Naturalia vocantur*, ed. E. L. Shields and H. Blumberg (Cambridge, Mass.: Medieval Academy of America, 1949). The section on *De somno et vigilia* will hereafter be cited as "Averroes, *Somn.Vig.*" What I say about Averroes' views is entirely based on the Latin translation, which was, of course, the only version of the text available to the Western scholastics. For an analysis based on the original Arabic text, see Rotraud Hansberger's chapter in the present volume.

4 See Rotraud Hansberger, "*Kitāb al-Hiss wa-l-mahsūs*: Aristotle's *Parva naturalia* in Arabic Guise," in *Les Parva naturalia d'Aristote: Fortuna antique et médiévale*, ed. C. Grellard and P.-M. Morel (Paris: Sorbonne, 2010), 143–62. In addition, see Hansberger's chapter in the present volume.

5 Averroes, *Somn.Vig.*, 82–83: "Et quidam descripserunt sompnum, quod est illud quod fit propter debilitatem virtutum sensibilium. Et non omnis sompnus fit ex debilitate virtutum sensibilium: fit enim maxime a cogitatione in aliqua re, quando sensus communis profundatur ad iuvandum cogitationem, non per debilitatem contingentem. Immo actio eius tunc cum aliis virtutibus fortior est quam in vigilia. Et signum eius est quod virtutes sensibiles contrahuntur apud sompnum interius et quia homo, quando cogitaverit in aliqua re difficili, maxime contingit ei sompnus, adeo quod quibusdam hominibus accidit simile morti, scilicet propter debilitatem virtutum extrinsecarum, per usum virtutum intrinsecarum in comprehendendo nobilia et videndo spiritualia existentia in mundo, sicut angelos et celos et similia."

The text translated above is the standard Latin version of Averroes' compendium. In the shorter Parisian version, which was also consulted by many scholastics, the passage runs:

> Often sleep occurs without any weakening of the senses but through the intensity of a person's thought. For in intense thought the whole nature is pulled toward the interior and together with it the common sense is used up in order to help the thought, and in combination with the remaining powers, its action becomes more intense than even when the person is awake. That this is so is indicated by the fact that when in such a disposition men sometimes grasp wonders of the world, such as angels and the heavens, and many things that are absent, *and even many facts that will come true in the future*.[6]

Notice the clause about future events that I have italicised at the end of the quotation. As a matter of fact it has a counterpart in the Arabic texts, whereas the claim about seeing angels and the heavens has not.[7]

So, according to Averroes, hard intellectual work may induce a sleep in which the mind of the sleeper gets access to information denied to normal people, and to themselves when they are awake.

When he reaches the section of his compendium that corresponds to *De divinatione per somnum*, Averroes starts by classifying true dreams as (1) simply dreams, (2) divinations, and (3) prophecies. The standard translation is on occasions barely intelligible, but, as often, the Parisian version of the text is easier to read, and it yields basically the same sense:

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6 Averroes, *Somn.Vig.*, 80, *Versio Parisina*: "sepe nulla debilitate cogente fit sompnus propter fortitudinem cogitacionis. In forti enim cogitacione contrahitur tota natura ad interius et profundatur cum ea sensus communis, ut adiuvet cogitacionem, et fit actio eius cum aliis virtutibus forcior quam sit eciam in vigilia: cuius signum est quod quandoque in tali disposicione comprehendit homo mirabilia mundi, ut angelos et celestia et multa absencia et eciam multa futura vera."

7 Abū l-Walīd Ibn Rushd, *Talkhīṣ Kitāb al-Ḥiss wa-l-maḥsūs*, ed. H. Blumberg (Cambridge, Mass.: The Mediaeval Academy of America, 1972), 54–55, as translated by R. Hansberger: "Evidence for sleep being a deep immersion/sinking of the common sense into the interior of the body is that something similar to this happens to the waking person, I mean that sense objects/perceptibles pass him by without him perceiving them. That happens when he focuses his thoughts on something, because at such a time the sense organs of the soul become idle, and he turns the common sense towards the interior of the body in order to support the cogitative/thinking faculty. For the cogitative/thinking faculty becomes stronger when the other senses are resting. Therefore human beings tend to perceive future events ("things") during sleep, whereas they will not perceive them during waking."

> Among the true ones, some are simply called dreams, others divinations, and some prophesies. And some say that true dreams come from angels, divinations from demons, and prophecies from God, while others deny this and say that all three types are due to chance. But experience proves the contrary, for there is hardly a man who has not seen some true dream, and sometimes this occurs with such evidence that if the one who sees the dream thinks it properly through, he will necessarily concede that it is the result of an evident manifestation of the truth, and not due to chance. Although divinations and prophecies are only rarely seen and by few people, yet among all it is said to be thus.[8]

8 Averroes, *Somn.Vig.*, 94–95, *Versio Parisina*: "Et verorum quedam dicuntur simpliciter sompnia, quedam vero divinaciones, et quedam prophecie. Et dicunt aliqui quod sompnia vera sint ab angelis, divinaciones vero a demonibus, et prophecie a Deo. Aliqui tamen sunt qui negant ista et dicunt hec omnia fieri a casu. Contrarium tamen probat experiencia, quia vix est homo qui non viderit aliquod sompnium verum; et quandoque accidit hoc cum tanta certitudine quod, si videns sompnium bene consideraverit, necessario concedet hoc fieri ex certa veritatis ostensione et non a casu. Divinaciones vero et prophecie licet raro et paucis videantur, tamen apud omnes dicitur ita esse."

The standard version (94–96) runs: "Et post determinandum est de natura sompniorum et quod est sui generis de comprehensionibus divinis, que non acquiruntur per acquisitionem hominis. Dicamus igitur quod istarum comprehensionum quedam dicuntur sompnia, quedam divinationes, et quedam prophetie. Et quidam homines negant ista et dicunt ea accidere casu; sed negare ea est negare sensata, et maxime negare vera sompnia. Nullus enim homo est qui non viderit sompnium quod enuntiaverit sibi aliquod futurum. Et cum homo experimentaverit hoc multotiens videbit quod hoc non accidit casu, sed essentialiter. Et ille alie comprehensiones, licet non sint vise, tamen sunt valde famose. Et res que sunt famose apud omnes aut sunt necessarie secundum totum aut secundum partem: impossibile enim est ut famosum sit falsum secundum totum; et sermo de istis omnibus idem est. Et sermo de quiditate sompnii sufficiet, quia cause eorum non differunt, nisi secundum magis et minus, sed tamen differunt secundum nomina propter hoc, quod vulgus dicit. Dicunt enim quod sompnia sunt ab angelis et divinationes a demonibus et prophetie a Deo, aut cum medio aut sine medio. Et Aristoteles non fuit locutus nisi tantum de somniis."

The following translation is about as clumsy as the Latin text: "And then we must treat of the nature of dreams and, which is of a genus of its own, about divine comprehensions which are not acquired by human acquisition. Let us therefore say that of those comprehensions some are called dreams, some divinations and some prophecies. And some people deny those and say that they happen by chance. But denying them is denying things sensed, and in particular denying true dreams. For there is no man who has not seen a dream that announced to him some future [event]. And when someone has experienced this many times, he will see that this does not happen by chance, but essentially. And those other comprehensions, even if not seen, are yet very commonly accepted, and things that are commonly accepted among all people are necessary, either totally or partly, for it is impossible that what is commonly accepted is totally false. And there is the same to be said about all of those. And what there is to say about the quiddity of dream will suffice, because their causes do not differ except by more or less, but yet they differ in names because of what ordinary people say. For they say that dreams are from angels, divinations from demons, and prophecies from God,

The sentence, "And some say …" has no counterpart in the Arabic text, which thus does not mention angels, demons, and God (however, angels and God will appear later on).

In what follows, Averroes concentrates on explaining dreams in general as a phenomenon dependent on the imaginative power (*virtus imaginativa*), then returns to the question of where true dreams come from. The agent that induces them must be the active intellect (*intellectus in actu*), the same that provides universal principles in the theoretical disciplines.[9] This raises a difficult question, Averroes says, for dreams are about individual things, and how can the agent intellect provide information about particulars? His explanation is hard to follow, and may here be left aside. It should be noticed, however, that he repeatedly speaks about an *intelligentia* – it is unclear in exactly which sense he uses the word, but the Latins would be prone to think of such separate substances as Avicennian intelligences, which could be equated both with Aristotelian celestial movers and with Biblical angels.

Averroes also offers a teleological explanation for the occurrence of veridical dreams:

> What are dreams for? Let us say: they are due to care for humans. Because humans need a sort of knowledge and comprehension in the cogitative faculty that will allow it to know future useful and harmful events so that it can be prepared for them, for this reason the named faculty was provided with a support from this noble warning and spiritual comprehension. And therefore it is one part of prophecy. And this is clear in the dream about which Pharaoh consulted Joseph.[10]

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whether with an intermediary or without an intermediary. And Aristotle only spoke about dreams."

R. Hansberger's translation of the Arabic text, p. 66 in Blumberg's edition (see n7 above), runs: "We say that these perceptions include those that are called dream-visions (*ru'ya*), those that are called divination (*kahāna*), and those that are called revelation (*waḥy*). Some people dispute the existence of these [perceptions] and attribute the existence of any such thing that is [actually] observed to chance. Others confirm them; among them are those that confirm some of them but reject others. Arguing against their existence amounts to a rejection of the sense objects/perceptibles, especially where the existence of true dream-vision is concerned. For there is no human being who has not seen a dream-vision before that has warned him of what will happen to him in the future. If a person considers the frequency with which that [kind of thing] has happened to himself, this consideration will advise him of the fact that the knowledge that arises from the [dream-vision] is in fact essential, and arising from a nature that is an agent for it/that produces it, not from chance."

9 Averroes, *Somn.Vig.*, Standard version, 107; *Versio Parisina*, 105.

10 Averroes, *Somn.Vig.*, Standard version, 116: "Propter quid vero sunt sompnia? Dicamus ergo propter sollicitudinem circa hominem: homo enim quia indiget cognitione et

Albert the Great used the structure of the *Corpus Aristotelicum* as a blueprint for his vast encyclopedia, but he did not feel obliged to always defend Aristotle's theories. In Book three of his *De somno et vigilia*[11] (composed in the late 1250s) he deals with divination, and starts with some very critical remarks about Aristotle, who, he claims, has by no means provided a full and satisfactory account of divination.[12] Not only does he not treat of the magical and mathematical (i.e., astronomical and astrological) knowledge that is necessary for the interpretation of dreams, he also leaves out the physical explanation of the "likenesses" (*simulacra*, the Latin translation of Aristotle's *aisthḗmata*) that occur in such dreams as are accessible to divinatory interpretation. Yet, immediately afterwards Albert becomes less aggressive:

> Nevertheless, what Aristotle says is closer to the truth than anything that any previous or later philosopher whose writings have come down to us has written.[13]

Albert keeps this ambiguous attitude to Aristotle all through the work. In book three, treatise one, chapter two he asks whether divination is at all possible, and after some preliminaries he provides a clear affirmative answer in book

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comprehensione in virtute cogitativa, qua sciret res futuras utiles et nocentes, ut sit paratus contra illas, ideo fuit sustentata ista virtus cum hac enuntiatione nobili et comprehensione spirituali. Et ideo dicitur quod est una pars prophetie. Et hoc manifestum est in sompnio Pharaonis, de quo interrogavit Ioseph." The passage is cited in Simon of Faversham, *Quaest. Somn.Vig.*, qu. 13*.

The Arabic (ed. Blumberg 84–85; cf. n7 above) text as translated by R. Hansberger has: "As for why dream-vision exists, it does so to provide a proper place for the perfect providential care concerning human beings. For since man is deficient in knowledge and perception in [his] intellectual, thinking/cogitative faculty, through which he perceives the occurrence of beneficial and harmful things in the future, in order to prepare and get ready for such a thing, and [through which he] also forecasts the advent of [something] good and works towards its coming about, the [dream-vision] supports this faculty through this [kind of] noble warning and spiritual perception. Therefore it is said that it is a part of such and such [type of] prophecy. That is plain in the case of the dream that was seen by the king, who asked Joseph, peace be upon him, about it. For when Joseph, peace be upon him, had given his interpretation, he ordered them to get ready for the drought the dream had indicated, by leaving the grain in its ears during the fertile years, so that it would not go bad but would keep until the time of the years of drought."

11 Albertus Magnus, *De somno et vigilia*, ed. A Borgnet (Paris: Vivès, 1890), henceforward cited as "Albert, *De somno.*"

12 Albert, *De somno* 3.1.1, 178a. For a more thorough analysis of Albert's *De somno et vigilia*, see Donati "Dreams and Divinatory Dreams," 178–215.

13 Albert, *De somno* 3.1.1, 178a: "Tamen hoc quod dicit Aristoteles plus accedit veritati quam aliquid quod ante vel post scripsit aliquis philosophorum cuius scripta ad nos pervenerunt."

three, treatise one, chapter four: sure, there is divination. The material to be interpreted may be caused by God, by the stars, or by a cause in ourselves. Divination is generally about future contingents, and normally there is a celestial influence, but this influence is of a general nature, and does not provide ready-made precise likenesses but rather stimulates the mind to produce metaphors.

In the following chapters Albert tries to provide a *Forschungsbericht*, delineating the views of prominent authors, some of whom have assumed gods or demons to be the source of veridical dreams. But, he concludes,

> for our part, in this work we only speak from the point of view of natural science, and we see that there is no evidence from nature to prove that such dream influences come to our souls from gods or intelligences. […] So, it must be the ray-light that, variously configured, carries all the powers of the orb to us.[14]

Sticking to natural science means dropping all considerations about gods and demons in attempts to explain forewarnings (*praesignationes*) of future events. Instead, one must restrict oneself to the study of the movements of the heavenly bodies and the way they affect people. Their powers over us are considerable, they even play a considerable role in actions that in principle are voluntary, a fact that Aristotle overlooked with the result that he thought dreams about actions of the will could only come out true by coincidence.[15]

In book three, treatise one, chapters nine to twelwe Albert then lays out his theory of how the heavenly influence works with astral light (*lumen*) doing the job of carrying the powers (*virtutes*) of the celestial movers to us. An inflowed form, so to speak, takes over the faculties of the sleeping person, and likenesses (*simulacra*) are then multiplied. Only after the presentation of his beliefs about astral influence does Albert finally, in treatise 3.2, get around to expounding Aristotle's doctrine, which receives a rather fair treatment. Only in a section corresponding to Aristotle's rather muddled section about receiving information about events occurring far away does Albert introduce the celestial influence, adding that fascination (controlling processes in other people's

14 Albert, *De somno* 3.1.8, 188a: "Nos autem in hoc opere tantum physice loquentes videmus ex physicis nullo modo posse probari a diis vel intelligentiis huiusmodi influentias somniorum venire in animas." 188b: "Oportet ergo quod lumen radiale diversimode figuratum advehat nobis omnes virtutes orbis."

15 Albert, *De somno* 3.1.8, 188b–89a.

bodies by mental power) might also be relevant here, "though this can hardly be philosophically proved."[16]

3 The Commentators

For the next couple of generations of scholastics Albert's *De somno et vigilia* was a treasure trove of suggestions for how to get round the Aristotelian disbelief in divination, as well as a cherished source of genuine or anecdotal information about earlier thinkers' views and of anecdotes about veridical dreams upon which Albert's authority bestowed the status of empirical evidence.

How, then do the scholastics go about their job? Below I shall describe some of the moves they make.

3.1 *Move A: Make Aristotle an Ordinary Believer in Divination*

Several authors brazenly claim that in *De memoria* and *De divinatione per somnum* Aristotle supports the possibility of divination, without properly modifying their statement. In the case of *De memoria*, the claim is based on the remark that knowledge about the future would be "an expectative sort of knowledge" – that is, a knowledge about what to expect – "such as some say that divination is," which they take as support for a scientific astrology, without, however, linking it to dreams.[17] In the case of *Div.Somn*. they cite the remark at the beginning of the work that the claim that dreams may be signs of future events seems to have some empirical support, as most people believe to be the case.[18] Anonymus Angelicanus I puts it this way:[19]

16 Albert, *De somno* 3.2.6, 203b: "sed hoc per philosophiam probari vix posset."

17 *Mem*. 1, 449b11–13. Peter of Auvergne, *Quaestiones super De memoria et reminiscentia*, qu. 3 (edition in David Bloch, "Peter of Auvergne on Memory," *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 78 (2008): 51–110); Radulphus Brito, *Quaestiones super librum De memoria*, qu. 2 (edition in Ebbesen, "Radulphus Brito on Memory and Dreams"; see n2 above); Anonymus Vaticani 3061, *Quaestiones super librum De memoria*, qu. 3 (edition in Ebbesen "Anonymus Vaticani 3061"; see n2 above).

18 Apart from the two texts quoted below, see Radulphus Brito, *Quaest. Somn.Vig*., qu. 2.5.

19 Anonymus Angelicanus I, *Quaest. Somn.Vig*., qu. 2.10: "Possibilitatem autem talis scientiae contingit de(clara)re ratione Aristotelis et Commentatoris. Ea enim quae omnes vel plures existimant, necesse est habere aliquam veri significationem; nunc autem omnes vel plures existimant quod per somnia contingit divinare futura, nullus enim hominum est qui non viderit somnium quod non enuntiaverit sibi aliquod futurum, sicut Commentator dicit; ideo etc."

> The possibility of such [i.e., divinatory] knowledge can be shown with an argument used by Aristotle and the Commentator: What everybody or at least most people hold must contain some indication of truth. Now, everybody or at least most people hold that it is possible to divine the future through dreams, for, as the Commentator says, there is no man who has not seen a dream that announced him some future event. Therefore etc.

Simon of Faversham agrees:

> The opposite [i.e., the view that it is possible to obtain divinatory/divinative knowledge from dreams] is held by the Philosopher, and also by the Commentator, who says that denying dreams is denying what one can sense, since it is often the case that people who dream tell the truth about future events via their dreams.[20]

In referring to Aristotle's remark about the common belief in divination, the scholastics conveniently neglect the context, which is that of marshalling *prima facie* grounds for believing and not believing in dream divination. By taking the Aristotelian dictum out of context, they can construe it as being equivalent to Averroes' claim that there is empirical evidence for the possibility of divination by means of dreams. Of course, Aristotle did believe it was possible to derive some sorts of information from dreams, but only a few sorts, and he did not endorse the argument from common belief.

3.2 *Move B: Accept Aristotle's Three Types of Dreams That Come Out True*

None of the scholastics felt it difficult to accept that (1) some dreams are causes of future events, while (2) others are signs of future events, and (3) still others only by chance foreshadow some event. Types (1) and (3) were unproblematic, but not so type (2), because, to the medievals' taste, Aristotle operated with far too few sorts of significative dreams. As we shall see, they were ready to add some of the missing elements.

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20 Simon of Faversham, *Quaest. Somn.Vig.,* qu. 13*: *U. scientia divinativa per somnium sit possibilis*: "Oppositum vult Philosophus, et etiam Commentator. Dicit enim quod negare somnia est negare sensibilia, unde aliqui somniantes per somnia[s] saepe dicunt verum de futuris." Simon does not in his determination refute this argument. A very similar passage is found in James of Douai, *Quaest. Somn.Vig*., qu. 19, 87. Anonymus Vaticani 3061, *Quaest. Somn.Vig.*, qu. 2.7, adduces Aristotle in the *ratio ad oppositum*, and immediately at the beginning of his determination emphatically endorses the argument from experience.

3.3 *Move C: Introduce a New Classification of Dreams*

Several commentators operate with a new classification of dreams:[21]

(1) Dreams whose cause is in ourselves.
  (1.1) Dreams caused by our body.
  (1.2) Dreams caused by our soul.
(2) Dreams with an external cause.

With a little bit of good will, the distinction between 1 and 2 could be claimed to be present in Aristotle's text: until 2, 463b31 he deals with type 1, and then he starts to deal with type 2.[22] In itself, the distinction is innocuous, but it ceases to be so when type 2 is interpreted in the way the commentators take it.

Type 1.1 will take care of the sort of significative dreams recognised by Aristotle. Dreaming that you walk through fire may be the result of a developing fever, and thus be prognostic of illness and induce the dreamer to take proper action to counter the incipient onslaught of the disease.

As an example of type 1.2 some commentators just mention dreaming about something one has thought much about while awake, while others specifically cite dreaming about some close relative or friend who is much on one's mind, basing this example on an enigmatic remark of Aristotle's in 2, 464a27–32. Like Aristotle, they seem to assume that such dreams can provide correct information about the relevant person's present circumstances, but – again like

21 Anonymus Angelicanus 1, *Quaest. Somn.Vig.*, qu. 2.12; James of Douai, *Quaest. Somn.Vig.*, qu. 19, 87–88; Simon of Faversham, *Quaest. Somn.Vig.*, qu. 13*; Radulphus Brito, *Quaest. Somn.Vig.*, qu. 2.6–7. Thomas Aquinas, in his capacity as a theologian, had to make room for divinely and demonically inspired dreams, so in *Summa theologiae*, ed. P. Caramello (Turin: Marietti, 1948), 2-2.95.6, we find a modified version of the classification. *2* is divided into *2.1* dreams with a corporeal external cause, and *2.2* dreams with a spiritual external cause. As examples of corporeal external causes he mentions the air around the sleeper and celestial impressions, both of which may affect the sleeper's imagination. His "spiritual external cause" is either God via an angel or demons.

22 Thus Anonymus Parisini 16149, *Sententia libri II De somno*, fol. 76rb, on 2, 463b31: "Habita parte in qua determinavit de divinatione in somn<i>is originem ab interioribus in dormientibus habentibus […] intendit hic determinare de divinationibus in somn<i>is ab extrinseco ortum habentibus, ut per defluxiones idolorum" ("After the part in which he dealt with divination in dreams that have their origin inside the sleepers, […] he here intends to deal with divinations in dreams that have their origin from outside, as those caused by the flow of idols.") The same analysis in James of Douai, *Quaest. Somn.Vig.*, qu. 18, 82: "Consequenter cum dicit <2, 463b31> *De hiis vero* determinat de somniis quae non accipiunt originem ex nobis." Compared to James, Anonymus Parisini 16149 is remarkably levelheaded and loyal to the Aristotelian text; he nowhere mentions celestial influence.

Aristotle – they are generally vague about how such dreams can have a prognostic value.[23]

Type 2 would have been innocuous if it had been reserved for cases with no value for prognostication, like dreaming of thunder because one, even though asleep, registers some outside noise, which is then magnified in the dream. But, in fact, the sort of external cause the commentators always mention is celestial influence.

3.4 *Move D: Isolate Dreams Induced by God, Angels, or Demons*

While accepting that God, angels and demons can be sources of dreams carrying true information, Albert had isolated dreams of that type by claiming that they are not a proper object of an inquiry within natural philosophy.

Generally, the commentators follow Albert on this point, but there are nuances. They are very aware that Aristotle does not accept god-sent dreams, but some make a point of distinguishing between dreams coming directly from God and dreams that only indirectly have him as their source. The latter are acceptable in an Aristotelian framework, they think, while the former are not.[24]

If mentioned, demons are also generally excluded from consideration as sources of veridical dreams, if for no other reason than because "the Philosopher (*or:* a philosopher) cannot posit such substances."[25] James of Douai, however,

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23 Anonymus Angelicanus 1, *Quaest. Somn.Vig.*, qu. 2.10, is very brief on this point: "Similiter est ex parte animae cum aliquis somniat se videre dilectum vel alium talem." Simon of Faversham, *Quaest. Somn.Vig.*, qu. 13*, 142: "Aliquando somnia habent originem ex parte animae, sicut aliquando contingit quod aliquis in somno multum afficitur specie amici sui cum ab eo fuerit multum distans, quia dicit Philosophus quod amici p<ro>cul entes maxime sunt sol<lic>iti. Contingit tunc quod anima in somno informet idola convenientia amico suo, ista autem idola informata mittuntur ad sensum communem, ex quo causatur somnium, sc. iuxta sensum communem apparent multa idola eorum quae eveniunt circa dilectum, de eufortunio sc. et dysfortunio, de prosperitate et improsperitate et aliis circumstantibus amicum."

24 James of Douai, *Quaest. Somn.Vig.*, qu. 19, 88.12–15: "sunt aliqua somnia quae accipiunt originem ex nobis, quaedam vero quae ex nobis non originantur sed a causa extrinseca, non tamen a deo immediate sed ab influentia caeli (et qualiter <per> talia somnia contingit praevidere futura aliqualiter dictum est), vel a substantia divina." Anon. Vat. 3061, *Quaest. Somn.Vig.*, qu. 2.8, 289: "Sed hoc <*namely that dreams come directly from God*> est falsum, quia a causa immateriali nihil de novo producitur, ut patet 8 Physicorum […]." Radulphus Brito, *Quaest. Somn.Vig.*, qu. 2.6.

25 Anonymus Vaticani 3061, *Quaest. Somn.Vig.*, qu. 2.8, 289: "Philosophus non potest ponere tales substantias." James of Douai, *Quaest. Somn.Vig.*, qu. 20, determination, 90.10–12: "Plato specialiter est contra intentionem Philosophi in hoc quod ponit daemones. Sicut enim apparet in XII° Metaphysicae, Philosophus nullam substantiam immaterialem posuit nisi habeat ordinem ad motum caeli." Similarly, Siger of Brabant in another context (a discussion of magic in *Quaestiones in Metaphysica: Texte inédit de la reportation*

takes the unusual step of arguing against Aristotle on this point. Aristotle, he says, was actually wrong in thinking there could be no demons of the required sort. As evidence that demons do exist he appeals to the supposed fact that some people have been observed to speak foreign languages without ever having been abroad, which, he claims, can only be explained by assuming action by demons.[26]

Several authors also reject as un-Aristotelian the notion that separate substances (intelligences) might be the immediate sources of dreams (possibly ultimately coming from God): for a separate substance to act on us it must, on Aristotelian theory, have a mediating tool, such as a heavenly body.[27] But again James adds a twist to the argument by linking Aristotle's rejection of immediate action by an intelligence to his mistaken belief in the sempiternity of the world, thereby leaving open the possibility that intelligences may, after all, act directly on us.[28]

3.5 *Move E: Expatiate on the Non-Aristotelian Veridical Dreams That You Have Now Made Room For*

Accepting celestial influence as a source of dreams (type 2) leaves the door wide open for diviners. To explain how the influence from above comes about, and how it can have prognostic value, most or all commentators take their cue from Albert and reckon with light (*lumen*) as the carrier of the information

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de Cambridge, ed. A. Maurer (Louvain: Institut supérieur de philosophie, 1983), qu. 5.41, 283), says: "Ex quo apparet de intentione Aristotelis esse duo, scilicet quod non sunt tales substantiae separatae quas daemones dicimus, cum non ponantur causae effectivae et finales motuum superiorum; quod etiam ab aliqua substantia intellectuali separata non possunt aliqui effectus novi in his inferioribus immediate causari, sed tantum mediantibus corporibus supercaelestibus."

26 James of Douai, *Quaest. Somn.Vig.*, qu. 20, determination, 90.16–20: "Sententia tamen Philosophi est contra veritatem. Sunt enim aliqui daemones, apparuerunt enim aliqui daemones sub specie alicuius hominis vel feminae, quod declaratur ex hoc, nam visi sunt aliqui loquentes omnia idiomata, qui numquam locum proprium exierant; huiusmodi autem causa non potest reddi nisi ex daemonibus. Sunt ergo daemones secundum veritatem."

27 James of Douai, *Quaest. Somn.Vig.*, qu. 19 (see quotation above). Anon. Vat. 3061, *Quaest. Somn.Vig.*, qu. 2.8, 289: "Philosophus non ponit aliquam substantiam immaterialem de novo aliquid agere sine motu sive nisi mediante motu." Radulphus Brito, *Quaest. Somn. Vig.*, qu. 2.7.

28 James of Douai, *Quaest. Somn.Vig.*, qu. 20, determination, 90.6–9: "Unde sua <i.e. Aristotelis> intentio est quod nulla substantia separata potest agere in ista inferiora, sed quicquid agunt in ista inferiora deus et aliae substantiae immateriales agunt mediante motu caeli, qui secundum Philosophum est sempiternus. Ista tamen sententia est contra veritatem."

from above, reproducing his "natural" explanation of type 2 dreams without mentioning that it is not Aristotelian. Anonymus Angelicanus 1 explains the matter as follows:

> Some dreams occur in us due to celestial influence – not in the way that some intelligence directly inflows into us a likeness of some future effect, but through the medium of some corporal vehicle such as light or the like, and one may perceive such an influence in one's sleep because [other] movements have been put to rest. Therefore, when an intelligence inflows some form into the intellect it happens that the imagination forms for itself some likeness, and after one has awoken the intellect can relate this [likeness] to some future effect and divine.[29]

Simon of Faversham even went so far as to use celestial influence to explain how a sleeping person can answer a question (as mentioned by Aristotle in *Insomn.* 3, 462a25–26). After first sensibly suggesting, as Aristotle had done in 3, 462a26–27, that such a person is not in a deep sleep in which all sensory input is shut off, Simon adds that the ability to answer questions may also be due to some power (*virtus*) that comes flowing in from above.[30]

But if celestial influence can carry information that allows one to predict contingent future events, why do so many dreams that seem to be of the right sort not turn out true? And, even more seriously, does not an acceptance of such inflowed information – and of astrology – presuppose a deterministic universe? Albert had touched on these problems, trying to solve them by claiming that causal chains may be disrupted by other impeding causes.[31] In the same vein, Radulphus Brito in his questions on *Somn.Vig.* (qu. 2.7) holds that astral influence cannot force a human being to act in a certain way, it can only incline

29 Anonymus Angelicanus 1, *Quaest. Somn.Vig.*, qu. 2.12: "Quaedam autem fiunt in nobis ex influentia caelesti, non ita quod immediate intelligentia aliqua influit nobis similitudinem alicuius effectus futuri, sed mediante aliquo vehiculo corporali ut lumine vel aliquo tali, et contingit talem influentiam percipere in somno propter sedationem ipsorum motuum, et ideo(?) cum intelligentia influit aliquam formam in intellectum contingit quod imaginatio formet sibi aliquam similitudinem et contingit intellectum conferre post expergefactionem conferre illam ad aliquem effectum futurum et divinare."

30 Simon of Faversham, *Quaest. Somn.Vig.*, qu. 6*, 119–20: "Vel potest dici quod hoc est per virtutem aliquam a superioribus infusam. Si enim somnus est immobilitatio sensuum exteriorum, quando aliquis incipit dormire sensus simpliciter ligantur, sc. exteriores, sed quando aliquis loquitur sensus exteriores non simpliciter ligantur. Unde dicendum quod si aliquis respondet ad interrogata, hoc est propter virtutem influxam sibi a corporibus superioribus, ut dictum est prius."

31 Albert, *De somno* 3.2.5, 202a–203a.

him to a certain course of action, and if he is strong-willed enough his free will can overrule the inclination. However, in a question on *Mem.* Radulphus develops a rather strange theory of future contingents:[32] some future events are contingent in one respect and not in another; they may be contingent in relation to human causes but necessary in relation to celestial causes. It is not entirely clear how this is supposed to work, but probably the idea is that the necessity attaching to celestial causes only binds voluntary agents as long as they do not exercise their free will. To illustrate his claim, Radulphus introduces an astrologer who registers a conjunction whose influence will result in a good harvest in the vineyards; from this observation the astrologer can predict with certainty (*scire*) that someone will get drunk, but not that any particular person, say Socrates, will get drunk – presumably because Socrates may decide not to drink too much.

3.6 *Move F: Foist Albert's Theory of Celestial Influence on Aristotle*

The commentators all seem to take it for granted that their belief in veridical dreams of type 2 is not un-Aristotelian. James of Douai even goes so far as to explicitly ascribe Albert's theory to Aristotle:

> for the Philosopher holds that a celestial habitude and influence is carried down to the body of the dreamer by light or by some corporeal vehicle and modifies it, whereupon the modified body in turn modifies the phantasy;[33] but the phantasy, thus excited by some motion existing in the virtue of the influence, forms for itself a phantasm as similar to the influence as it can, and when that has been made it is carried to the common sense, and a dream comes about by which one can divine future events. And this is reasonable, because when someone is in a passion and then dreams <***> and in the same way it is reasonable that someone is changed by an influence in such a way that he forms for himself an idol similar to that influence, and even more reasonable the more the power of the influence surpasses the passion. The Philosopher explains this way [of working] as follows: just as when one sets air or water in motion and this, that is, the air or the water, once set in motion sets something else in motion, and it is possible for that sort of motion to go on or proceed until a distant point even after that which started the movement has come to rest and even after that which started the movement has ceased to be

32 Radulphus Brito, *Quaestiones super librum De memoria*, qu. 2 (edition in Ebbesen, "Radulphus Brito on Memory and Dreams," for which see n2 above).

33 I use the outdated "phantasy" to render *phantasía*.

> present – thus nothing prevents some movement and sense, that is, some idol capable of modifying the sense, and downflows from heaven to proceed all the way to dreaming souls, on the basis of which movements and downflows the soul of the dreamer produces idols which form the basis of dreams by which future events can be divined.[34]

Aristotle's unhappy musings in *Div.Somn.* 2, 463b31ff. about the possibility of becoming aware of events taking place far away are here coming back to haunt him: his model for the spread of information as concentric circles in water is used to explain how information from far-away celestial regions can reach our minds. As pointed out by Donati,[35] a decisive factor in making Albert and his followers interpret the passage that way was one fatal word: at 2, 464a11 Aristotle calls the movements that are propagated *effluences* (*apórrhoiai*), which in the Latin translation became *defluxiones* – the Westerners could not help being reminded of celestial *influentiae.*

3.7 *Move G: Use Albert's Anecdotes to Support the Reliability of Dreams*

To illustrate a dream that is a sign in Aristotle's sense, Albert tells a story about someone who dreamed that he had an infusion of hot tar in his stomach:

> One person dreamed that burning tar (*picem ardentem*) was poured into his stomach and that he was becoming burningly hot in the fire of the tar,

34 James of Douai, *Quaest. Somn.Vig.*, qu. 18, 82.24–83.7: "vult enim Philosophus quod habitudo et influentia caelestis defertur usque ad corpus somniantis per lumen aut per aliquod vehiculum corporeum, et ipsum alterat, et ipsum corpus alteratum ulterius alterat phantasiam, phantasia autem sic excitata ex aliquo motu existente in ipsa virtute influentiae format sibi aliquod phantasma similius influentiae quam potest, quo facto defertur ad sensum communem et fit somnium per quod contingit divinare futura. Et illud est rationabile, nam cum aliquis est in passione et tunc somniat, <***> et eodem modo rationabile est quod aliquis sic immutatur ab influentia quod formet idolum sibi consimile illi influentiae, et adhuc rationabilius quanto illa influentia est maioris virtutis quam passio, et istum modum declarat Philosophus, quia sicut cum aliquis movit aerem aut aquam et hoc, sc. aer vel aqua mota movet aliud, et quiescente illo quod primo movit contingit huiusmodi motum prodire sive procedere usque ad aliquid distans et non praesente etiam illo quod primo movit; sic etiam nihil prohibet aliquem motum et sensum, i.e. idolum potens immutare sensum et defluxiones ab ipso caelo procedere usque ad animas somniantes, a quibus motibus et defluxionibus ipsa anima somniantis facit idola quae sunt principium somniorum per quae divinantur futura."

35 Donati, "Dreams and Divinatory Dreams," 191.

> the reason being that he had burning black bile on fire in his stomach, which he threw up upon wakening.[36]

This story was repeated by several of the later commentators,[37] but was also modified. In French pronunciation of Latin, *piscem* "fish" is indistinguishable from *picem* "tar," and so according to Anon. Vat. 3061 the man had ingested a burning fish (*piscem ardentem*)![38] Radulphus Brito tries to make this slightly less bizarre by having the man *eat a heated fish*.[39]

Another of Albert's anecdotes is about a man who had problems with his spleen and wondered what to do about it. He then dreamed that he was let blood from a place between the little finger and the ring finger. After waking up he did so, and was cured.[40] This example of a dream that causes later action is also used by James of Douai[41] and Radulphus Brito. With the latter, the story has been modified to explain why blood-letting from that particular place would work, so now it runs: a sick man, whom the doctors could not cure, dreamed that he was bled from a vein in the hand between the little finger and the ring finger. When he told his doctors about the dream they concluded that he had a spleen condition, because that vein was a spleen-vein, so they bled him in accordance with the dream and he was healed.[42]

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36 Albert, *De somno* 3.2.1, 198b: "somniavit quidam fundi sibi in ventrem picem ardentem, et se exaestuare in igne picis, eo quod choleram adustam nigram incensam in ventre habuit: et hanc emisit, cum surrexit a somno."

37 Thus James of Douai, *Quaest. Somn.Vig.*, qu. 18, 76.

38 Anonymus Vaticani 3061, *Quaest. Somn.Vig.*, qu. 2.7, 286–87. There are two versions of the text: (1) "unus se somniat comedere piscem ardentem et evigilatus emittit choleram," (2) "unde quidam somnia<vi>t se devorasse piscem ardentem et expergefactus evomuit choleram nigram."

39 Radulphus Brito, *Quaest. Somn.Vig.*, qu. 2.5, 69: "quidam †sel'ıs† somniavit se comedere picem {piscem *a.c.*} calefactum, et expergefactus vom<u>it choleram nigram." In the edition I preferred the *p.c.* reading, but I now tend to believe that Radulphus actually meant *piscem.*

40 Albert, *De somno* 3.2.2, 199a–b: "Et tale fuit somnium de quo dicit Galienus quod quidam dolens splenem saepe contulit et ordinavit quid {q.: quod *Borgnet*} faceret unde sibi contra vitium {c.v.: contrarium *Borgnet*} splenis medicaretur. Et somniavit quod minueret {m.: mingeret *Borgnet*} super manum inter duos digitos auricularem et annularem: et cum evigilaret sic fecit, et convaluit." The corrections of Borgnet's edition are taken from a preliminary version of the critical edition that Silvia Donati is preparing.

41 James of Douai, *Quaest. Somn.Vig.*, qu. 18, 78.11–13: "recitat Galienus quod quidam patiebatur dolorem splene, somniavit autem quod si faceret se minui inter duos digitos quod sanaretur, surrexit et fecit se minui sicut somniaverat, <et> sanatus est."

42 Radulphus Brito, *Quaest. Somn.Vig.*, qu. 2.5, 70: "Eodem modo, sicut Albertus recitat auctoritate Galeni, quidam erat infirmus et nullo modo poterat sanari a medicis, ipse autem de nocte somniavit quod minuebatur de quadam vena in manu quae est inter auricularem

In this story the dream is in a rather straightforward way the cause of the action that cured the man, and thus satisfies the criterion for being a causal dream in Aristotle's sense, but neither version explains why the man could dream the right cure for his condition. Implicitly, the anecdote works as support for the belief that dreams may contain otherwise inaccessible information that can help us shape the future.

3.8 *Summing Up*

The commentators examined all show an awareness that Aristotle did not much believe in divination, though they tend to make him less of a sceptic than he was. They also all realise that demons, angels, and other separate substances should not appear in an Aristotelian account of how some dreams turn out true. Most of them were probably quite happy to be able to discard demons and intelligences from consideration, with James of Douai as the one certain exception: he openly claims that Aristotle got things wrong on this point. All commentators make room for forecasts based on dreams with an origin in celestial influence, and none shows any awareness that this class of veridical dreams is un-Aristotelian. Some use Albert's anecdotes to smuggle in among the veridical dreams that Aristotle recognised a type that he would not have accepted.

4 The Loner: Boethius of Dacia

Among other works, Boethius of Dacia (*floruit* c.1270) has left us a question commentary on Aristotle's *Topics*.[43] Question twenty on Book two is "Whether it is possible to know future events." His answer is a fairly standard one: events that necessarily follow from causes known to us can be foreknown. Events whose causes may be interfered with cannot be known with certainty, only informed forecasts are possible, although we might in theory reach certainty if only we were able to survey the whole network of interacting causes. Chance events are simply unpredictable. Boethius does not exemplify the first type of event, but he was surely thinking of predictable astronomical events like

et digitum anularem, et tale somnium retulit medicis, medici autem per artem medicinae consideraverunt quod ipse habebat malum in splene eo quod illa vena erat vena splenis, et fuit minutus de illa vena, et fuit sanatus."

43 Boethius Dacus, *Quaestiones super librum Topicorum*, ed. N. J. Green-Pedersen and J. Pinborg (Copenhagen: Gad, 1976).

eclipses.[44] He explicitly links the second type to astronomy, and must have been thinking of astrological forecasts, to which he was willing to accord some credibility, though not certainty.

But Boethius has also left us a less conventional little treatise *On Dreams*,[45] ostensibly written to satisfy the intellectual curiosity of certain unnamed acquaintances, but almost certainly a revision of material from a course he had given on *De somno et vigilia*.[46] The main part of the treatise has the form of a *quaestio*, although one with an unusually long determination and with no answers at the end to the initial *rationes principales*. The question asked is whether one can obtain knowledge about future events from one's dreams. Boethius' answer is "Yes," but although he operates with a distinction between dreams of types 1.1, 1.2, and 2, his type 2 (dreams with an outside cause) does not include celestially induced dreams except in a totally innocent way: a constellation may cause a person's body to become either hot or cold, and if, as a consequence, the person has a dream suitable to the way his body feels, it can be a sign in the Aristotelian sense.[47]

Boethius keeps Aristotle's three types of veridical dreams, and stays true to the Philosopher's naturalism, leaving no room for superstition except for one brief remark that was clearly meant to prevent trouble with ecclesiastical authorities. The remark comes after a discussion of illusions that occur in dreams due to some bodily ailment affecting the dreamer – indigestion or a fever, for instance – that causes his organ of phantasy to work in an irregular way and colour its images of humans fiendishly black or angelically white. When waking up, "stupid people claim that they have seen devils [...] or in a rapture witnessed angels singing and dancing."[48]

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44 Cf. Thomas Aquinas, *Summa theologiae* 2-2.95.5: "Et de his quidem quae ex necessitate eveniunt, manifestum est quod per considerationem stellarum possunt praenosci: sicut astrologi praenuntiant eclipses futuras."

45 Boethius Dacus, *De somniis*, in *Opuscula*, ed. N. J. Green-Pedersen (Copenhagen: Gad, 1976), henceforward referred to as "Boethius Dacus, *De somniis*."

46 The so-called Stams catalogue from the early thirteenth century in a list of works by Boethius mentions "quaestiones de somno et vigilia" (see Boethius Dacus, *Modi significandi*, ed. J. Pinborg (Copenhagen: Gad, 1964), xxxii). There is not much literature on Boethius' *De somniis*, but see Gianfranco Fioravanti, "La 'scientia sompnialis' di Boezio di Dacia," *Atti della Accademia delle Scienze di Torino: Classe di Scienze Morali* 101 (1967): 329–69.

47 Boethius Dacus, *De somniis*, 386.130ff.

48 Boethius Dacus, *De somniis*, 388.200–208: "et quidam fatui expergefacti iurant se in dormiendo vidisse diabolos. [...] somniant dormientes se videre loca lucida et angelos cantantes et saltantes; expergefacti iurant se raptos fuisse et angelos secundum veritatem vidissse."

In Boethius' time many reports of such raptures with visions of Heaven, Hell, or Purgatory were circulating, and some were supported by ecclesiastical authorities,[49] so it was not quite safe to sweepingly classify tellers of such tales as stupid. This is surely why Boethius piously adds:

> Although such deceptions can occur for natural reasons, I do not, however, deny that by divine will an angel or a devil may truly appear to a sleeping or ill person.[50]

That did not, however, fool archbishop Stephen Tempier of Paris, who in his famous 1277 condemnation of 219 theses included this one:

> That raptures and visions only occur in natural ways.[51]

The bishop had seen Boethius' defensive stratagem for what it was.

5 Averroes' and Albert's Waning Influence in the Fourteenth Century

John Buridan's Aristotelian commentaries often break in decisive ways with thirteenth-century traditions and become patterns for the following generations of scholars. His questions on the *Parva naturalia* are no exception.[52] One notable trait is their independence of Albert the Great and their relative shortness – interest in the *Parva naturalia* seems to have diminished in the fourteenth century, while other parts of Aristotelian natural philosophy were

49 For somewhat later an example, see Anonymous, *Visiones Georgii: Visiones quas in purgatorio Sancti Patricii vidit Georgius Miles de Ungaria A.D. MCCCLIII*, ed. L. L. Hammerich (Copenhagen: Det Kgl. Danske Videnskabernes Selskab, 1931).

50 Boethius Dacus, *De somniis*, 389.216–19: "Et quamvis tales deceptiones contingere possint per causas naturales, non tamen nego quin angelus vel diabolus possit dormienti vel infirmo secundum veritatem apparere divina voluntate."

51 Stephen Tempier, *Articuli 1277 condemnati*, in David Piché, *La condemnation parisienne de 1277* (Paris: Vrin, 1999), 33 (177): "Quod raptus et visiones non fiunt nisi per naturam." Cf. Roland Hisette, *Enquête sur les 219 articules condamnés à Paris le 7 mars 1277* (Louvain: Publications Universitaires/Vander-Oyez, 1977), 271–72.

52 I have not made any systematic study of Buridan's impact on his successors in this particular case. Suffice it to mention that Marsilius of Inghen (d. 1396) shares Buridan's worries about the difficulty of telling which of the possible sources a dream has, and in practice he restricts the value of celestially induced dreams to weather-forecasting. See his *Quaestiones super De somno et vigilia*, qu. 9: *Utrum possibile sit per somnia praegnosticare et divinare de futuris contingentibus*, MS Uppsala, UB, C.604, fol. 144vb–46va.

still extensively treated. The commentary on *De somno et vigilia* has exactly one question about divination: "Whether it is possible to divine about future events or prognosticate." There are at least two versions of the question: one found in MS *E* (Erfurt, CA 2º 357), and another found in George Lockert's 1516 edition of questions on Aristotle's natural philosophy by Albert of Saxony, Themo Iudaeus, and Buridan.[53] The two editions share an initial claim that all dreams have their origin in species acquired by past sensation and stored in the phantasy, as well as a classification of dreams into four types:

(1) Dreams involving species that have not been modified. Such dreams are irrelevant for forecasting, since all information they contain relates to the past.
(2) Dreams involving species that have been modified by a bodily condition. Such dreams can be interpreted as signs of the relevant condition, and it may be possible to foresee its future consequences.
(3) Dreams involving species that have been modified by a psychological condition such as love or fear. Again, it may be possible to infer the condition from the dream, and also something about the dreamer's likely behaviour in the future.
(4) Dreams involving species that have been modified by celestial influence.

While the two versions of Buridan's question say much the same about the first three types, they diverge widely regarding type 4. They both claim that such dreams may have prognostic value, but the manuscript version does not expand on what sort of events such dreams allow us to foresee, and instead continues with a remark about how difficult it is to prognosticate, especially on the basis of type 4 dreams, because it may not be at all easy to determine which type of dream one is faced with. In this connection Buridan also scathingly ridicules people who claim their dreams almost invariably come true. For one thing, dreams often present a good number of different episodes in rapid succession, and so it is not strange if at least one later on finds a counterpart in reality; modifying an Aristotelian comparison (*Div.Somn.* 2, 463b21), Buridan says this is like people throwing peas at a goal: if they throw a lot of peas, a couple are likely to hit the goal. For another, people interpret their dreams at

53 I have not investigated all the manuscripts of Buridan's questions. There are several besides *E*. See Ebbesen, Thomsen Thörnqvist, and Decaix, "Questions," 112. Lockert's edition is found in *Quaestiones et decisiones physicales insignium virorum*, ed. G. Lockert (Paris: Jose Bade, 1516), xliir–xlviiv. I refer to the version in the Erfurt MS as "Buridan, *Quaest. Somn. Vig. E*" and to Lockert's as "Buridan, *Quaest. Somn. Vig. L.*"

will, so if they have dreamed of death, they will say "Look, this is just what I dreamed!" no matter whether they encounter a wedding or a corpse.[54]

The version in Lockert's edition, while also having a lengthy section about the difficulties involved in interpreting dreams, is much more optimistic about the possibility of success. "Save for the free will, all things down here are ruled by the celestial bodies," the text claims,[55] and so type 4 dreams can, for instance, inform us about the weather to come, because the celestial influence that will eventually cause rain may reach us and make us dream of water before it actually results in rain. In the same way we may be informed about "wars and insurrections before they actually occur, and similarly with other dispositions that these lower regions by their nature receive from the heavens."[56]

I suspect that Lockert's text is inauthentic, so that the real Buridan is the one of the manuscript version, who is almost as sceptical about divination as Boethius of Dacia. If Lockert's text *is* authentic, Buridan must at some point in his long teaching career have exchanged a very critical attitude to divination for a much less sceptical one.[57] But even if this is so, he represents a break with the tradition of the late thirteenth century. He does, in the principal argument *ad oppositum* advance the claim that Aristotle supports the possibility of divination and thinks that there is probably some truth in a commonly held belief, but he does not introduce Averroes. Indeed, he has left virtually all the baggage from Averroes and Albert behind him. He spends not a word on demons or intelligences as possible sources of dreams that lend themselves to divination, and he does not introduce a single of Albert's anecdotes. He has also, to some extent, freed himself from the theoretical framework of Aristotle's text.

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54 Buridan, *Quaest. Somn.Vig. E*, qu. 9: "tales curantes de somniis suis exponunt somnia sua modo ad simile, modo ad contrarium; si somniaverunt mortem [u(ni)us] sed videant nuptias, et etiam si videant mortem, adhuc dicunt 'Ecce somnium meum!'"

55 Buridan, *Quaest. Somn.Vig. L*, qu. 9: "Alia causa promotionis et excitationis somn<i>orum est a caelo seu continente propinquo, quoniam omnis natura in istis inferioribus (excepta libera voluntate) regitur a corporibus caelestibus."

56 Buridan, *Quaest. Somn.Vig. L*, qu. 9: "Quartus modus somniorum est habens exitum et provocationem a corpore caelesti, et per ista possemus (*sic!*) prognosticare non solum de actibus futuris somniantis sed etiam de hiis quae nostram potentiam transcendunt. Si enim somniemus aquas multas, et hoc non proveniat ex complexione corporis, poterimus iudicare quod erunt cito pluviae; igitur humiditates. Caelum enim prius potest influere virtutes suas alterativas aeris et corporis nostri quam possint provenire effectus principales; igitur, cum sensus in dormitione est purus, potest cito recipere impressiones corporum caelestium et aliquando prius videre pluvias aut siccitates aut guerras aut seditiones quam de facto eveniant, et ita de aliis dispositionibus quas haec inferiora sunt innata recipere a caelo."

57 Hardly the other way round. The Lockert text is much more elaborate than the text of MS *E*.

In fact, he does not even mention Aristotle's three types of veridical dreams, whereas he does keep a modified version of the thirteenth-century distinction between dreams caused by bodily states and dreams caused by mental states, but assimilates the latter to the former: in both cases the prognostic value of the dream consists in the possibility of inferring from it what sort of state gave rise to it and then forecasting likely future effects of the relevant state. In other words, dreams of his types 2 and 3 are both signs in the Aristotelian sense, and have exactly as much and as little predictive power as Aristotelian significative dreams.

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CHAPTER 7

The Ghost of Aristotle in Medieval, Modern, and Contemporary Accounts of Delusional Dreaming

Filip Radovic

1 Introduction

Why are we unaware that we are asleep in most episodes of dreaming?[1] Aristotle gives the oldest extant answer to this question. I will examine how Aristotle's views on deception in dreaming and related cases are received and developed in pre-modern and modern philosophy. This wide-ranging paper may seem a bit unorthodox to some readers because of its inclusion of ancient, medieval, and premodern texts together with a rather thorough discussion of contemporary views. However, the idea is to follow Aristotle's account of why dreamers tend to mistake their dreams for real, ongoing events in relation to later explanations up to the present. I will show how contemporary discussions entail more or less prominent Aristotelian elements that were rediscovered by later authors, even when the link to Aristotle has been lost. It will also be shown that contemporary discussions on delusional dreaming have not advanced considerably since Aristotle, and that a version of Aristotle's explanation of why dreams are mistaken for real events is still a plausible alternative in contemporary debates. Thus, this work has the somewhat bold ambition to provide a contribution to the history of philosophy as well as defend an Aristotelian approach to the problem of why dreams are mistaken for real events, in a contemporary context.

I shall pay special attention to two pairs of related questions:

(1) What factors explain people's reports that dreams are misapprehended as real events while dreaming? And do such reports actually reflect misapprehensions of dreams as real?

(2) Are dreamers on occasion completely deceived about the true nature of their dreams, and if so, do such deceptions involve belief?

1 Modern dream-research has established that 90–99 percent of all dreams are completely non-lucid (that is, dreams where the dreamer is unaware of the dream as an illusory experience). See for instance, Antti Revonsuo, *Inner Presence: Consciousness as a Biological Phenomenon* (Cambridge, Mass.: MIT Press, 2006), 83.

I aim to show that there is a compelling form of deception that is present in dreams, which I shall call delusional dreaming. This form of deception involves an altered cognitive state, not necessarily pathological, characterised by the following closely related traits: (1) deception in the form of a misapprehension of dreams as real and (2a) the inability to be aware of absurd content as strange, as well as (2b) an inability to consider the dream as illusory even in cases where there is no absurd content. Thus, delusional dreaming involves a mode of forced deception that is based on deficient cognition and should not be conflated with deception that occurs under normal cognitive circumstances. Note that one can be deceived regarding the reality of an experience without having lost the ability to identify bizarre elements or to form critical judgements. For example, I may unknowingly be connected to a virtual reality device and tacitly assume that what I experience is real. Yet if I am awake, the readiness to react to bizarre elements and the ability to form critical attitudes is intact, even if there are no obvious elements that suggest that the experience is illusory. In the state of waking we can doubt the reality of our experiences at will, for any arbitrary reason: for example, as a playful theoretical exercise. By contrast, the state of delusional dreaming prevents any attempt to form critical attitudes toward one's own experiences. The three aspects of delusional dreaming will be further discussed below.

Deception may generally be characterised as a commitment to misleading, imperfect, or incomplete evidence that is false. A typical case involves a false view which is formed on the basis of how things superficially seem. Deception entails that somebody is deceived but does not necessarily involve a deceiver such as a stage magician who fools his audience by means of smoke and mirrors or an unfaithful partner who conceals the betrayal. There are a lot of different factors that make us prone to deception. The state of delusional dreaming is one of them.

In this paper I shall mainly follow Pavel Gregoric's interpretation of Aristotle's explanation of why dreams are taken to be real. On this interpretation, Aristotle's view provides the blueprint for a family of views that distinguish between proper beliefs (*dóxa*) that paradigmatically are the product of rational consideration in the state of wakefulness, and a simple form of unreflecting trust that occurs in sleep.[2]

I shall examine Aristotle's idea regarding a rudimentary form of trust that is distinct from fully developed beliefs and follow it from antiquity, through the middle ages and the early and late modern era, all the way to contemporary discussions in philosophy of mind. I will show that the ghost of Aristotle lurks

2 Cf. Pavel Gregoric's chapter in this volume, pp. 28–60.

in the background in many modern and contemporary discussions of why dreams are taken to be real.

I shall also compare ancient and medieval ideas that resemble Aristotle's views but which are not strictly Aristotelian, such as the distinction between rudimentary and fully developed beliefs that was endorsed by ancient sceptics in order to defend the sceptical stance in a coherent way. Moreover, I shall try to show that a cluster of modern theories called imagination theories that deny the possibility of deception in dreaming fail to account for the common experience of dreams as mistaken for real happenings while dreaming. Even so, some imagination theories come close to Aristotle's view that the dreamer is deluded about the reality of dreams without assuming a proper belief in the reality of the dream. I shall side with Aristotle and argue that the misapprehension of dreams as real does not involve fully developed beliefs (a non-doxastic view). Yet there is a tacit unreflecting trust in the dream as real.

2 The Concept of Delusional Dreaming

Dreaming may be compared to other conditions that include delusions, for instance, states caused by intoxication or mental disorder. Such states involve a compelling element that ordinary non-delusional cases of deception lack. At this stage it is useful to think of delusions as emerging from an altered state of cognition. I shall develop this point below.

Roughly, there are two forms of delusions, namely, delusional awareness and delusional belief. For instance, if I dream or hallucinate (a non-veridical perception-like experience in waking that has the full force of a perception) a flying pig and respond to it as real, I am having a delusional awareness. By contrast, if I am awake and convinced that extra-terrestrials are conspiring to conquer our planet, without there being any particular sensory experience to suggest this, then I am having a delusional belief.[3] Delusional awareness,

3 Standard textbooks in psychopathology typically defines delusional belief as: "A false unshakable idea or belief which is out of keeping with the patient's educational, cultural and social background; it is held with extraordinary conviction and subjective certainty." (Andrew Sims, *Descriptive Psychopathology: Symptoms in the Mind: An Introduction to Psychopathology*, 2nd ed. (London: W. B. Saunders Company Ltd., 1995), 101.) It has turned out to be difficult to specify exactly how delusional beliefs differ from other ordinary irrational beliefs, yet idiosyncratic content and some degree of suffering seem to be two important distinguishing features. For a comprehensive discussion of this problem see Lisa Bortolotti, *Delusions and Other Irrational Ideas* (Oxford: Oxford University Press, 2010), 259–65. As mentioned, the distinction between delusional awareness and delusional belief is not sharp. A large class of delusional beliefs seems to emerge in relation to supporting experiences even if some of

however, does not rule out belief but rather highlights the presence of an illusory experience that is taken to be veridical.

Nevertheless, in some cases it seems warranted to acknowledge a form of delusional awareness that does not qualify as belief, strictly speaking. A deflationary type of delusional awareness includes a rigid state of trust where 'delusional' refers to a deficient kind of cognition and 'trust' is taken to be an element that approximates the sense of conviction that is the result of fully developed beliefs. In this paper I shall mainly focus on the form of delusional awareness that occurs in the state of sleep and does not qualify as proper belief.

Dreams are special cases of illusions, and illusions are roughly false appearances. We are sometimes fooled by illusions, and different kinds of illusions reflect different objects of deception. Two common types of illusion include:

(1) *Things that appear other than they are.* A common type of illusion involves any appearance about the world that does not correspond to how things are in reality. For example, a dolphin may look like a shark, a room may appear smaller than it actually is, and a stick in water may appear to be bent. Some illusions may continue to appear true even when we know that they are false.

(2) *The misapprehension of internal sensory manifestations as happenings in the real world.* The type of illusions that I shall focus on in this paper involves the misapprehension of sensory-like entities, often described as images, of the kind we entertain when we internally visualise objects or scenarios or reproduce an internal awareness of any sense modality. For example, we may picture a polar bear before our inner eye. When we imagine a polar bear, we do not see a polar bear strictly speaking, yet we are aware of something that has the visual characteristics of a polar bear. We can leave the ontology of such objects of awareness aside for the moment and focus on the phenomenology of internal images. We rarely mistake imagined things as real when we are awake, but it sometimes happens that such internal imaginations are mistaken for objects or happenings in the real world. The misapprehension of dreams as real is an example of the relevant kind of misapprehension. Other examples include hallucinations where external objects are experienced as present in cases where such objects are actually absent.[4] This group of illusions

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those experiences are not sensory hallucinations, strictly understood. See Filip Radovic, "The Sense of Death and Non-Existence in Nihilistic Delusions," *Phenomenology and the Cognitive Sciences* 16:4 (2017): 679–99, for examples of delusional beliefs that are likely to involve an uncritical assent to an underlying experience.

4 Cf. the distinction between illusion and hallucination such as that attributed to Aretaeus of Cappadocia (c.150 CE) and later developed by Jean-Etienne Dominique Esquirol (1722–1840),

also includes false memories, that is, memory-like experiences of things that did not occur, as if they actually occurred in the past.[5]

Dreams are habitually characterised as realistic experiences. What does it mean to appear real? In fact, "appearing real" has a range of different senses. Here are some:

(1) *Faithful sensory replication*. Illusory appearances sometimes deceive us because they resemble the real object or the state of affairs they mimic. For example, I may be deceived by a dream of the Eiffel Tower because it appears exactly like a previous perception of the Eiffel Tower. Even so, perfect sensory replication may deceive us in some situations but not in others.

(2) *Likely and credible events*. Events are sometimes said to be realistic if they fall within the range of what can be expected to be normal, likely, or credible. For example, if I dream that I am late for a lecture or that I eat a sandwich for lunch, such events are realistic because they reflect common or likely events in real life. By contrast, dreams about talking ducks, or that I am able to fly, include improbable or unrealistic elements, despite the sensory realism of such dreams.

(3) *The sense of "this is really happening."* Alternatively, a dream may appear to be real in a more abstract feeling-like way rather than by faithful resemblance to perceptual states in waking, or with reference to credible scenarios. For example, I have dreamed about an environment consisting completely of different shades of blue, and dubious things like supposedly dead people who talk – such dreams may still appear as real as it

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according to which illusions are understood roughly as distorted perceptions of external objects, whereas hallucinations are taken to be perception-like experiences in the absence of any corresponding external object. For attempts in the scientific literature to define illusion and hallucination, see Jan Dirk Blom, *A Dictionary of Hallucinations* (Dordrecht: Springer, 2010) for a great variety of suggestions.

5 A special case includes perceptual circumstances that blur the line between imagination and perception in waking. For instance, the medieval thinker Ibn Khaldūn argues that mirror-scrying (an alleged kind of supernatural perception) involves an unconscious projection of internal images onto a perceived surface. See Ibn Khaldūn, *The Muqaddimah: An Introduction to History*, trans. F. Rosenthal (New York: Pantheon Books, 1958), 1:216–17. See also the case in which extremely vivid imagery in waking takes the form of real occurring events: Alexander Romanovich Luria, *The Mind of a Mnemonist* (Cambridge, Mass.: Harvard University Press, 1968), 149–60. Non-sensory, more abstract cases involve an illusory sense of the presence of a person or feelings of persecution; see Graham Reed, *The Psychology of Anomalous Experience: A Cognitive Approach* (London: Hutchinson & Co. Ltd., 1972), 44–45, 126–33.

gets.[6] While we dream, we seldom pay attention to details that distinguish dreams from ordinary perceptual states in waking, yet we often marvel at a dream's unrealistic features when we wake up.

(4) *The sense of observing things in the world*. Then again, even if dreams often diverge from sensory states in waking with reference to sensory phenomenology, dreams in general replicate the fundamental form of being-in-a-world, along with a sense of perceiving things in a way that roughly reflects the perceived environment in waking.[7]

Thus, 'appearing real,' in a broad sense, does not necessarily imply that the dream faithfully mimics the sensory phenomenology and the content of experiences we normally have in waking. Although some dreams are reported to faithfully imitate the perceptual phenomenology in waking,[8] and some dreams are described as having an intensified vividness that goes beyond the perception in waking,[9] the notion of 'appearing real,' as it is used here, does not require this kind of realism.

Finally, the state of delusional dreaming can be characterised as comprising three significant aspects:

(1) *The dreamer mistakes the dream for a real-world thing or occurrence*. A striking element in delusional dreaming is the common observation that dreams are habitually taken to be real events similar to those that we experience while awake. What does this mean? Here is a standard account by Michel Jouvet:

> Our dream consciousness reacts like this, as if it were awake. We think that we are not dreaming. It is thus *conscious awareness* because we can ask ourselves if we are dreaming. Dream consciousness is thus similar to that of a hallucinating awake subject. Dream or hallucinatory images triggered by an endogenous system in the brainstem are considered to be

6 Cf. Jennifer Windt, *Dreaming: A Conceptual Framework for Philosophy of Mind and Empirical Research* (Cambridge, Mass.: The MIT Press, 2015), 476–83. See especially the distinction between (1) deception from presumed indistinguishability and (2) deception from cognitive corruption.

7 Revonsuo, *Inner Presence*, 82–84.

8 Jennifer Windt and Thomas Metzinger, "The Philosophy of Dreaming and Self-Consciousness: What Happens to the Experiential Subject During the Dream-State?" in *The New Science of Dreaming*, vol. 3: *Cultural and Theoretical Perspectives*, ed. D. Barrett and P. McNamara (London: Praeger, 2007), 221.

9 Windt and Metzinger, "The Philosophy of Dreaming," 208–11.

> real, even if fantastic. Thus the reasoning of conscious awareness during waking is absent.[10]

So, we are deceived about the true nature of our current mental state, that is, that we are not awake and perceiving things in the world. And we take experienced events to be real even if they are extremely incredible. Dreams may be viewed as a kind of recurrent nocturnal madness we experience. It is only when we wake up that we realise that we were dreaming, and perhaps notice the unreal and excessive features of the dream. Consider Allan Hobson's colourful description of delusional dreaming:

> What is the difference between my dreams and madness? What is the difference between my dream experience and the waking experience of someone who is psychotic, demented, or just plain crazy? In terms of the nature of the experience, there is none. In my New Orleans dream I hallucinated: I saw and heard things that weren't in my bedroom. I was deluded: I believed that the dream actions were real despite gross internal inconsistencies. I was disoriented: I believed that I was in an old hotel in New Orleans when I was actually in a house in Ogunquit. I was illogical: I believed that drawing circles on a ceiling would help police localize individuals in a room above.[11]

(2a) *The tolerance of bizarre elements*. Another distinct aspect of delusional dreaming that this condition does not share with ordinary cases of deception is that the dreamer is insensitive and unable to react to the oddness or the incredibility of events. The dreamer cannot assess the dream as odd because strange experiential features do not stimulate critical assessment of the dream. Compare a normal case in which I may be deceived by, say, a virtual-reality device, that makes me believe that my current illusory experience is real. If really strange things happen I may doubt whether I am awake, or suspect that I am hallucinating. This cognitive sensitivity to react to events that lie beyond the range of what can be accepted as believable seems absent in delusional dreaming. In fact, the peculiarities in dreams often pass unnoticed as nothing out of the ordinary: for example, I may find myself talking to my partner M although she happens to look like a complete stranger; nevertheless I respond

10 Michel Jouvet, *The Paradox of Sleep: The Story of Dreaming*, trans. L. Garey (Cambridge, Mass.: MIT Press, 1999), 75.

11 Allan Hobson, *Dreaming as Delirium: How the Brain Goes out of Its Mind* (Cambridge, Mass.: MIT Press, 1999), 5.

to her as my familiar long-time partner. It seems that that we often are aware of dreams without noticing (or caring) how poorly the dream-object imitates real things. Finally, consider a related deficiency:

(2b) *The inability to consider the dream as illusory*. However, the inability to detect oddness is a symptom of a more serious deficiency. The state of delusion prevents the dreamer from doubting or disbelieving the dream, even as a voluntary theoretical exercise (as we might doubt the existence of the external world without really taking the doubt seriously). In order to see the difference between (2a) and (2b) more clearly, observe that, even if the dream comprises no fantastic elements, in the delusional state the dreamer is unable to view the experience in a critical way, nor even in a speculative, non-committing way. It seems that in the delusional state the dream cannot be challenged even as an act of make-believe. In fact, in delusional dreaming there seems to be no conscious awareness of a possible contrasting illusory state that provides a theoretical ground for uncertainty. On the other hand, if a dream is apprehended as illusory, in any manner for any reason, the dreamer is likely not to be fully deluded. Hence, delusional dreaming is a far more deprivational state than deception caused by ordinary ignorance, heedlessness, or absent-mindedness in wakefulness.[12]

The inability to consider the dream as unbelievable, deceiving, illusory, or false is an effect of a cognitive condition that conceals its deficient performance. In other words, we are cognitively incapacitated without being aware of it. For example, when we are awake, we may notice that we have certain gaps in our memory – I may realise that I remember nothing about how I got into my present situation. By contrast, delusional dreaming is more like an amnesia that we are unable to be aware of as a memory loss. For example, imagine that you wake up one morning with no memory at all about what happened the previous night, but you do not even notice your loss of memory. The delusional state is devious because it conveys an illusory sense of cognitive status quo in the sense that prevents any awareness of impaired cognitive performance.

Jouvet's and Hobson's description of deception in dreaming has been challenged by some philosophers. According to Jonathan Ichikawa, Jouvet and Hobson represent what he calls "the orthodox view."[13] Two tenets sum up the orthodox view, which reflects how people intuitively describe their experiences

12 Cf. Windt who suggests a similar distinction: "Deception in an interesting sense requires not just that one's beliefs are false but also a modicum of systematicity. The falsity of one's beliefs should be more than a matter of superficial oversight, carelessness, or clumsiness." (Windt, *Dreaming*, 470.)

13 Jonathan Ichikawa, "Dreaming and Imagination," *Mind and Language* 24 (2009): 103–4.

of dreaming: (1) dreams appear in a perception-like guise, and (2) dreams are misapprehended as real events. In this theoretical landscape, Aristotle may be said to be an advocate of the orthodox view since he considers dreams to be perception-like images that we usually mistake for real events. Those who oppose the orthodox view typically argue that dreams are imaginations (of the kind we entertain when we picture objects or scenarios before our inner eye) rather than percepts, and that being caught up in dreaming is not to believe in the reality of what is imagined regardless of what the dream is about (hereafter "imagination theories").

I shall return to the question of how modern proponents of imagination theories use the term 'image' in relation to Aristotle's general conception of *phántasma* and specific concept of dream-*phántasma*. I shall also use some modern imagination theories as a contrast to Aristotle's account of delusional dreaming, which basically reflects the orthodox view. Even if some imagination theories deny that dreams are mistaken for real events, nonetheless, other imagination theories provide an interesting account about how imagination may entail a rudimentary form of belief, that more or less reflects Aristotle's conception of delusional dreaming on the interpretation here considered.

I shall suggest a view that stays close to Aristotle's view in one plausible interpretation and argue that delusional dreaming involves (1) a rudimentary form of unreflecting trust, though not necessarily a full-fledged belief that dreams are real, and that (2a) not being aware of the dream as a dream, (2b) being unaware of being asleep, or (2c) taking the dream to be really happening in the world rather than being an illusion produced by our mind, is sufficient in order to be deceived by a dream's apparent reality. Thus, deception regarding the reality of dreams does not require a fully developed belief, nor a conscious thought that a dream is real, nor some other articulated idea that an experience is real rather than illusory.

3 Aristotle's Conception of Delusional Dreaming

3.1 *Why Dreams Are Taken to Be Real*

The problem of how we may prove that we are not dreaming right now is mentioned briefly by Aristotle in the *Metaphysics*[14] and is described as an artificial problem that misleadingly suggests the need of a demonstration in order to be resolved. Aristotle argues that to ask for proof in order to distinguish between one's dreaming and waking is to have things backwards, since the fundamental

14 *Metaph.* 4.5, 1010b3–11; 4.6, 1011a3–13.

distinction between veracity and error is founded on circumstances that do not need proof. The problem of dream-scepticism is discussed in the context of Protagorean relativism and echoes Plato's formulation of the problem in *Theaetetus* 157e–58e. Aristotle holds that there are normal circumstances of waking life that serve as paradigmatic cases of authoritative awareness in relation to more or less distorted apprehensions of reality due to a variety of causes. Aristotle seems to endorse the view that under normal circumstances we can recognise that we are awake and that the state of waking is more authoritative than sleep or dreaming. However, this does not rule out that we occasionally may be deceived by dreams during sleep.

To reduce overlaps with Gregoric's contribution in this volume I shall highlight a set of themes that are not extensively treated in his paper, including the nature of delusional dreaming as a forced mode of deception and varieties of deflationary notions of trust. It will be shown that the concept of delusional dreaming, in one interpretation, illuminates Aristotle's account of why dreams are cognised as real. Here is what Aristotle has to say about why people tend to mistake dream-images (*phantásmata*) for real events:

> Each of these [phantasms], as has been said, is a remnant of the actual sense-impression, and is still present within, even when the real one [viz. sense-impression] has departed. Thus, it is true to say that it is like Coriscus, even though it is not Coriscus. While one was perceiving, one's ruling and judging part was saying not that the sense-impression is Coriscus, but because of that impression, that the actual person out there is Coriscus. The part that says this while it is actually perceiving (unless it is completely held in check (*katéchetai*) by the blood) is moved by the movements in the sense-organs, *as if* it were perceiving.[15]

In short, dream-appearances derive from sense-impressions and linger on and become apparent in sleep because ordinary perception is shut down. One central idea is that, like veridical perceptual states, dream-appearances present information about how things appear to be in the world, even if false. For example, when we perceive Coriscus the senses display (the real) Coriscus as-if-present. Likewise, the dream (of Coriscus) involves an appearance of the real Coriscus even if the real Coriscus no longer causes the presence of the sense-impression that persists in sleep.

15 *Insomn.* 3, 461b21–29; *Aristotle on Sleep and Dreams: A Text and Translation with Introduction, Notes and Glossary*, trans. D. Gallop (Warminster: Aris and Phillips Ltd., 1996), 101.

Aristotle attributes a primitive form of judgement (*dokeîn*) to the senses, roughly the senses have the capacity to assess how things are in the world, which should not be conflated with proper belief (*dóxa*).[16] Sight is said to be more authoritative than touch because if touch stood alone, one single object would be taken as two when the object is sensed by crossed fingers.[17] Furthermore, appearances in perception sometimes contradict what is believed or known about the world. For example, the sun appears to be one foot across. In such cases there are conflicting cognitive assessments.[18] Thus, appearances may be challenged by many different kinds of cognitive assessments where some assessments are more trustworthy than others. For example, vision normally outranks touch, and accumulated knowledge about the world is superior to how things superficially look. It seems plausible to assume that what Aristotle refers to as superior cognition in terms of the "the ruler" (*tò kýrion*) may vary with the circumstances. For example, vision loses its status as the authoritative sense in a pitch-black environment. Exactly how Aristotle's discussion of hierarchical cognitive assessments relate to the conditions of deception in dreaming is not fully transparent. I shall discuss this problem briefly below, especially in connection with Radulphus Brito's (d. 1320/21) account.

Aristotle seems to mean that the highest instance of judgement, in relation to normal observational circumstances, is sufficient for reliable judgements. If the cognitive machinery works the way it is supposed to (that is, the subject is not diseased, sleeping, intoxicated, and so forth), the subject would know when he is awake, and accordingly he would know that he is not asleep and dreaming. The point is not that there are no ambiguous cases between sleep and waking, but rather that, given the radical difference between the cognitive conditions of sleep and wakefulness in their paradigmatic manifestations, it makes good sense to suppose that we can be aware of being awake when we in fact are awake, that is, in a state where the mind can exercise the full range of its cognitive powers.

Conversely, Aristotle's example of deception regarding the reality of the dream seems to rely on a similar assumption that all other cognitive functions are shut down except the awareness of the dream-appearance. In the case of humans, the intellect as well as lower capacities are inactive. Now, it seems reasonable to assume that animals can be deceived about the reality of dreams even if they lack rational capacities. This point is important because it shows

16 Cf. Gregoric's chapter in this volume for an extensive discussion of the *dokeîn*-element in perception and *phantasía*, pp. 34–35, 44, and 51.

17 *Insomn.* 2, 460b20–23.

18 *Insomn.* 2, 460b19.

that the conditions for deception in dreaming do not include having an intellect, even if the operation of the intellect may be of help in judgements that experiences are illusory. For instance, (1) a dog may be deceived about the reality of the dream, that is, not be aware of that the dream involves an illusory world, (2) when the dog wakes up it becomes aware of the real world, but this does not necessarily imply (3) that the dog has the capacity to be aware of a dream (or any other experience) as an illusory entity. In other words, deception regarding the reality of the dream does not presuppose the cognitive powers to know or suspect that we are sometimes deceived.

Aristotle's examples of dream deception in which there is no opposing cognition in relation to the appearing *phántasma* probably reflects a typical condition in which deception occurs. We do not receive any information about what is minimally sufficient for snapping out of the deceptional state in which dreams are taken to be real. Nevertheless, Aristotle is quite clear that the capacity for belief-formation is restrained in the state of sleep. On one interpretation, this means that the dream is neither believed to be real nor believed to be unreal (this is the non-doxastic interpretation of deception in dreaming):[19]

> And does judgement sometimes declare it an illusion, as it does for waking people, while at other times it is held in check (*katéchetai*) and follows along with the appearances (*phantásmata*)?[20]

And in a related passage:

> For in general the starting-point affirms the report from each sense, provided that some other, more authoritative one does not contradict it. In every case, then, something appears, yet what appears is not in every case judged to be real; it is, though, if the critical part is held in check (*katéchetai*) or fails to move with its own proper movement.[21]

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19 See also a related passage in *de An.* where Aristotle briefly mentions that some animals blindly act upon their appearances because they lack reason. Humans too can enter into this cognitive predicament in states in which the operation of reason is deprived, such as illness or sleep. Aristotle writes: "Because instances of imagination persist and are similar to perceptions, animals do many things in accordance with them, some because they lack reason, e.g. beasts, and others because their reason is sometimes shrouded by passion, or sickness, or sleep, e.g. humans." (*De An.* 3.3, 429a5–8; Aristotle, *De anima*, trans. C. Shields (Oxford: Oxford University Press, 2016.)

20 *Insomn.* 1, 459a6–8; Aristotle, *On Sleep and Dreams*, 87.

21 *Insomn.* 3, 461b3–7; Aristotle, *On Sleep and Dreams*, 99.

In this second passage Aristotle does not explicitly refer to belief-formation as restrained but only to the "critical part." So, does he refer to the capacity to form critical beliefs or to any assessment that may oppose a present *phántasma*? It seems plausible to interpret Aristotle as referring to any opposing cognitive assessments as absent in the typical case of dream-deception. The reference to *dóxa* as a product of the operating intellect in the first passage, however, is likely to highlight the point of there being a deceptive non-doxastic form of naïve trust in dreams.

As for the question of belief, I follow Gregoric's view that deception does not require a proper belief. It is a form of unreflecting trust, which involves a tacit uncritical affirmation of whatever appears to be the case. Aristotle maintains that there is an element of low-level judgement (*dokeîn*) that is conveyed by the senses. The *dokeîn*-element in sense-perception basically means that the senses, in one very restricted sense, can be said to judge how things are in the external world. This form of low-level judgement should not be conflated with fully developed belief (*dóxa*) yet it seems sufficient to explain the apprehension of a dream as something real. Now, if the sensory remnants in sleep convey some sort of judgements about how things are, which are manifest as appearances, the dreamer will respond to such appearances as true given the absence of opposing cognitive assessments. This is the non-doxastic interpretation of why the dreamer is deceived regarding the reality of the dream.

However, there is another option. It might be argued that the state of sleep only inhibits the formation of critical beliefs, not the formation of affirmatory beliefs. So when the dreamer responds to the apparently real dream as actually real there is a proper belief in the dream as real. Yet it is difficult to see why the state of sleep would restrain critical belief formation but leave the capacity for affirmatory belief intact. If there can be only confirmatory beliefs there is not much left of the normal belief-generating procedure that is the result of rational evaluation, and consequently it becomes odd to characterise such non-rational assents as proper beliefs.[22]

22 See Gregoric's chapter in this volume for a fine-grained non-doxastic interpretation of Aristotle's account of why dreams are mistaken for perceived real-world objects. See also Gallop, *Aristotle on Sleep and Dreams*, for an influential account that presents a view along the lines of a non-doxastic interpretation. Gallop writes: "If we perceive something indistinctly, we will say that it 'appears to be a man,' to register uncertainty as to whether it really is one or not (*DA* 428a12). Here we make no firm judgement on the matter. Accordingly, Aristotle distinguishes 'imagination' (*phantasía*) from 'judgement' (*dóxa*), which may either endorse or oppose imagination's deliverances, or which may do neither. In dreaming it simply fails to oppose them, so that the appearances presented to the subject gain acceptance by default (461b29–462a8, cf. 459a6–8, 461b3–7)." (Gallop, *Aristotle on Sleep and Dreams*, 24–25.) Cf. also Philip van der Eijk, *Aristoteles: De insomniis, De*

3.2 *Realism, Deception, and Dream Bizarreness*

As we have seen, Aristotle's explanation of delusional dreaming involves examples that faithfully mimic sensory qualities and also mundane events, for instance, when it seems as if a well-known person (Coriscus) is present. Aristotle does not explicitly discuss incredible dream-content or cases in which dreamers respond to fantastic dream-content as real, nor does he discuss the cognitive capacity needed in order to be able to assess what is considered as normal, credible, or hard to believe. In other words, Aristotle does not explicitly address the question of why absurd dream-content is accepted without further notice. Nonetheless, it seems reasonable to assume that the dreamer responds to the *phántasma* as nothing strange because it provides the only present cognitive assessment about how things are. In such simple-minded cognitive states, nothing can be analysed or examined.[23]

However, Aristotle discusses aspects of dream-bizarreness from another angle in *De insomniis*. Strange dream-contents are understood as distortions that are caused by physiological disturbances and may involve deformed, fragmentary, or rearranged sense-impressions to the extent that they no longer resemble the perceived objects they derive from.[24]

When Aristotle refers to distortions, or grotesque or incoherent dreams, he seems to be focused on strange dream-images in the form of objects, not on fantastic dream-narratives. Two related points can be made in connection

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divinatione per somnum: Übersetzt und Erläutert (Berlin: Akademie Verlag, 1994), 150–52, 225–26.

23 The dream of Coriscus is mistaken for the real Coriscus because the dream resembles the real Coriscus. However, misidentifications based on resemblance exclusively concern unreal things that are mistaken for real things, not the other way around, because perception is the primary state and dreaming is the anomaly. Thus, a likeness resembles a real thing but the real thing is not a likeness, technically speaking, even if it resembles the copy.

24 *Insomn.* 3, 461a8–25. Modern research on dreams suggests that dreams are not completely chaotic even if they sometimes include striking differences in relation to experiences in waking. A scale used in contemporary research to measure bizarreness considers different kinds of dream content: plot, characters, objects, actions, thoughts, feelings, and emotions. Moreover, three kinds of bizarreness are considered (1) discontinuity, (2) incongruity, and (3) uncertainty. See for instance, Allan Hobson et al., "Dream Bizarreness and the Activation-Synthesis Hypothesis," *Human Neurobiology* 6 (1987): 157–64. See also Allan Hobson, *The Dreaming Brain: How the Brain Creates Both the Sense and the Nonsense of Dreams* (New York: Basic Books, 1988), 257–69; Adam N. Mamelak and Allan Hobson, "Dream Bizarreness as the Cognitive Correlate of Altered Neuronal Behavior in REM Sleep," *Journal of Cognitive Neuroscience* 1 (1989): 201–22. See also Antti Revonsuo and Christina Salmivalli, "A Content Analysis of Bizarre Elements in Dreams," *Dreams* 5:3 (1995): 169–87.

with this observation. First, Aristotle's conception of distorted dreams, just like his conception of undistorted dreams, is object-centred, rather than event-centred (unlike our contemporary notion of dreaming which involves a succession of events, sometimes in the form of stories).[25] There is no remark on bizarre sequences of events in dreams in Aristotle's account.

Further, Aristotle does not make any distinction between (1) what qualitatively appears as real, and (2) what can be reasonably taken to be a realistic experience of an object or an event. For example, a dream of a chimera may appear as real (in a qualitative sensory sense) but may seem unrealistic given what I know about the world. For Aristotle, a dream about a chimera is a distortion, most likely a unity composed of several sense-impressions with different origins.[26] A further implication is that the dreamer tends to apprehend a dream-image of a chimera as real, regardless of whether such a creature exists or not. Yet the parts of a chimera-dream correspond to various fragments that derive from mundane sense-impressions. In sum, Aristotle might explain the dream-subject's tolerance of dream-bizarreness by way of the restrained powers of the intellect or some other inhibited cognitive function that is deactivated by the state of sleep. Even if Aristotle does not explicitly discuss what capacity would be sufficient to identify a dream as odd, incredible, or bizarre, the suggestion that the dream-appearance, as such, involves the only present cognitive assessment, indirectly explains why bizarre elements are ignored or taken as equally real as mundane events.

3.3 *The Proper Sense of 'Unreflective Trust'*

Non-doxastic accounts tend as a rule to sound slightly more intellectualistic (that is, doxastic) than they are intended to be. The problem is mainly terminological and concerns the element of assent that may appear to be some kind of top-down attitude taking sense-impressions as its object. The *dokeîn*-element of a sense impression mentioned above is not something that is added to the sense-impression, but ought to be regarded as an integrated part of it. Hence when the dreamer blindly or non-committedly follows his dream-appearances, the element of trust, conviction, or assent is already there in the very awareness of the appearance itself, provided that there are no other assessments.

25 Cf. Eric R. Dodds, *The Greeks and the Irrational* (Berkeley: University of California Press, 1951), 104–6, and Gregoric in this volume (p. 30). Note also that Aristotle's conceptions of memory and recollection exhibit a similar orientation towards states and objects rather than events or plot-like narratives.

26 Cf. Aristotle's remark on dream-interpretation in *Div.Somn.* 2, 464b5–16.

Therefore, expressions that aim to capture the non-doxastic interpretation of delusional dreaming conceptualised as an "unreflective acceptance," "unreflective assent," "tacit acceptance," "taking the appearance of realism for granted," "passive trust," etc., should not be understood as something added to what is included in the bare awareness of the appearance. Hereafter I shall refer to this non-doxastic type of assent as "unreflective trust."

We need to make some further qualifications of the relevant Aristotelian sense of 'unreflective trust' that is characteristic of delusional dreaming. First, the relevant kind of 'unreflective trust' only partly corresponds to similar phenomena we are familiar with from waking life. For example, we usually presuppose (take for granted, or accept) without any critical reflection that the ground under our feet is solid as we walk, if it appears that way. It is arguable that the dreamer tacitly believes, (thinks, presupposes, or takes for granted) that what is experienced during dreaming is real, in the same sense a wakeful person 'believes' that the ground under his feet is solid if there are no particular reasons to be uncertain about it. In such cases it becomes reasonable to speak of an absence of doubt rather than the presence of an affirmative belief as something actively produced in response to an appearance. However, it is important to realise that the condition of delusional dreaming does not include any readiness to form critical attitudes as we may do when we tacitly trust that the ground is solid under our feet.

Even naïve or spontaneous beliefs in the existence of the external world are misleading analogues in this context. Why? There is a compelling element in delusional dreaming that distinguishes it from other kinds of unreflecting trust in waking. For instance, when the person is fully awake, he can withdraw, modify, or suspend his trust in bare experience, as he sees fit. For example, if I fall into a camouflaged hole in the ground, I might be very suspicious the next time I stroll around in similar surroundings. Or, even if I do not for a second commit to the belief that there is no external world, I can doubt its existence as part of a sceptical exercise, perhaps to the point where I feel the world to be unreal (without really being deceived by the feeling of unreality). The delusional dreamer, by contrast, cannot withdraw his trust in experience at will for any reason, not even by means of a suspension of judgement or a speculative hypothesis that the present experience is illusory. In sum, the relevant kind of unreflective trust that is characteristic of delusional dreaming, in Aristotle's account, manifests itself as a rigid, narrow awareness that takes experiences at face value and cannot be modified or altered at will as long as the cognitive inhibitions that are characteristic of the delusional state prevails. Give and take some details, this characterisation seems a plausible option in contemporary theorising.

4 Two Kinds of Assent in Ancient Scepticism

In order to get some perspective on Aristotle's conception of unreflecting trust we may take a look at some later conceptions of proto-belief, which contrasts with fully developed belief. A distinction between fully developed beliefs and something in line with 'unreflecting trust' was developed in the ancient sceptical tradition in order to escape the charge that that scepticism is a self-refuting position. For example, if you believe that nothing can be known, it seems quite pointless to defend this view by a knowledge-claim. This problem resulted in attempts to articulate a distinction, as Michael Frede puts it, between "having a view" and "making a claim." The sceptics distinguished between two kinds of assent: sometimes 'assent' was used to describe a mental act, for example, the acceptance of a sense-impression, that is based on reasons for judging it to be true; on other occasions people assent to sense impressions simply because they appear in certain ways.[27] Michael Frede writes:

> On the basis of this one might try to make a distinction between just having a view and making a claim, taking a position. To just have a view is to find oneself being left with an impression, to find oneself having an impression after having considered the matter, maybe even for a long time, carefully, diligently, the way one considers matters depending on the importance one attaches to them. But however carefully one has considered a matter it does not follow that the impression one is left with is true, nor that one thinks that it is true, let alone that one thinks that it meets the standards which the dogmatic philosophers claim it has to meet if one is to think of it as true. To make a claim, on the other hand, is to subject oneself to certain canons. It does, e.g., require that one should think that one's impression is true and that one has the appropriate kind of reason for thinking it to be true. To be left with the impression or thought that *p*, on the other hand, does not involve the further thought that it is true that *p*, let alone the yet further thought that one has reason to think that *p*, that it is reasonable that *p*.[28]

One important point is that appearances are forced upon us. Perhaps some beliefs are also forced upon us after reflection. Yet beliefs can be endorsed for

27 Michael Frede, "The Sceptic's Two Kinds of Assent and the Question of the Possibility of Knowledge," in *Philosophy in History*, ed. R. Rorty, J. B. Schneewind, and Q. Skinner (Cambridge: Cambridge University Press, 1984), 255–78.

28 Frede, "The Sceptic's Two Kinds of Assent," 261.

a variety of reasons. The distinction between the impression that *p*, on the one hand, and the reason-based belief that *p* or *not-p*, on the other, seems fairly clear and approximates Aristotle's distinction between an unreflecting trust in appearances and fully developed beliefs. However, as previously argued, Aristotle's notion of delusional dreaming should not be equated with the voluntarily suspension of judgement, as one attitude among others. The dreamer cannot voluntarily choose to accept the impression, nor disbelieve the impression, nor withhold acceptance or rejection.

Next I shall make a leap to the middle ages and examine Radulphus Brito's commentary of Aristotle's *De insomniis*.[29]

5 Radulphus Brito: Delusional Dreaming and Incredible Dreams

I shall now turn to a medieval discussion of the deceptive nature of dreams: namely, Radulphus Brito's comments on Aristotle's account on dreaming in *De insomniis*. I shall follow a particular strand in Brito's commentary that deals

29 A medieval source that superficially seems to be linked to Aristotle's discussion in *De insomniis* is al-Ghazālī (c.1058–1111, known as Algazel in the Latin tradition). Al-Ghazālī discusses the idea of hierarchical cognitive assessments and his remarks about conviction based on the absence of opposing evidence are reminiscent of the problem of deception as discussed in *De insomniis* (al-Ghazālī, *The Deliverance from Error and the Beginning of Guidance*, trans. W. M. Watt (Kuala Lumpur: Islamic Book Trust), 8–10). However, al-Ghazālī pushes the issue further than Aristotle and notes that if people are inclined to respond to unchallenged information as trustworthy, why should any judgement be taken as trustworthy? A general mistrust of human rationality would make little sense for Aristotle. However, al-Ghazālī's discussion was probably not influenced by Aristotle or Arabic Aristotelianism. The relevant passage in the *Deliverance* that considers a cognitive hierarchy of (1) sense, (2) intellect, and (3) super-understanding is similar to the Neoplatonic one found, for example, in Boethius' *The Consolation of Philosophy*: (a) sense (common to all animals) – (b) imagination (some animals only) – (c) reason (humans only) – (d) divine super-understanding (*intelligentia*). See Boethius, *The Consolation of Philosophy*, trans. P. G. Walsh (Oxford: Oxford University Press, 1999), 108–9. Moreover, the relevant passages in the *Deliverance* echo a fragment of Democritus where an imaginary dialogue between the senses and the mind (*phrḗn*) takes place; see frag. 552 in *The Presocratic Philosophers*, ed. G. S. Kirk, J. E. Raven, and M. Schofield, 2nd ed. (Cambridge: Cambridge University Press, 1983), 412 (= fragment 125 in *Die Fragmente der Vorsokratiker*, ed. H. Diels, rev. W. Kranz, 6th ed. (Zurich: Weidmann, 1951)). The fragment is preserved by Galen. See Stephen Menn, "The Discourse on the Method and the Tradition of Intellectual Autobiography," *Hellenistic and Early Modern Philosophy*, ed. J. Miller and B. Inwood (Cambridge: Cambridge University Press, 2003): 141–91, on the genre of intellectual autobiography on which al-Ghazālī models his own text. At any rate, al-Ghazālī mentions Galen in the *Deliverance*, and is likely to have read him.

with fantastic dreams, that is, dreams with incredible content.[30] Brito is interesting in this context because he attempts to explain why the dreamer accepts very strange dreams as true. The fact that the dreamer is inclined to be fooled by dreams that include quite ordinary events like eating breakfast at home is more understandable, since such dreams do not give any reasons to suspect that something is wrong. Brito's discussion may be seen as a development of a theme that was implicit in *De insomniis*. Brito investigates the general idea that the sense-impressions that linger on in sleep are taken to be actual sense-impressions. Dreams about horses as well as dreams about centaurs appear real because dreams in general appear to be caused by real objects. Brito writes:

> This, then, is first clear from a consideration of the movement of images to the fantasy, for, according to the Philosopher, during sleep, towards the end of the sleep when the evaporation has become refined, there is a continuous movement of images from the fantasy to the common sense, for they are moving continuously in such a way that one is there in actuality and another in potency, and when one is destroyed another is generated, and then the common sense is modified by those phantasms as if it were modified by external sense-objects, and therefore, when several phantasms that do not have any mutual ranking modify the common sense, then it judges as if it were modified by external sense-objects, and then something composed of a man and a horse or the like appears to one, and one dreams of monsters.[31]

Brito repeats Aristotle's explanation of how *phantásmata* may change shape into various forms that more or less resemble proper real-world objects. Thus, a phantasm may be composed of a man and a goat, and this is how monsters may appear in sleep. The claim that any dream, even a dream of monstrous creatures, appears to be real, is a plausible interpretation of what is implicit in *De insomniis*.[32]

Brito goes on to discuss the effect of the disabled intellect during sleep. It is the power of sleep that makes the dreamer believe that a likeness of a thing, that is, a *phántasma*, is the very thing it resembles:

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30 See Sten Ebbesen, "Radulphus Brito on Memory and Dreams: An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 85 (2016): 11–86.

31 Radulphus Brito, *Quaestiones super libros De somno et vigilia* in Ebbesen, "Radulphus Brito," qu. 2.4, 65. I am grateful to Sten Ebbesen for preparing this English translation exclusively for this inquiry.

32 For the role of the common sense, in cases when dreams are mistaken for real events, see Gregoric in this volume (pp. 32–34).

> The major is evident from the Philosopher, for the Philosopher claims that if someone were to put his finger under his eye, but is unaware of having his finger under his eye, then he sees one thing as two, and he is unaware of this deception and believes that one thing is two. But if he is not unaware of having his finger under his eye, then he still sees one thing as being two, but he is not unaware of the deception; on the contrary, he knows that in reality there is just one thing and not two, and he judges in accordance with the superior capacity. This is also the way it is during sleep: if someone believes that a phantasm of Coriscus is Coriscus, he is deceived; but if a superior capacity, such as the intellect, is not fettered, and he does not believe that the phantasm of Coriscus is Coriscus, he is not deceived. But the intellect, which is a superior capacity, is sometimes actual, and then one is not unaware of the deception †[33] are because of the horrible nature of the dream† when the intellect is actual, because sometimes a dream is so terrible that the intellect judges that this cannot possibly happen. Thus when someone dreams that something disgraceful happens to him, he believes that he is dreaming. Also, sometimes memory becomes actual, and when someone judges about something past that it is present and remembers that it is past, then he judges that this is a dream, and thus he is not unaware of the deception. When, however, the superior capacity is fettered, then he is unaware of the deception.[34]

In addition to Aristotle's standard examples of dreams about men or horses, Brito considers the case of monstrous or incoherent dreams (that is, bizarre dreams) which relates to Aristotle's discussion of deformed and fragmentary dreams in *De insomniis* 3, 461a8–25. Brito's idea is that if the intellect is operating properly, the dreamer may notice that something is terrible and supposedly unrealistic (in the sense of being highly unlikely). In a similar vein, if something disgraceful happens to the dreamer (for example fornication), then he is inclined to believe that he is dreaming. In addition, Brito makes an interesting claim about memory. He suggests that if a superior capacity happens to be operational in the state of sleep, for example, if the subject remembers that the dream concerns a friend who passed away some time ago, this superior assessment is sufficient for the subject to reject the apparent reality of the

33 The translator notes that "the text between the crosses makes no sense in the context, and the text after it is not a direct continuation of the text before it. Probably a scribe has mistakenly jumped over some text (translator's note)."

34 Radulphus Brito, *Quaestiones Somn.Vig.*, ed. Ebbesen, qu. 2.4, 66; trans. Ebbesen.

dream. Brito's account is a reasonable interpretation even if Aristotle's explicit account of 'monstrous dreams' is more focused on how such dreams emerge, not how the dreamer responds to such dreams or what is required in order to be able to identify them as strange or incredible.

Finally, we may note that Brito does not make any distinction between fully developed beliefs and non-doxastic forms of unreflecting trust. He simply says that, in sleep, the likeness of Coriscus (the *phántasma*) is believed to be the real Coriscus, if the function of superior cognitive capacities such as memory or intellect is restrained. Even so, Brito explains the phenomenon of delusional dreaming by a reference to absent superior cognitive assessments, following Aristotle in the assumption that our highest actual cognitive assessments will be taken as authoritative when superior cognitive assessments for some reason are inaccessible. For instance, the intellect may reveal that a dream is illusory, but also memory can contradict and expose the false nature of dreams. Thus, the novel element in Brito's contribution is that he provides an account of how the sleeper may be deceived by dreams that are odd or incredible.

6 Modern Philosophy on Delusional Dreaming

6.1 *Descartes: Deception in Sleep and Waking and the Question of Dream-Belief*

In the early modern period Descartes reintroduced the ancient theme of dream-scepticism – widely known as the argument from dreaming.[35] Descartes stresses the illusory nature of dreams and raises the problem of how we can know that what appears to be an ordinary experience in waking is not really a dream. The argument from dreaming, in various formulations, is discussed by Descartes mainly as an epistemological problem involving the quest for criteria that guarantee certain knowledge. Nonetheless, one strand in Descartes' discussion concerns the deceptive nature of dreams. In a well-known passage in the *First Meditation* Descartes suggests that dreams are unreliable because they occasionally mimic plain experiences in waking. However, it might be useful to highlight some divergences between Descartes' dream-scepticism and Aristotle's analysis of delusional dreaming. First, Descartes does not pay any

35 René Descartes, *Meditationes de prima philosophia VI*, trans. J. Cottingham, R. Stoothoff, and D. Murdoch, in *The Philosophical Writings of Descartes* (Cambridge: Cambridge University Press, 1984), 2:89–90. Dream-scepticism has since ancient times been used to establish a range of different conclusions. For example, the presumed indistinguishability between dreaming and waking can be used to undermine the assumed authority of the waking state (cf. *Metaph.* 4.5, 1010b3–11; 4.6, 1011a3–13).

special attention to the fact that dreaming and waking exemplify two radically different states of cognition – at least not explicitly. For instance, Descartes does not seem to endorse the view that we are likely to be deceived about the true nature of our experiences in sleep but not in waking, which is one of Aristotle's basic assumptions. Second, a tacit supposition in Descartes' discussion of dream-scepticism is that the capacity for belief-formation is intact in the dream-state. This assumption, as we have seen, is explicitly rejected by Aristotle. Descartes' and Aristotle's opposing views on dream-belief will be an important backdrop to more recent discussions on whether genuine belief-formation is possible in the state of sleep – discussions which otherwise may appear more or less obscure.

Let us now turn to an early modern account that more directly resembles Aristotle's idea that sensory experience is taken as real in the absence of information to the contrary.

6.2 *Spinoza: Revisiting Aristotle*

In a passage in the *Ethics*, Spinoza highlights a kind of unreflecting trust that is characteristic for the dream-state – a notion that strongly reflects Aristotle's conception of a non-doxastic form of trust as described in *De insomniis*:

> So this may be clearly understood, let us conceive a boy imagining a winged horse, and perceiving nothing else. Since this imagination involves the existence of the horse (by Prop. 17, Coroll., Part 2) and the body perceives nothing that takes away the existence of the horse, he will necessarily regard the horse as present, nor will he be able to doubt of its existence, even though he is not certain of it. We experience this daily in dreams, and I do not believe that there is anyone who thinks that, whilst he is dreaming, he has a free power of suspending his judgement about that of which he dreams, and of bringing it about that he does not dream what he dreams he sees. Nevertheless, it happens that even in dreams we suspend judgement, namely when we dream that we are dreaming. Further, I grant that nobody is deceived in so far as he perceives; that is, I grant that the imaginations of the mind, considered in themselves, involve no error (see Prop. 17, Schol., Part 2). But I deny that a man affirms nothing in so far as he perceives. For what is it to perceive a winged horse, other than to affirm wings of a horse? For if the mind were to perceive nothing other than a winged horse, it would regard the horse as present to it, and would have no cause of doubt about its existence and no faculty of dissent, unless its imagination of the winged horse were joined to an idea which takes away the existence of that horse, or because it perceives

> that the idea of the winged horse that it has is inadequate. Then it will either necessarily negate the existence of the horse, or it will necessarily doubt it.[36]

Thus, if the mind perceives nothing but a winged horse, then there is nothing that may provide a ground for doubt or disbelief, and so the presence or existence of the horse will be taken for granted. Supposing that the mind perceives nothing but a winged horse, a kind of affirmation of the perceived object's existence will follow from the mere awareness of it.

Spinoza's view involves some ideas that resemble Aristotle's account of delusional dreaming: for instance, (1) there is a compelling type of awareness that includes (a) an apprehension of the imagined horse as real, (b) the inability to doubt its existence or suspend judgement,[37] (c) even if there is no certainty of what is apprehended ("certainty" here refers to something that is the result of intellectual assessment). Thus, perceiving (understood to include imagination) considered in isolation from other cognitive features conveys an element of trust in what is perceived. (2) Doubt and disbelief require grounds, and since the awareness of the winged horse is the sole cognitive assessment, without any competing evaluation, the presence of a winged horse is taken as real. A point concerning the example including a winged horse that easily goes unnoticed is that even when such incredible things as winged horses are apprehended, they are apprehended as real. We may also note that Spinoza's example reflects Radulphus Brito's discussion of the cognitive conditions that make the dreamer inclined to experience dreams as real even when dreams are completely incoherent or absurd (cf. section three).

6.3 *Late Modern Adaptations of the Principle of Unreflecting Trust*

A version of Spinoza's account appears in William James' *Principles of Psychology*. James elaborates on the idea of unreflecting trust as a result of absent contradictory information, and his immediate source appears to be Spinoza's *Ethics*. He discusses the idea in very general terms – not specifically in the context of delusional dreaming – and makes no explicit reference to Aristotle. James gives a rather general characterisation of belief in terms of a mental state that involves some degree of assuredness, certainty,

36 Baruch Spinoza, *Ethics*, 2, schol. 49, trans. G. H. R. Parkinson (Oxford: Oxford University Press, 2000), 160.

37 The claim that "[…] even in dreams we suspend judgement, namely when we dream that we are dreaming" is difficult to understand.

or conviction.[38] Belief, or a sense of reality is a feeling close to an emotion of conviction.[39] James maintains that the true psychological opposites of belief are doubt and inquiry, not disbelief,[40] and he rhetorically asks what it would mean if a simple apprehension of something were to be considered as not real:

> Suppose a new-born mind, entirely blank and waiting for experience to begin. Suppose that it begins in the form of a visual impression (whether faint or vivid is immaterial) of a lighted candle against a dark background, and nothing else, so that whilst this image lasts it constitutes the entire universe known to the mind in question. Suppose moreover (to simplify the hypothesis), that the candle is only imagery, and that no "original" of it is recognized by us psychologists outside. Will this hallucinatory candle be believed in, will it have a real existence for the mind?
>
> What possible sense (for that mind) would a suspicion have that the candle was not real? What would doubt or disbelief of it imply?[41]

James concludes:

> The sense that anything we think of is unreal can only come, then, when that thing is contradicted by some other thing of which we think. *Any object which remains uncontradicted is ipso facto believed and posited as absolute reality.*[42]

The most basic forms of belief occur when there is no contradictory information that opposes the existence of the object of awareness. Such primitive beliefs in the reality or existence of something do not involve some reference to some special property or quality that makes it real. Rather, any object of awareness, in the absence of contradictory information, will be apprehended as real. The idea here is that primitive unreflecting trust does not imply fully developed belief, while doubt and disbelief imply a fully operational ability to form beliefs.

James considers a case in which we apprehend something in an epistemically detached way and on the basis of rational evaluation make an affirmative or critical judgement:

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38 William James, *The Principles of Psychology* (New York: Dover Publications, 1890), 2:288.
39 James, *The Principles*, 2:283.
40 James, *The Principles*, 2:284.
41 James, *The Principles*, 2:287.
42 James, *The Principles*, 2:289.

> The having and the crediting of an idea do not always coalesce; for often we first suppose and then believe; first play with the notion, frame the hypothesis, and then affirm the existence, of an object of thought. And we are quite conscious of the succession of the two mental acts. But these cases are none of them primitive cases. They only occur in minds long schooled to doubt by the contradictions of experience. The *primitive* impulse is to affirm immediately the reality of all that is conceived.[43]

Now, cases of detached sober rational assessment are cognitively sophisticated whereas the primitive mode of apprehension of something as real is not. James maintains that there is a general inclination to believe, and that we have to learn to distrust on the basis of contradictions in our experiences. It is only when contradictions and discrepancies are recognised that there is a need to resolve the felt cognitive tension.[44]

A few decades later, Bertrand Russell examines James' theory of unreflecting assent in *The Analysis of Mind*:

> If this is correct, it follows (though James does not draw the inference) that there is no need of any specific feeling called 'belief,' and that the mere existence of images yields all that is required. The state of mind in which we merely consider a proposition, without believing or disbelieving it will then appear as a sophisticated product, the result of some rival force adding to the image-proposition a positive feeling which may be called suspense or non-belief – a feeling which may be compared to that of a man about to run a race waiting for the signal. Such a man, though not moving, is in a very different condition from that of a man quietly at rest. And so the man who is considering a proposition without believing it will be in a state of tension, restraining the natural tendency to act upon the proposition which he would display if nothing interfered. In this view belief primarily consists merely in the existence of the appropriate images without any counteracting forces.
>
> There is a great deal to be said in favour of this view, and I have some hesitation in regarding it as inadequate. It fits admirably with the phenomena of dreams and hallucinatory images, and it is recommended by the way in which it accords with mental development. Doubt, suspense of judgement and disbelief all seem later and more complex than a wholly unreflecting assent. Belief as a positive phenomenon, if it exists, may be

43 James, *The Principles*, 2:319.

44 James, *The Principles*, 2:299–300.

> regarded, in this view, as a product of doubt, a decision after debate, an acceptance, not merely of *this*, but of *this-rather-than-that*.[45]

Russell seems to agree with James that some simple forms of awareness entail a belief-like trust, and he mentions dreams and hallucinations as examples of such unreflecting assent. In cases where there is neither uncertainty nor doubt there is a naïve trust, whereas uncertainty and doubt are the products of rational considerations. Even if Russell is sympathetic to the idea that some states like dreaming involve an unreflecting trust, such states should not be conflated with fully developed beliefs.[46] It seems as if Russell comes very close to a plausible interpretation of Aristotle's position. Rudimentary belief-like phenomena may occur in the absence of contradictory information, for example, in dreams, but full-fledged beliefs are the outcome of a rational choice of this over that, and such judgements require something more advanced than a form of unreflecting trust that is the outcome of a simple awareness of something.

7 Contemporary Views

In this section I shall broaden the scope to some extent and include contemporary views on delusional dreaming, not only explained in terms of an unreflecting trust. I shall highlight two themes that have an Aristotelian origin even if the Aristotelian connection is quite obscure in the contemporary context. The first theme is dreaming understood as a case of imagination as opposed to perception. Another idea is the view that the dream-state comprises no genuine belief. As we will see, this latter issue is entangled with the question in what sense, if any, a dream can fully deceive the dreamer to the extent that the dream is mistaken for a real ongoing event. In the final part of the paper I argue in favour of an Aristotelian explanation of delusional dreaming opposed to rival explanations in the recent literature.

7.1 *Imagination Theories of Dreaming*

There are a variety of views that reject the idea that dreaming involves a false apprehension of reality. As we have seen, appearing real and also trusting the dream to be real are prominent elements in many accounts of delusional dreaming (Aristotle, Spinoza, James, and so forth).

45 Bertrand Russell, *The Analysis of Mind* (London: George Allen and Unwin, 1921), 248–49.
46 Russell, *The Analysis of Mind*, 249–50.

A number of theories that we may call imagination theories challenge the traditional idea of deception in dreaming. The label "imagination theory" of dreaming minimally entails that dreams are conceived as imaginations in the sense of being internal manifestations of a sensory character that are distinct from perception proper and are under voluntary control. It is often maintained that imaginations occur in the form of unfolding sequences of events or stories. Further, most imagination theorists stress that imaginations should not be conflated with other cognitive functions like belief. A central idea in many contemporary conceptions of imagination is that we can imagine arbitrary events, for example, that we travel to the planet Mars. However, it is sometimes supposed that acts of imagination also may seemingly emulate primitive forms of trust, for example, trust that we really encounter the things that we imagine. Exactly what this means will be discussed in detail below.

A quick comparison between the notion of "imagination" as used by modern imagination theories and Aristotle's conceptions of *phantasía* (the faculty of imagination) and *phántasma* (sensory replication in any sense-modality) reveals a superficial resemblance, but Aristotle's conception of imagination merely partially overlaps with contemporary conceptions of the term. According to Aristotle, dreams are perceptual remnants that emerge through *phantasía*. Sensory after-effects and re-activations (so-called *phantásmata*) occur under different cognitive circumstances, for example, in cases of misperception, in relation to thinking and memory, and in sleep in the form of dreams. Aristotle contrasts imagination (*phantasía*) with belief (*dóxa*), arguing that belief is involuntary whereas imagination, at least in waking, conforms to our will.[47] Elsewhere in *De insomniis* Aristotle says that dreaming is the work of the perceptual part, but belongs to this part in its imagining capacity.[48] So even if imagination is distinct from perception, they are closely related, which explains why imagination appears in a perception-like guise. One point of divergence between Aristotle's and modern conceptions of imagination is that Aristotle's notion of *phántasma* is object-oriented whereas modern theories of imagination often emphasise the narrative-like products of imagination.

However, there are at least two noteworthy correspondences between Aristotle's conception and modern conceptions of imagination. First, both notions of imagination are regarded as strictly distinct from other cognitive attitudes such as belief. Still, imagination may under some circumstances superficially mimic something akin to a state of unreflecting trust or belief. Even so, it is quite difficult to determine to what extent modern imagination-theories

47 *De An.* 3.3, 428b3–5.
48 *Insomn.* 1, 459a21–22.

are influenced by Aristotelian ideas of, for instance, non-doxastic belief-like phenomena or whether they are responses to Cartesian assumptions about intact belief-formation in the state of sleep.

However, to what extent modern imagination-theories oppose the tenets of the orthodox view varies – tenets such as (1a) that dreams appear in a way similar to the way perceptions appear during waking, or (1b) that dreams are percepts, and that (2a) dreams involve a misapprehension of reality or (2b) that dreams involve *beliefs* in the reality of the dream. I shall argue that some imagination theories fail to provide an account that accords with the widespread assumption that dreams in most cases are apprehended as real. Imagination theories that explain the dreamer's absorption in a dream as the sort of immersion we undergo when, for instance, we read a story, seem better equipped to explain ambiguous states that are on the brink of delusional dreaming than they are to explain fully-developed delusional states.

As we saw, the orthodox view characterises dreams as perception-like experiences. Aristotle explains the perception-like nature of dreams by assuming that they are remnants of proper sense-impressions that no longer indicate the presence of real-world objects. In the modern discussions there is some disagreement on how to articulate the distinction between image and percept. However, the proponents of the so-called orthodox view quite often characterise dreams as perception-like experiences, but not necessarily perceptions, a description that refers to how dreams appear to the subject in the dream-state. The issue of how images relate to percepts remains controversial.[49] Part of the problem is the lack of standardised definitions of 'imagination' and 'percept.' In any event, a plausible theory should be able to account for the perception-like appearance of dreams, even if dreams are not considered to be 'percepts' according to very restricted applications of the term.

7.2 *Fascination and Fictional Immersion*

Sartre presents an intriguing theory that aims to show that the dreamer does not believe his dreams to be real events – the dreamer is rather compelled to attend to the dream by means of a narrow-minded consciousness. Dreaming is characterised by a spellbinding attention to unreal imaginations.[50] Sartre

49 For contemporary discussions of how images relate to percepts, see Colin McGinn, *Mindsight: Image, Dream, Meaning* (Cambridge. Mass.: Harvard University Press, 2004), 7–41, and Jonathan Ichikawa, "Dreaming," 106–11.

50 Jean-Paul Sartre, *The Imaginary: A Phenomenological Psychology of the Imagination*, trans. J. Webber (London: Routledge, 1940), 165. Sartre's theory of dreaming was most likely inspired by theories in the German school of phenomenology. For a helpful overview of theories of dreams in the phenomenological tradition, see Nicola Zippel, "Dream

makes it clear that when we are caught up in imagination this is not a misapprehension of reality. According to him, the dreamer cannot apprehend the dream-image as real since he has lost the very conception of reality. This view is difficult to accept for a variety of reasons. For instance, if the notion of reality is lost, there seems to be no awareness of the experience as unreal either, which seems to make the experience neither real nor illusory. Yet Sartre clings to the idea that the dreamer is in some sense aware of the dream as an illusory image.

Sartre describes dream-consciousness as similar to the spell-bound state of our consciousness when we are absorbed in reading a fictional story: we buy into the story we are reading, but we are not mistaking it for real events. Colin McGinn presents a view that recalls of Sartre's theory. McGinn calls this theory the "immersion theory of dreaming." He writes:

> Just as your mind cannot wander from your daydreams and expect them to proceed by themselves, so it cannot wander from your dream images – and the reason in both cases is the attention-dependence of the imagination. This explains the *enthralling* character of dreams, the single-mindedness of the dream state. It is not that dreams are somehow intrinsically fascinating so gripping that you cannot take your mind off them; on the contrary, they can be quite boring in the retelling. It is that they de facto have a monopoly on the attention. Since they are constituted by the attention, they are not the *kind* of thing from which the attention might wander. Their fascination for the dreaming consciousness is therefore an artifact of their constitutive nature, not a reflection of the narrative powers of their author.[51]

This idea reflects Sartre's assumption that the reality perspective is absent in the dream-state. Thus, the dreamer is unable to be aware of the narrow-mindedness of the dream-state as opposed to the broader state of awareness that characterises waking consciousness. Yet Sartre maintains that the dreamer is not fooled by the illusory nature of the dream.

Consciousness: A Contribution from Phenomenology," *Rivista Internazionale di Filosofia e Psicologia* 7 (2016): 180–201.

51 McGinn, *Mindsight*, 79.

7.3 *Do Dreamers Believe Their Dreams?*

Sartre argues that no matter how caught up the dreamer is in his dreams, he has some rudimentary awareness that the dreams are mere images. In other words, he does not believe the dream. Sartre writes:

> Here it is necessary to characterize the degree of belief of consciousness in the imaginary worlds, or if you prefer the "weight" of these worlds. Let us return to Mlle B …'s dream. The sole fact that the dream is given as a *story* should permit us to understand the kind of belief that we can attribute to it. But the dreamer instructs us still better, she tells us that she believed she was *reading* this story. What does she mean, if not that the story is presented to her with the same type of interest and credibility as that of a read story? Reading is a kind of fascination, and when I read a detective story I believe in what I read. But this does not signify in the least that I cease to hold the detective's adventures to be imaginary. Simply, an entire world appears to me as imaged through the lines of the book (I have already shown that the words serve as an analogon) and this world encloses my consciousness, I cannot disengage, I am fascinated by it. This is the kind of fascination without positing existence that I call belief.[52]

Sartre seems to argue that the enchanting fascination that characterises the dream-state should not be understood as an affirmative belief that what is dreamt is real. The dreamer rather accepts the dream as he might accept a story in a novel. We play along with the story in a sort of make-believe, yet we know that the dream-story is unreal.

Sartre may be right, given a particular interpretation: perhaps the dream exhibits no explicit or conscious claims of reality, that is, the dreamer does not explicitly think "This is real." The dreamer may misapprehend the reality of the dream nevertheless. It is difficult to see how the state of fascination, in its most developed and compelling form, does not imply a misapprehension of reality. Sartre explains that what might appear as certain mental attitudes in dreams (for example beliefs) are really imagined fake imitations of real beliefs. But then, does not an ersatz-belief that the dream is real amount to the very same thing as real belief that the dream is real, namely, deception about the true nature of the dream?

Just like Sartre, McGinn maintains that the dreamer is not misapprehending his experiences as real events. He writes:

52 Sartre, *The Imaginary*, 168.

> The attraction of this theory is obvious: it reconciles the image theory of dreams with the phenomenon of dream belief. While I am immersed in a novel, I am not under the strange delusion that the marks on paper are real events that I am observing; I know that I am only reading a book, not witnessing the events described in it. Nor do I mistake the images that form in my mind for belief-inviting percepts. Yet I am able to enter into the story to such a degree that my emotions may be stirred, rather *as if* I were witnessing these events. Perhaps even closer to the dream, when am I watching a film I do not confuse the images on the screen with real events; nor do I mistake my prompted imaginings for reality. Yet I may find myself so absorbed that my state of mind mimics real belief and feeling; I "enter into" the story. Similarly, in a dream I am not under the illusion that the images are percepts – I am implicitly aware (in some sense) that they are not – yet I am able to enter into the dream fiction in such a way as to become emotionally affected. I am not confused about the status of dream experiences; it is just that the dream images can draw me into a fictional world in such a way as to engage my cognitive and affective faculties. So engrossed am I by the dream story that I give my assent to it – or go into a state that is very similar to ordinary assent. Fictional immersion stimulates belief.[53]

McGinn claims that we are not confused about the illusory nature of dream-experiences. Even if there is no genuine misapprehension of reality in dreaming, why does the dreamer not react appropriately in response to bizarre and incredible features of dreaming? McGinn explains:

> I know very well that the actor on the stage is not about to stab the other actor, but I 'believe' that he is. I become absorbed in a novel in which a certain world leader has been assassinated, but I know very well that he has not. I am hypnotized into believing that I am a barking dog, but part of me knows that this is rubbish. The dreamer's tolerance of inconsistency is therefore not some kind of preternatural irrationality or disregard for logic; it is simply the correlative of fictional immersion.[54]

The tolerance for incredible elements is explained as an effect of playing along with the story; it is not a kind of acceptance that the dream is believable or real.

53 McGinn, *Mindsight*, 104.
54 McGinn, *Mindsight*, 109.

Nevertheless, McGinn seems to accept that dream-immersion may stimulate belief. But these are not really beliefs, they are more like quasi-beliefs.[55] McGinn writes:

> We should not make the mistake of supposing that everything we call 'belief' fits some chosen paradigm of belief – say, assenting to a sentence when confronted by a sensory stimulus. Beliefs come in a great many forms everything from beliefs about perceived matters, to ethical beliefs, to theoretical beliefs, to religious beliefs ('faith'), to dream beliefs.[56]

And a few pages earlier:

> I noted earlier that dream fear is not *quite* the same as real fear; it doesn't have quite the *clout* of real fear. And dream belief is not quite as committed as ordinary belief; there is some kind of holding back or reservation about it. It is very hard to characterize exactly what this involves, but the point I want to make now is that the same kind of holding back applies to the emotions felt in ordinary fictional immersion. The belief and emotion of fictional immersion are *quasi*-belief and *quasi*-emotion (whatever this may ultimately come to).[57]

McGinn seems to follow Sartre here when he claims that quasi-believing is something like going along with the story without strictly believing that it is true. The main weakness of this view is that it does not correspond to how people normally experience their dreams. For example, there seems to be no holding back when we are in the grip of horrifying nightmares. On the contrary, we psychologically respond to dreams as if the events dreamed of are really happening. Perhaps the reluctance to accept the idea of deception in dreaming relies on the assumption that the state of sleep disables belief-formation and that deception requires belief. However, to assume a kind of holding back seems to be a high price to pay given the almost universal experience that the dream-state in most cases deceives us (see note 1 above).

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55 I think that it is easy to misrepresent McGinn's view. For instance, he says that immersion stimulates belief. But he also makes clear that dream-belief is something that should not be conflated with fully developed beliefs that are formed in waking consciousness. Moreover, dream-beliefs are described as less committing – there is a holding back. Thus, dream-belief, as characterised by McGinn seems to be merely nominally belief.

56 McGinn, *Mindsight*, 112.

57 McGinn, *Mindsight*, 110.

Jonathan Ichikawa, on the other hand, seems to argue that the dreamer is completely deceived regarding the reality of the dream, at least implicitly, but that this is not a belief, strictly speaking.[58] Ichikawa's stance on deception depends on how the phrase "as if you are really there" is interpreted. He writes:

> Lose yourself enough in your daydream, and you will feel, in some sense, as if you are really there. That's not to say you falsely believe the contents of the daydream to be true. Our dreams in sleep are, on the imagination model, like *that*.[59]

Ernest Sosa, along the same line of thought, introduces the notion of make-believe,[60] as a substitute for proper belief and just like Itchikawa he also seems to accept that deception does not imply belief.[61]

> When something happens *in my dream*, reality tends not to follow suit. When in my dream I am chased by a lion, this poses no threat to my skin. No physical proposition about the layout of the world around me is true in actuality just because it is true in my dream. What about mental propositions about how it is in my own mind? Must any such proposition be true in actuality whenever it is true in my dream? No, even if *in my dream* I believe that a lion is after me, and even if *in my dream* I intend to keep running, *in actuality* I have no such belief or intention. What is in question is the *inference* from <in my dream I believe (or intend) such and such> to <In actuality I so believe (or intend)>.[62]

In sum, the contemporary proponents of imagination-theories all circle around the same idea of being caught up in a dream and introduce a set of

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58 Ichikawa presents a version of the fascination theory in line with Sartre and McGinn, but explicitly holds that the absorption in a dream involves no kind of belief, not even quasi-beliefs. In fact, he criticises McGinn for endorsing quasi-beliefs in dreaming. However, Ichikawa's own rejection of beliefs in dreaming relies on a very narrow conception of belief. On this account, beliefs are basically modelled on the cognitive functions they serve in waking life, that is, they are intimately linked to perception and action, and therefore the kind of quasi-belief that is endorsed by Sartre and McGinn poorly exhibits the distinctive traits of genuine belief. See Ichikawa, "Dreaming," 115.

59 Ichikawa, "Dreaming," 119.

60 Ernest Sosa, *A Virtue Epistemology: Apt Belief and Reflective Knowledge* (Oxford: Clarendon Press, 2007), 1:8.

61 Sosa developed his view on dream-belief unaware of Sartre's and McGinn's view. Nevertheless, Sosa's view on dream-belief echoes Sartre's and McGinn's accounts.

62 Sosa, *A Virtue Epistemology*, 3–4.

notions that are meant to substitute for proper instances of belief. The relevant notions include "fascination," "immersion," "quasi-belief," and "make-belief."

How then is imagination supposed to mimic belief? The idea seems to be that imaginations may simulate the occurrence of a variety of cognitive attitudes. So, when quasi – or pseudo – beliefs occur in dreams they are empty, ghostly replicas of the real thing. The difference between proper belief and imagined belief is as great as that between imagining the Eiffel Tower and perceiving the real Eiffel Tower. So when in the dream I take the horse I experience to be real, I do not really believe it to be real, I just imagine myself to believe it to be real.[63] Conversely, when I perceive the real Eiffel Tower I can form proper beliefs about the Eiffel Tower, for example, that it is real and not just some optical illusion. So, according to one interpretation of Ichikawa's and Sosa's accounts, "imagining x to be real" as this occurs in dreaming has the same practical consequence of deception as-if this was really believed, even if it is not. Let us now take a closer look at some theorists' reluctance to accept that the dreamer is deceived with regard to the reality of the dream.

As we have seen, the assumption that dream subjects are never completely deceived about the reality of the dream conflicts with ordinary experiences of dreaming. Even so, the imagination theory seems well suited to explain borderline cases between delusional awareness and lucidity, that is, ambiguous awareness of a dream's reality, such as the awareness that there is something strange about the dream that is difficult to articulate while we remain in the dream-state. For example, I have often dreamed of interacting with people who have passed away. In such dreams, at some points, I have felt that something is wrong, as if a part of me knows that the current dream contradicts known facts. On a charitable reading, this 'feeling that something is wrong' might correspond to McGinn's description that something is holding us back in dreaming. As mentioned, Sartre and McGinn deny complete deception and assume some degree of lucidity in every case of dreaming. However, the occurrence of borderline cases between delusional dreaming and lucidity does not rule out dream-states in which the subject is completely deceived about the illusory nature of the dream.[64] So, are people mistaken when they say that they are deceived by the realistic appearance of dreams? If Sartre and McGinn are right, people merely say that they mistake dreams for real events, but they do not really.

63 See also Malcolm who formulates a version of this idea in *Dreaming*, 112.

64 The majority of theories within the phenomenological tradition deny that dreams can be misapprehended as real. However, there are exceptions, see for instance Eugen Fink's view as described in Zippel, "Dream Consciousness," 195–96. Cf. Sartre above.

Let us sum up some of the points made by proponents of imagination theories of dreaming and their stance on the question of delusional dreaming. (1) Are we deceived (or deluded) about the reality of the dream? Sartre: No, not really, but we are immersed in the dream by the narrow-minded consciousness that constitutes dreaming. Something in us is aware of the dream as an unreal imagination. McGinn: No, there is a holding back of the kind we experience when we are immersed in fictions. Yet, immersion can stimulate belief-like attitudes. Ichikawa: Yes, we can be deceived, it is as if we really are at the place we dream about, but we do not strictly speaking believe it. Sosa: Yes, we respond to the dream as real without believing it, because in dreaming we are unable to believe that the dream is real by means of proper belief.

One detail that divides modern imagination theories is the issue of whether deception occurs at all. Now, all the discussed varieties of imagination theories presuppose that beliefs are ruled out regardless of whether the dreamer is deceived. Sartre and McGinn reject the possibility of deception whereas Ichikawa and Sosa seem to accept a form of deception that is not based on belief. The latter position, apparently involves a kind of immersion in dreams that approximates the non-doxastic view that has been attributed to Aristotle in this paper.

7.4 *Owen Flanagan: Delusional Dreaming through Absent Metacognition*

Owen Flanagan, a philosopher in the contemporary analytical tradition, presents an account of delusional dreaming that comes close to Aristotle's view that the kind of unreflecting trust that is characteristic for dreaming is a consequence of the temporary shut-down of a set of higher cognitive functions. He writes:

> Another way in which dreams differ from wakefulness is this. Many philosophers, thinking they follow Descartes – take for example, Russell's claim that the awake and dreamed thoughts of the ruined church are 'intrinsically indistinguishable' from each other – think that the fact that often we cannot tell we are dreaming when we are dreaming is because dreams seem as real as real can seem. One reason dreams seem so real is related to the point just made: our metacognitive powers are typically turned way down in dreams and thus so are our judgemental capacities to perceive incongruities, uncertainties, and discontinuities as odd while they are occurring. Perceiving that such things are odd is hard, since perceiving them as odd requires layering thoughts, for example, having the thought that one is flying while also having the thought that people can't

> fly. We understand from a neurophysiological perspective why we are better able to think metacognitively when we are awake than asleep. But in any case, the fact that dreams seem so real while we are dreaming that we cannot tell that we are not awake does not imply that dream mentation is just like awake mentation in terms, say, of vivacity or along other phenomenological dimensions.[65]

Flanagan highlights an important detail: we can be deceived about the reality of dreams even if they are very unlike ordinary perceptions we have in the state of waking. For example, it may be the case that dreams are less vivid than perceptual experiences and that they typically deviate from perceptions in a number of distinctive ways. Moreover, dreams often display unrealistic content that does not correspond to waking experiences (cf. section two on different senses of 'appearing real' above): it is as if we are unable to detect vital differences between dreams and waking consciousness while we remain in the deficient mode of cognition that is characteristic of the dream-state. Differently put, we are not necessarily deceived by the dream because it mimics waking experiences to some degree; rather, the dreamer mistakes the dream for reality because of the altered cognitive state he is in, not because the dream in itself is indistinguishable from waking experience.

Flanagan observes that in order to be aware of (1) incongruities (e.g., having a conversation with a duck on the campus lawn), (2) uncertainties (a person may look like a known person but is at the same time felt to have some different or indeterminate identity), and (3) discontinuities (my dream-self undergoes rapid shifts in location – in one moment I am in Europe another moment I am in the Americas), as odd, we have to have layered thought. In other words, we have to have thoughts about thoughts (cf. Brito's view of the role of the intellect in delusional dreaming). In the dream-state we seem to be unable to assess content in a rational way through the firmly held beliefs we have established in the state of wakefulness. Thus, it is the absence of metacognitive assessments that explains why the subject mistakes the dream for reality.

Flanagan's explanation of delusional dreaming comes close to Aristotle's account because the delusional appearance of reality is a mere effect caused by the inactivity of certain supervising cognitive capacities. However, unlike Aristotle, Flanagan explicitly discusses the inability to detect irrational and atypical events and unfolding of events. Another important difference between

65 Owen Flanagan, *Dreaming Souls: Sleep, Dreams, and the Evolution of the Conscious Mind* (Oxford: Oxford University Press, 2000), 173.

the two accounts is that Aristotle stresses the similarity between dreams and perception, whereas Flanagan emphases their differences.

7.5 *Jennifer Windt: Unreflecting Trust, Deception, and Adoxastic Dream-States*

Jennifer Windt offers a very rich account and I shall only consider her take on dream-deception in relation to the notion of unreflecting trust. Just like Flanagan, Windt makes a distinction between deception based on phenomenal resemblance and deception due to cognitive impairment. She introduces the notion of doxastic situatedness, and beliefs are said to be paradigmatic cases of doxastic situatedness. She then explains:

> Doxastic situatedness refers to exactly those attitude types that carry with them particular epistemic commitments. If I believe or affirm that *p*, I am convinced or firmly assume that *p*, and so on, then I am thereby committed to the truth of *p*. This commitment influences how I subsequently reason or act on *p*. If I am strongly convinced of a particular theoretical claim, I will defend it against objections; and if I clearly remember having left my keys in my purse, I will search for them there when needed, which deplorably is not always the most direct path to success.[66]

Windt's main point seems to be that some dreams exhibit no doxastic situatedness at all, not even in the form of a rudimentary unreflecting trust. Such dream-states are considered to be doxastically undetermined and are adoxastic in nature. In fact, Windt argues that a majority of dreams are of this adoxastic character. She writes:

> A new way of saying that dreams are deceptive, then, is to say that dreaming is a state of doxastic disorientation: dreams mislocalize us in our doxastic framework by preventing access to long-standing beliefs or memories, but also by temporarily enticing us to endorse new ones. Dreams are, literally, misleading experiences. In the Cartesian scenario of dream-deception, the dreamer believes or affirms propositions such as 'I am awake,' 'I am *really* holding this piece of paper in my hands and not just dreaming that I am,' and so on. The dream self is now *doxastically situated* toward the content of these propositions in the manner of believing of affirming their truth. Again, not all dream cogitations involve doxastic situatedness, and only a subgroup that do will affect how one is

66 Windt, *Dreaming*, 469.

> situated toward the fact that one is now dreaming. If dream beliefs can occur in isolation, as argued in section 9.6, then believing, in a dream, that my mother has grown a beard does not entail that I thereby take myself to be awake. Other dream-beliefs will undermine one's prior doxastic position without substituting a new one. One can be doxastically situated toward the proposition I am awake' by simply doubting its truth. In this case one will no longer believe that one is awake, but one will also not believe that one is dreaming. What is essential for dream deception, then, is being doxastically situated toward a certain type of content, expressed in propositions about one's current state of consciousness and the reality of ongoing experience, in a manner that is at odds with the actual truth or falsity of the respective propositions.[67]

Windt suggests that dreams are deceptive in a special sense because they do not stimulate adequate doxastic attitudes in the way that waking experiences do. Nevertheless, she also suggests that a large class of dreams lack any doxastic element – they do not include even rudimentary forms of unreflecting trust – and therefore these cases do not involve deception, strictly speaking, because deception requires at least some minimal degree of doxastic situatedness. So, a mistake about the reality of a dream requires that this reality is affirmed, no matter how simple such affirmations are.

Windt challenges a central element in the Aristotelian account of the mistaken reality of dreams, namely, that unreflecting trust automatically results from the simple awareness of a sense-impression. Instead, she argues that an awareness of *p* as such does not imply blind trust in *p* because of the absence of opposing considerations. She writes:

> What about intermediate states between doxastic indeterminacy and doxastic situatedness? A possible objection to my account is that dreams involve unquestioning assent rather than full-fledged belief and that this is enough for deception. For instance, Reed while granting that 'ordinary dreams involve no considered opinion or strongly appraisive belief' (Reed, 1979, p. 45), argues that the concept of *taking for granted* should be applied to dreaming. Here "the dimension of appraisal is minimal … and the possibility of deception is assured" (pp. 43–44) since one can take something for granted that is false. According to Reed, this is enough to vindicate the traditional view: "Ordinary dreaming involve belief, in the perhaps extended or uncommon sense of 'taking for granted'" (p. 44).

67 Windt, *Dreaming*, 470.

> To this, I would respond that taking for granted, or unreflected assent, may well be a precursor to more sophisticated forms of belief. The distinction between doxastic indeterminacy and doxastic situatedness is intended to be not sharp but gradual. Taking something for granted in a dream – for instance, that this is not a dream, but is really happening – is a simple and unarticulated form of doxastically situating oneself toward the fact that one is now dreaming. In doing so, one fulfils the condition for the simplest form of deception. What I would question, however, is that we should ascribe even this simple form of belief to dreams in the absence of any positive evidence. Rather, it might be useful to distinguish such cases of taking for granted from doxastically indeterminate dreams. The concept of doxastic indeterminacy makes room for the possibility that experience does not automatically invite beliefs and does not per se involve even a primitive form of belief such as taking for granted.[68]

Windt's reference to adoxastic states may superficially appear to involve a quite non-committing position. However, it is not clear what the claim that most dreams are adoxastic amounts to. For instance, we may ask (1) are there adoxastic dream-states, and (2) if there are, how many dreams have this adoxastic character, and (3) do such states involve any kind of deception? I shall argue that the average awareness of dreams involves a form of unreflecting trust in the reality of the dream. The proposed view challenges Windt's position which claims that most instances of dreaming lack any doxastic element no matter how rudimentary it is assumed to be. In my view, if the dream seems to take place in the real world and this appearance is not questioned in any way, then there is deception about the reality of the dream. On the other hand, rudimentary forms of unreflecting trust do not imply articulated beliefs like "This is real" or "I am not sleeping." Dreams may be taken to be real, not necessarily through a conscious judgement that what is experienced is real, but indirectly by viewing events as if appearing in the world and not noticing that one is asleep. This implicit apprehension of the dream as real is sufficient for deception regarding the reality of the dream.

Let us examine Windt's assumption of alleged adoxastic states in dreaming. What does it mean to be aware of a dream yet remain neutral to how the dream appears? Is it a disengaged attitude of "going through the motions"? Is it a completely neutral apprehension of a dream with regard to its realistic

68 Windt, *Dreaming*, 474–75. The references are to T. M. Reed, "Dreams, Skepticism, and Waking Life," in *Body, Mind, and Method: Essays in Honor of Virgil C. Aldrich*, ed. D. F. Gustafson and B. L. Tapscott (Boston: D. Reidel, 1979), 37–67.

qualities? Is it like watching a movie but not responding to what is seen with actions or emotions? Or does it simply mean that the realistic features of a given dream are not reported upon awakening? For example, would my dream of my friend D reading on the campus lawn qualify as such an adoxastic state? I do not apprehend the dream as real in any conscious significant way at all. While dreaming, I am just completely caught up in the situation here and now. I did not explicitly think: "This is real," and I did not disbelieve that it was an occurrence in the world. It seems right that there is no deception of reality in delusional dreaming that matches sophisticated cases where we sincerely wonder: "Are my sensory appearances deceiving me?" In my dream there was not even any consciously articulated conception of reality, only a tacit, intuitive sense of reality. In fact, deceptions of reality do not seem to require any articulated concept of reality. Imagine a cat being deceived about chasing an unreal mouse while dreaming. If a cat can be deceived by a dream it seems unreasonable to suppose that deception requires the cognitive resources to articulate conceptually sophisticated attitudes about reality as "reality."

The dreamer is not only deceived about the true nature of the things dreamt of, the dreamer is also deceived about the cognitive states that monitors the events in the dream. This move turns things back to the endorsed interpretation of Aristotle and suggests in just how deflated a sense 'unreflecting trust' ought to be understood. It is a tacit unreflecting trust that things are really happening in the world, not in the form of articulated doxastic attitudes like "This has to be real," "This really appears real," or "I am truly convinced that this is real," but rather in an unquestioned intuitive yet prominent sense of reality that is not the result of any top-down processing.

It seems like Windt's discussion disregards the detail that dreams can *appear* to be real and that appearances play a vital role in accounts of why dreams are apprehended as real. Now, to uncritically take dreams at face value is not a matter of intellectual processing. But why then do dreams present themselves as real rather than neutral or unreal? Here is one answer. Perception paradigmatically gives us immediate and intuitive access to the world. Sensory imaginings of the kind we entertain in the state of waking do not really indicate the presence of real-world objects, yet their existence is parasitic on proper perceptual states. Dreams along with imaginations mimic the characteristic format of perception that things take place in a world and thereby emulate the realistic appearance of perception. The illusion of reality that is inherent in imagination is less prominent when we perceive the world around us and conversely the illusion of reality in imagination and dreaming is increased the more perception, and other higher cognitive functions are deprived.

8 Conclusion

A non-doxastic interpretation of Aristotle was proposed along the lines of Gregoric's account in this volume, in which deception in dreaming manifest itself as a compelling state of unreflecting trust in appearances (*phantásmata*) that is distinguished from believing the dream to be real (*dóxa*). This forced mode of deception warrants a characterisation of the condition as delusional due to a deficient state of cognition. The dream is cognised as real and its reality cannot be doubted or disbelieved, for any reason, as long as the higher cognitive functions that enable critical examination are restrained.

Similar notions of rudimentary forms of unreflective trust have been used for different purposes among the ancient sceptics. Further, Aristotle's theory was discussed and slightly developed by commentators in the medieval West such as Radulphus Brito. Later in early modern times, something very close to the view of Aristotle's conception of unreflecting trust presented reappears in Spinoza and is discussed by William James and Bertrand Russell.

Moreover, a wide range of modern imagination theories claim that fully developed beliefs cannot be formed in dreaming. Some imagination theories deny that dreaming involves deception, presumably because deception seems to require belief, whereas other imagination theories accept deception but without belief. The latter type of imagination theories echo Aristotle's view in the proposed interpretation.

Finally, I have argued against the adoxastic view, namely, the idea that many dreams are doxastically neutral and therefore cannot involve deception strictly speaking. On the contrary, I maintain that the dreamer frequently is deceived about the reality of the dream even if this form of deception does not include articulated beliefs or thoughts of the kind "This is really real," "This has to be real," or "I am certain that I am not asleep." Minimally, it is sufficient to be deceived about the reality of dreams indirectly by not being aware of that one is currently asleep or by a misidentification of the dream-world as the perceived world. However, unlike Aristotle I endorse a wider conception of 'appearing real' that does not necessarily include a faithful replication of ordinary perceptual states in waking.

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Bibliography

Primary Sources

Adam of Buckfield. *Commentarium in De somniis*. In Thomas Aquinas, *Doctoris angelici divi Thomae Aquinatis opera omnia* 24. Edited by S. E. Fretté. Paris: Vivès, 1875.

Albert the Great. *De anima*. Edited by C. Stroick. Alberti Magni Opera omnia 7:1. Münster: Aschendorff, 1968.

Albert the Great. *De animalibus libri XXVI. Nach der Kölner Urschrift*. 2 vols. Edited by H. Stadler. Beiträge zur Geschichte der Philosophie des Mittelalters: Texte und Untersuchungen 15. Münster: Aschendorff, 1916.

Albert the Great. *De homine*. Edited by H. Anzulewicz and J. R. Söder. Alberti Magni Opera omnia 27:2. Münster: Aschendorff, 2008.

Albert the Great. *De somno et vigilia*. Edited by A. Borgnet. Alberti Magni Opera omnia 9. Paris: Vivès, 1891.

Albert the Great. *De vegetabilibus*. Edited by A. Borgnet. Alberti Magni Opera omnia 10. Paris: Vivès, 1891.

Anonymous. *Visiones Georgii. Visiones quas in purgatorio Sancti Patricii vidit Georgius Miles de Ungaria A.D. MCCCLIII*. Edited by L. L. Hammerich. Historisk-filologiske meddelelser 18:2. Copenhagen: Det Kgl. Danske Videnskabernes Selskab, 1931.

Anonymus Angelicani. *Quaestiones in Aristotelis De somno et vigilia*. MS Rome, Bibl. Angelica 549, fol. 104vb–12rb.

Anonymus Parisini 16149. *Sententia libri II De somno*. MS Paris, BNF, lat. 16149, fol. 74rb–76vb.

Anonymus Vaticani 3061. [Selected questions on *Sens., Mem., Somn.Vig., Insomn*., and *Div.Somn*.] Edited by S. Ebbesen, in "Anonymus Vaticani 3061 and Anonymus Vaticani 2170 on Aristotle's *Parva Naturalia*: An Edition of Selected Questions," *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 86 (2017): 216–312.

Aristotle. *Analytica priora et posteriora*. Edited by W. D. Ross. Oxford: Clarendon Press, 1964.

Aristotle. *The Arabic Version of Aristotle's Parts of Animals: Book XI–XIV of the Kitāb al-Ḥayawān*. Edited by R. Kruk. Amsterdam: North Holland Publishing Company, 1979.

Aristotle. *The Complete Works of Aristotle. The Revised Oxford Translation*. Edited by J. Barnes. 2 vols. Princeton: Princeton University Press, 1984.

Aristotle. *De anima*. Edited by W. D. Ross. Oxford: Clarendon Press, 1961.

Aristotle. *De anima*. Translated by C. Shields. Oxford: Oxford University Press, 2016.

Aristotle. *De insomniis, De divinatione per somnum. Übersetzt und erläutert*. Edited and translated by P. J. van der Eijk. Berlin: Akademie Verlag, 1994.

Aristotle. *De Insomniis et De divinatione per somnum. A New Edition of the Greek Text with the Latin Translation*. Edited by H. J. Drossaart Lulofs. 2 vols. Leiden: Brill, 1947.

Aristotle. *De somno et vigilia liber adiectis veteribus translationibus et Theodori Metochitae commentario*. Edited by H. J. Drossaart Lulofs. Leiden: Burgersdijk and Niermans, 1943.

Aristotle. *Fragmenta selecta*. Edited by W. D. Ross. Oxford: Clarendon, 1955.

Aristotle. *Generation of Animals*. Translated by A. L. Peck. Cambridge, MA: Harvard University Press, 1942.

Aristotle. *Kleine naturwissenschaftliche Abhandlungen*. Edited by E. Dönt. Stuttgart: Reclam, 1997.

Aristotle. *Meteorologica*. Translated by H. D. P. Lee. Cambridge, MA: Harvard University Press, 1952.

Aristotle. *Oeuvres complètes*. Edited by P. Pellegrin. Paris: Flammarion, 2014.

Aristotle. *On Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism*. Edited and translated by D. Bloch. Philosophia antiqua 110. Leiden: Brill, 2007.

Aristotle. *On Sleep and Dreams: A Text and Translation with Introduction, Notes and Glossary*. Edited and translated by D. Gallop. Petersborough: Broadview Press, 1991; 2nd ed. Warminster: Aris & Phillips Ltd., 1996.

Aristotle. *On the Soul and Other Psychological Works*. Translated by F. D. Miller, Jr. Oxford: Oxford University Press, 2018.

Aristotle. *Parva naturalia*. Edited by J. I. Beare and G. R. T. Ross. Oxford: Clarendon Press, 1908; reprinted in *The Works of Aristotle Translated into English*, vol. 3, edited by W. D. Ross. Oxford: Clarendon Press, 1931.

Aristotle. *Parva naturalia graece et latine*. Edited and translated by P. Siwek. Collectio philosophica Lateranensis 5. Rome: Desclée, 1963.

Aristotle. *Parva naturalia: A Revised Text with Introduction and Commentary*. Edited by W. D. Ross. Oxford: Clarendon Press, 1955.

Aristotle. *Petits traités d'histoire naturelle*. Edited by R. Mugnier. Paris: Les Belles Lettres, 1953.

Aristotle. *Petits traités d'histoire naturelle*. Translated by P.-M. Morel. Paris: Flammarion, 2000.

Aristotle. *Il sonno e i sogni*. Edited by L. Repici. Venice: Marsilio, 2003.

Aristotle. *La vérité des songes*. Translated by J. Pigaud. Paris: Rivages, 1995.

Aristotle [pseud.] *Kitāb al-Ḥiss wa-l-maḥsūs* [*Book of Sense Perception and the Perceived*]. MS Rampur, Raza Library, Ar. 1752, fol. 7a–54b.

Artemidorus. *Oneirocritica. Text, Translation, and Commentary*. Edited by D. Harris-McCoy. Oxford: Oxford University Press, 2012.

Averroes [Ibn Rushd]. *Al-Kulliyāt fī l-Ṭibb* [*The Canon of Medicine*]. Edited by M. A. al-Jābirī. 2nd ed. Beirut: Markaz Dirāsāt al-Waḥda al-ʿArabiyya, 2008.

Averroes [Ibn Rushd]. *Commentarium magnum in Aristotelis De anima libros*. Edited by F. S. Crawford. Corpus commentariorum Averrois in Aristotelem 6:1. Cambridge, MA: The Medieval Academy of America, 1953.

Averroes [Ibn Rushd]. *Compendia librorum Aristotelis qui Parva naturalia vocantur*. Edited by A. L. Shields and H. Blumberg. Cambridge, MA: Medieval Academy of America, 1949.

Averroes [Ibn Rushd]. *Epitome of Parva naturalia*. Translated by H. Blumberg. Cambridge, MA: The Medieval Academy of America, 1961.

Averroes [Ibn Rushd]. *The Incoherence of the Incoherence* [*Tahāfut al-Tahāfut*]. Edited by M. Bouyges. Beirut: Imprimerie Catholique, 1930.

Averroes [Ibn Rushd]. *Long Commentary on the De Anima of Aristotle*. Translated by R. C. Taylor. New Haven: Yale University Press, 2009.

Averroes [Ibn Rushd]. *Middle Commentary on Aristotle's De anima*. Edited and translated by A. Ivry. Provo: Brigham Young University Press, 2002.

Averroes [Ibn Rushd]. *Sharḥ Kitāb al-Burhān wa-Talkhīṣ al-Burhān*. Edited by ʿA. Badawī. Kuwait: al-Majlis al-Waṭanī lil-thaqāfa wa-l-funūn wa-l-ādāb, Qism al-turāth al-ʿarabī, 1984.

Averroes [Ibn Rushd]. *Tahāfut al-Tahāfut* [*The Incoherence of the Incoherence*]. Translated by S. van den Bergh. 2 vols. London: E. J. W. Gibb Memorial Trust, 1969.

Averroes [Ibn Rushd]. *Talkhīṣ Kitāb al-Ḥiss wa-l-maḥsūs*. Edited by H. Blumberg. Cambridge, MA: The Medieval Academy of America, 1972.

Avicenna [Ibn Sīnā]. *Al-Ishārāt wa-l-tanbīhāt*. Edited by S. Dunyā. 4 vols. 3rd edition. Cairo: Dār al-Maʿārif, 1971–1992.

Avicenna [Ibn Sīnā]. *Al-Shifāʾ: al-Nafs, Book 4*. Translated by D. Black. http://individual.utoronto.ca/dlblack/WebTranslations/shifanafs41-3.pdf.

Avicenna [Ibn Sīnā]. *Avicenna's De anima, Being the Psychological Part of Kitāb al-Shifāʾ*. Edited by F. Rahman. London: Oxford University Press, 1959.

Avicenna [Ibn Sīnā]. *Ibn Sīnā and Mysticism: Remarks and Admonitions: Part Four*. Translated by S. Inati. London: Kegan Paul, 1996.

Avicenna [Ibn Sīnā]. *Kitāb al-Ḥiss wa-l-maḥsūs: Die Epitome der Parva naturalia des Averroes*. Edited by H. Gätje. Wiesbaden: Otto Harrassowitz, 1961.

Avicenna [Ibn Sīnā]. *Liber de anima seu Sextus de naturalibus*. Edited by S. van Riet and G. Verbeke. 2 vols. Louvain: Éditions Orientalistes/Leiden: Brill, 1968–72.

Avicenna [Ibn Sīnā]. *The Metaphysics of the Healing* [*Al-Ilāhiyāt min al-Shifāʾ*]. Edited and translated by M. Marmura. Provo: Brigham Young University Press, 2005.

Avicenna [Ibn Sīnā]. *Ṭabīʿiyyāt, Dāneshnāme-ye ʿAlāʾī*. Edited by M. Meshkāt. Tehran: Anjoman-e Āthār-e Mellī, 1952.

Avicenna [pseud.] *Risāla al-Manāmiyya*. Translated by M. A. M. Khan, in "*Kitāb Taʿbīr al-ruʾyā* of Abū ʿAlī Ibn Sīnā," *Indo-Iranica* 9 (1956): 43–57.

Avicenna [pseud.] *Risāla al-Manāmiyya* [A Unique Treatise on the Interpretation of Dreams]. Edited by M. A. M. Khan, in *Avicenna Commemoration Volume*, 255–307. Calcutta: Iran Society, 1956.

Bayhaqī, Abū Bakr Aḥmad ibn al-Ḥusayn al-. *Dalāʾil al-nubuwwa wa-maʿrifa aḥwāl ṣāḥib al-sharīʿa*. Edited by S. Ibrāhīm. 7 vols. Cairo: Dār al-Ḥadīth, 2006.

Boethius, Anicius Manlius Severinus. *The Consolation of Philosophy*. Translated by P. G. Walsh. Oxford: Oxford University Press, 1999.

Boethius of Dacia. *Modi significandi*. Edited by J. Pinborg. Corpus philosophorum Danicorum medii aevi 4. Copenhagen: Gad, 1964.

Boethius of Dacia. *Opera. Opuscula*. Edited by N. J. Green-Pedersen. Corpus philosophorum Danicorum medii aevi 6:2. Copenhagen: Gad, 1976.

Boethius of Dacia. *Quaestiones super librum Topicorum*. Edited by N. J. Green-Pedersen and J. Pinborg. Corpus philosophorum Danicorum medii aevi 6:1. Copenhagen: Gad, 1976.

Cicero. *On Old Age. On Friendship. On Divination*. Translated by W. A. Falconer. Loeb Classical Library 154. Cambridge, MA: Harvard University Press, 1923.

Democritus. *Die Fragmente der Vorsokratiker*. Vol. 2, 6th edition. Edited by H. Diels and W. Kranz. Berlin: Weidmann, 1952; reprinted in 1966.

Descartes, René. *The Philosophical Writings of Descartes*. Vol. 2. Translated by J. Cottingham, R. Stoothoff, and D. Murdoch. Cambridge: Cambridge University Press, 1984.

Fārābī, al-. *Kitāb Ārāʾ ahl al-madīna al-fāḍila*. Edited by A. Nader. Beirut: Dār al-Mashriq, 1986.

Fārābī, al-. *On the Perfect State. Mabādiʾ ārāʾ ahl al-madīna al-fāḍila*. Edited and translated by R. Walzer. Oxford: Clarendon Press, 1985.

Galen. *De dignotione ex insomniis*. In *Claudii Galeni Opera omnia*. Medicorum graecorum opera 1–20, edited by K. G. Kühn. 20 vols. Leipzig: C. Cnoblochii, 1821–1833.

Geoffrey of Aspall. *Quaestiones super librum De somno et vigilia*. Edited by S. Ebbesen, in "Geoffrey of Aspall, *Quaestiones super librum De somno et vigilia*: An Edition." *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 83 (2014): 257–341.

Ghazālī, al-. *Deliverance from Error and the Beginning of Guidance*. Translated by W. M. Watt. Kuala Lumpur: Islamic Book Trust, 2005.

Ghazālī, al-. *Maqāṣid al-Falāsifa*. Edited S. Dunyā. Cairo: Dār al-Maʿārif, 1965.

Hippocrates. *De diaeta*. Edited by R. Joly and S. Byl. Berlin: Akademie-Verlag, 1984.

Hippocrates. *Regimen IV. Nature of Man. Regimen in Health. Humours. Aphorisms. Regimen 1–3. Dreams. Heracleitus: On the Universe*. Trans. W. H. S. Jones. Loeb Classical Library. Cambridge, MA: Harvard University Press, 1923.

Ibn Khaldūn. *The Muqaddimah. An Introduction to History*. Translated by F. Rosenthal. 3 vols. New York: Pantheon Books, 1958.

James of Douai. *Expositio cum quaestionibus super libros De somno et vigilia*. Edited by S. Ebbesen, in "James of Douai on Dreams," *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 84 (2015): 42–92.

John Buridan. *On the Soul and Sensation: An Edition of Book II of his Commentary on Aristotle's Book on the Soul with an Introduction and a Translation of Question 18 on Sensible Species*. Edited by P. G. Sobol. PhD diss., Indiana University, 1984.

John Buridan. *Quaestiones et decisiones physicales insignium virorum Alberti de Saxonia ... Thimonis ... Buridani in Aristotelis ... Librum de Somno et vigilia*. Edited by G. Lockert. Paris: Josse Bade, 1516.

John Buridan. *Quaestiones super De somno et vigilia*. Edited by G. Lockert, in *Quaestiones et decisiones physicales insignium virorum*, fol. xliir–xlviiv. Paris: Jose Bade, 1516.

John Buridan. *Quaestiones super De somno et vigilia*. MS Erfurt, UB, CA 2° 357, fol. 152ra–58rb.

John of Jandun. *Ioannis Gandavensis philosophi acutissimi Quaestiones super Parvis naturalibus*. Edited by A. Apulus. Venice: Hieronymus Scotus, 1557.

Kirk, Geoffrey Stephen, John Earle Raven, and Malcolm Schofield, eds. *The Presocratic Philosophers*. 2nd ed. Cambridge: Cambridge University Press, 1983.

Kindī, al-. *The Philosophical Works of al-Kindī*. Translated by P. Adamson and P. Pormann. Oxford: Clarendon Press, 2012.

Kindī, al-. *Rasā'il al-Kindī al-falsafiyya*. Edited by A. Rīda. 2 vols. Cairo: Dār al-fikr al-ʿarabī, 1950–1953.

Marsilius of Inghen. *Expositio cum quaestionibus super libros De somno et vigilia*. MS Uppsala, UB, C.604, fol. 135va–47va.

Michael of Ephesus. *In Parva naturalia commentaria*. Edited by P. Wendland. Commentaria in Aristotelem Graeca 22.1. Berlin: Reimer, 1903.

Nemesius of Emesa. *De natura hominis*. Edited by M. Morani. Berlin: De Gruyter, 1987.

Peter of Auvergne. *Quaestiones super De memoria et reminiscentia*. Edited by D. Bloch, in "An Edition of the *Quaestiones super De memoria et reminiscentia*," *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 78 (2008): 58–110.

Plotinus [Arabic]. *Uthūlūjiyya Arisṭūṭālīs* [*Theology of Aristotle*]. In *Aflūṭīn ʿind al-ʿArab*, edited by ʿA. Badawī. 3rd edition. Kuwait: Wikālāt al-Maṭbūʿāt, 1977.

Radulphus Brito. *Quaestiones super Aristotelis De somno et vigilia*. Edited by S. Ebbesen, in "Radulphus Brito on Memory and Dreams: An Edition," *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 85 (2016): 11–86.

Rāzī, Fakhr al-Dīn al-. *Sharḥ al-Ishārāt*. Edited by A. R. Najafzadeh. Tehran: Anjoman-e Āthār va Mafākher-e Farhangī, 2005.

Rufus of Ephesus. *Quaestiones medicinales*. Edited by H. Gärtner. Corpus medicorum Graecorum supplementum 4. Berlin: Akademie Verlag, 1962.

Siger of Brabant. *Quaestiones in Metaphysicam. Texte inédit de la reportation de Cambridge*. Edited by A. Maurer. Philosophes médiévaux 25. Louvain-la-Neuve: Éditions de l'Institut supérieur de philosophie, 1983.

Siger of Brabant[?]. *Quaestiones super Aristotelis De somno et vigilia*. MS München, BSB, Clm. 9559, fol. 47ra–51rb.

Siger of Brabant[?]. *Quaestiones super Aristotelis De somno et vigilia*. MS Rome, Bibl. Angelica, 549, fol. 99vb–104va.

Simon of Faversham. *Quaestiones super librum De somno et vigilia*. Edited by S. Ebbesen, in "Simon of Faversham, *Quaestiones super librum De somno et vigilia*: An Edition," *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 82 (2013): 90–145.

Sophonias [Themistius]. *In Parva naturalia commentarium*. Edited by P. Wendland. Commentaria in Aristotelem Graeca 6. Berlin: Reimer, 1903.

Spinoza, Baruch. *Ethics*. Edited and translated by G. H. R. Parkinson. Oxford: Oxford University Press, 2000.

Stephen Tempier. *La condemnation parisienne de 1277*. Edited by D. Piché. Paris: Vrin, 1999.

Thomas Aquinas. *Summa theologiae*. Edited by P. Caramello. Turin: Marietti, 1948–50.

Walter Burley. *Expositio in Aristotelis De somno et vigilia*. Edited by C. Thomsen Thörnqvist, in "Walter Burley's *Expositio* on Aristotle's Treatises on Sleep and Dreaming: An Edition," *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 83 (2014): 379–515.

Secondary Literature

Adamson, Peter. *The Arabic Plotinus. A Philosophical Study of the Theology of Aristotle*. London: Duckworth, 2002.

Adamson, Peter. "Averroes on Divine Causation." In *Interpreting Averroes*, edited by P. Adamson and M. Di Giovanni, 198–217. Cambridge: Cambridge University Press, 2019.

Adamson, Peter. "Forms of Knowledge in the Arabic Plotinus." In *Medieval Philosophy and the Classical Tradition in Islam, Judaism and Christianity*, edited by J. Inglis, 106–25. London: Routledge, 2002.

Akiti, Afifi al-. "The Three Properties of Prophethood in Certain Works of Avicenna and al-Ghazālī." In *Interpreting Avicenna: Science and Philosophy in Medieval Islam*, edited by J. McGinnis with D. C. Reisman, 189–212. Leiden: Brill, 2004.

Alpina, Tommaso. "Intellectual Knowledge, Active Intellect and Intellectual Memory in Avicenna's *Kitāb al-Nafs* and Its Aristotelian Background." *Documenti e studi sulla tradizione filosofica medievale* 25 (2014): 131–83.

Black, Deborah L. "Averroes on Spirituality and Intentionality of Sensation." In *In the Age of Averroes: Arabic Thought in the Sixth/Twelfth Century*, edited by P. Adamson, 159–74. London: The Warburg Institute/Turin: Nino Aragno Editore, 2011.

Black, Deborah L. "Memory, Individuals, and the Past in Averroes's Psychology." *Medieval Philosophy and Theology* 5 (1996): 161–87.

Black, Deborah L. "Models of the Mind: Metaphysical Presuppositions of the Averroist and Thomistic Accounts of Intellection." *Documenti e studi sulla tradizione filosofica medievale* 14 (2004): 319–52.

Black, Deborah L. "Psychology." In *The Cambridge Companion to Arabic Philosophy*, edited by P. Adamson and R. C. Taylor, 308–26. Cambridge: Cambridge University Press, 2005.

Bloch, David. *Aristotle on Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism*. Philosophia antiqua 110. Leiden: Brill, 2007.

Bloch, David. "Peter of Auvergne on Memory. An Edition of the *Quaestiones super De memoria et reminiscentia*." *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 78 (2008): 51–110.

Bloch, David. "The Text of Aristotle's *De sensu* and *De memoria*." *Revue d'Histoire des Textes*, n.s. 3 (2008): 1–58.

Block, Irving. "The Order of Aristotle's Psychological Writings." *American Journal of Philology* 82:1 (1961): 50–77.

Blom, Jan Dirk. *A Dictionary of Hallucinations*. Dordrecht: Springer, 2010.

Bortolotti, Lisa. *Delusions and Other Irrational Ideas*. Oxford: Oxford University Press, 2010.

Bos, Egbert, and Stephen Read. *Concepts: The Treatises of Thomas of Cleves and Paul of Gelria. An Edition of the Texts with a Systematic Introduction*. Louvain: Peeters, 2001.

Brenet, Jean-Baptiste. "Agent Sense in Averroes and Latin Averrois." In *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*, edited by J. F. Silva and M. Yrjönsuuri, 147–66. Studies in the History of Philosophy of Mind 14. Dordrecht: Springer, 2014.

Burdach, Karl Friedrich. *Physiology as Empirical Science*. 6 vols. Leipzig: Leopold Voss Publisher. 1826–1840.

Burnyeat, Miles F. "'De Anima' II.5." *Phronesis* 47:1 (2002): 28–90.

Bydén, Börje. "Introduction." In *The Parva naturalia in Greek, Arabic and Latin Aristotelianism*, edited by B. Bydén and F. Radovic, 1–50. Cham: Springer, 2018.

Bydén, Börje, and Filip Radovic, eds. *The Parva naturalia in Greek, Arabic and Latin Aristotelianism: Supplementing the Science of the Soul*. Studies in the History of Philosophy of Mind 17. Cham: Springer, 2018.

Caston, Victor. "Aristotle on Consciousness." *Mind* 111:4 (2002): 751–815.

Corcilius, Klaus. "Activity, Passivity, and Perceptual Discrimination in Aristotle." In *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*,

edited by J. F. Silva and M. Yrjönsuuri, 31–53. Studies in the History of Philosophy of Mind 14. Dordrecht: Springer, 2014.

Corcilius, Klaus, and Pavel Gregoric. "Aristotle's Model of Animal Motion." *Phronesis* 58:1 (2013): 52–97.

Daiber, Hans. "Prophetie und Ethik bei Fārābī (gest. 339/950)." In *L'homme et son univers au moyen âge: Actes du septième Congrès international de philosophie médiévale (18 août–4 septembre 1982)*, edited by C. Wenin, vol. 2, 729–53. Philosophes médiévaux 27:2. Louvain-la-Neuve: Éditions de l'Institut supérieur de philosophie, 1986.

De Haas, Frans A. J. "Recollection and Potentiality in Philoponus." In *The Winged Chariot: Collected Essays on Plato and Platonism in Honour of L. M. de Rijk*, edited by M. Kardaun and J. Spruyt, 164–84. Leiden: Brill, 2000.

De Leemans, Pieter. "Parva naturalia, Commentaries on Aristotle's." In *Encyclopedia of Medieval Philosophy: Philosophy Between 500 and 1500*, edited by H. Lagerlund, 917–23. Dordrecht: Springer, 2011.

Di Giovanni, Matteo. *Averroè*. Rome: Carocci editore, 2017.

Dodds, Eric Robertson. *The Greeks and the Irrational*. Berkeley: University of California Press, 1951.

Dodds, Eric Robertson. "Supernormal Phenomena in Classical Antiquity." *Proceedings of the Society for Psychical Research* 55 (1971): 189–273.

Donati, Silvia. "Albert the Great as a Commentator of Aristotle's *De somno et vigilia*: The Influence of the Arabic Tradition." In *The Parva naturalia in Greek, Arabic, and Latin Aristotelianism*, edited by B. Bydén and F. Radovic, 169–209. Cham: Springer 2018.

Donati, Silvia. "Dreams and Divinatory Dreams in Albert the Great's Liber de somno et vigilia." In *Contemplation and Philosophy: Scholastic and Mystical Modes of Medieval Philosophical Thought. A Tribute to Kent Emery, Jr.*, edited by R. Hoffmeister Pich, S. Dumont, A. S. Culleton, and A. Speer, 178–215. Leiden: Brill, 2018.

Drossaart Lulofs, Hendrik Joan. "Review of Siwek, *Aristotelis Parva naturalia*." *Mnemosyne* 18:4 (1965): 425–27.

Dufour, Richard. "Actuality and Potentiality in Plotinus' View of the Intelligible Universe." *The Journal of Neoplatonic Studies* 9 (2004): 193–218.

Ebbesen, Sten. "Anonymus Vaticani 3061 and Anonymus Vaticani 2170 on Aristotle's *Parva Naturalia*: An Edition of Selected Questions." *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 86 (2017): 216–312.

Ebbesen, Sten. "Geoffrey of Aspall, *Quaestiones super librum De somno et vigilia*: An Edition." *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 83 (2014): 257–341.

Ebbesen, Sten. "James of Douai on Dreams." *Cahiers de l'Institut du Moyen-Âge Grec et Latin* 84 (2015): 22–92.

Ebbesen, Sten. "Radulphus Brito on Memory and Dreams. An Edition." *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 85 (2016): 11–86.

Ebbesen, Sten. "Simon of Faversham, *Quaestiones super librum De somno et vigilia*. An Edition." *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 82 (2013): 90–145.

Ebbesen, Sten, Christina Thomsen Thörnqvist, and Véronique Decaix. "Questions on *De sensu et sensato, De memoria* and *De somno et vigilia.* A Catalogue." *Bulletin de philosophie médiévale* 57 (2015): 59–115.

Ebert, Theodor. "Aristotle on What Is Done in Perceiving?" *Zeitschrift für Philosophische Forschung* 37:2 (1983): 181–98.

Endress, Gerhard. "Al-Kindī's Theory of Anamnesis." In *Islām e arabismo na península ibérica: Actas do XI congresso da união europeia de arabistas e islamólogos*, edited by A. Sidarus, 393–402. Évora: Universidade de Évora, 1986.

Endress, Gerhard. "Platonizing Aristotle: The Concept of 'Spiritual' (rūḥānī) as a Keyword of the Neoplatonic Strand in Early Arabic Aristotelianism." *Studia graeco-arabica* 2 (2012): 265–79.

Endress, Gerhard. "The Circle of al-Kindī." In *The Ancient Tradition in Christian and Islamic Hellenism: Studies on the Transmission of Greek Philosophy and Science, Dedicated to H. J. Drossaart Lulofs on His Ninetieth Birthday*, edited by G. Endress and R. Kruk, 43–76. CNWS Publications 50. Leiden: Research School CNWS, 1997.

Everson, Stephen. "The *De somno* and Aristotle's Explanation of Sleep." *Classical Quarterly* n.s. 57:2 (2007): 502–50.

Fahd, Toufic. *La divination arabe: études religieuses, sociologiques et folkloriques sur le milieu natif de l'Islam*. Leiden: Brill, 1966.

Fioravanti, Gianfranco. "La 'scientia sompnialis' di Boezio di Dacia." *Atti della Accademia delle Scienze di Torino: Classe di Scienze Morali* 101 (1967): 329–69.

Flanagan, Owen. *Dreaming Souls. Sleep, Dreams, and the Evolution of the Conscious Mind*. Oxford: Oxford University Press, 2000.

Frede, Michael. "The Sceptic's Two Kinds of Assent and the Question of the Possibility of Knowledge." In *Philosophy in History*, edited by R. Rorty, J. B. Schneewind, and Q. Skinner, 255–78. Cambridge: Cambridge University Press, 1984.

Freud, Sigmund. *The Interpretation of Dreams*. Translated by J. Strachey. New York: Basic Books, 2010.

Freud, Sigmund. *Die Traumdeutung*. Leipzig: Deuticke, 1900.

Gallop, David. *Aristotle On Sleep and Dreams: A Text and Translation with Introduction, Notes and Glossary*. Petersborough: Broadview Press, 1991; 2nd ed. Warminster: Aris & Phillips Ltd., 1996.

Gätje, Helmut. "Die 'inneren Sinne' bei Averroes." *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 115:2 (1965): 255–93.

Gätje, Helmut. "Philosophische Traumlehren im Islam." *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 109 (1959): 258–85.

Gätje, Helmut. *Studien zu Überlieferung der aristotelischen Psychologie im Islam*. Heidelberg: Carl Winter, 1971.

Glasner, Ruth. Review of *Averroës: Middle Commentary on Aristotle's De anima*, edited and translated by Alfred L. Ivry. *Aestimatio* 1 (2004): 57–61.

Gohlman, William E. *The Life of Ibn Sina*. 2nd ed. Albany, NY: State University of New York Press, 1974.

Gregoric, Pavel. *Aristotle on the Common Sense*. Oxford: Oxford University Press, 2007.

Gregoric, Pavel. "Perceiving that We Are Not Seeing and Hearing: Reflexive Awareness in Aristotle." In *Encounters with Aristotelian Philosophy of Mind*, edited by P. Gregoric and J. L. Fink. London: Routledge, 2021.

Grellard, Christophe. "La réception médiévale du *De somno et vigilia*. Approche anthropologique et épistémologique du rêve, d'Albert le Grand à Jean Buridan." In *Les Parva naturalia d'Aristote: Fortune antique et médiévale*, edited by C. Grellard and P.-M. Morel, 221–37. Paris: Sorbonne, 2010.

Grellard, Christophe, and Pierre-Marie Morel, eds. *Les Parva naturalia d'Aristote: Fortune antique et médiévale*. Paris: Sorbonne, 2010.

Grunebaum, Gustave E., and Roger Caillois, eds. *The Dream and Human Societies*. Berkeley: University of California Press, 1966.

Gutas, Dimitri. *Avicenna and the Aristotelian Tradition. Introduction to Reading Avicenna's Philosophical Works*. Leiden: Brill, 1988; 2nd ed. Leiden: Brill, 2014.

Gutas, Dimitri. "Avicenna v. Mysticism." In *Encyclopaedia Iranica* 3:1 (1987): 79–83.

Gutas, Dimitri. "Imagination and Transcendental Knowledge in Avicenna." In *Arabic Philosophy, Arabic Theology: From the Many to the One*, edited by J. Montgomery, 337–54. Leiden: Brill, 2006.

Gutas, Dimitri. "The Study of Avicenna: *Status quaestionis atque agenda*." *Documenti e studi sulla tradizione filosofica medievale* 21 (2010): 45–69.

Hansberger, Rotraud. "The Arabic *Parva naturalia*." In *Noétique et théorie de la connaissance dans la philosophie arabe du IX^e^ au XII^e^ siècle*, edited by M. Sebti and D. De Smet, 45–75. Paris: Vrin, 2019.

Hansberger, Rotraud. "Averroes and the 'Internal Senses'." In *Interpreting Averroes*, edited by P. Adamson and M. Di Giovanni, 138–56. Cambridge: Cambridge University Press, 2019.

Hansberger, Rotraud. "How Aristotle Came to Believe in God-given Dreams." In *Dreaming Across Boundaries: The Interpretation of Dreams in Islamic Lands*, edited by L. Marlow, 50–77. Washington: Ilex Foundation/Cambridge, MA: Center for Hellenic Studies, 2008.

Hansberger, Rotraud. "*Kitāb al-Ḥiss wa-l-maḥsūs*: Aristotle's *Parva Naturalia* in Arabic Guise." In *Les Parva naturalia d'Aristote: Fortune antique et médiévale*, edited by C. Grellard and P.-M. Morel, 143–62. Paris: Sorbonne, 2010.

Hansberger, Rotraud. "Representation of Which Reality? 'Spiritual Forms' and '*maʿānī*' in the Arabic Adaptation of Aristotle's *Parva naturalia*." In *The Parva naturalia in Greek, Arabic and Latin Aristotelianism*, edited by B. Bydén and F. Radovic, 99–121. Cham: Springer, 2018.

Hasse, Dag Nikolaus. "Avicenna's Epistemological Optimism." In *Interpreting Avicenna*, edited by P. Adamson, 109–19. Cambridge: Cambridge University Press, 2013.

Hein, Christel. *Definition und Einteilung der Philosophie*. Frankfurt a. M.: Peter Lang, 1985.

Hisette, Roland. *Enquête sur les 219 articules condamnés à Paris le 7 mars 1277*. Philosophes médiévaux 22. Louvain: Publications Universitaires and Vander-Oyez, 1977.

Hobson, Allan. *Dreaming as Delirium. How the Brain Goes Out of Its Mind*. Cambridge, MA: MIT Press, 1999.

Hobson, Allan. *The Dreaming Brain. How the Brain Creates both the Sense and the Nonsense of Dreams*. New York: Basic Books, 1988.

Hobson, Allan, Steven A. Hoffman, Rita Helfand, and Delia Kostner. "Dream Bizarreness and the Activation-Synthesis Hypothesis." *Human Neurobiology* 6 (1987): 157–64.

Hulskamp, Maithe. *Sleep and Dreams in Ancient Medical Diagnosis and Prognosis*. PhD diss., Newcastle University, 2008.

Ichikawa, Jonathan. "Dreaming and Imagination." *Mind and Language* 24 (2009): 103–21.

Inati, Shams. *Ibn Sīnā and Mysticism: Remarks and Admonitions: Part Four*. London: Kegan Paul, 1996.

Ivry, Alfred. "Arabic and Islamic Psychology of Mind." *The Stanford Encyclopedia of Philosophy*, edited by E. N. Zalta (2012). https://plato.stanford.edu/archives/sum2012/entries/arabic-islamic-mind/.

Jaeger, Werner. *Aristoteles: Grundlegung einer Geschichte seiner Entwicklung*. Berlin: Weidmann, 1923. Translated into English by R. Robinson in *Aristotle: Fundamentals of the History of his Development*, 2nd ed. Oxford: Clarendon Press, 1948.

James, William. *The Principles of Psychology*. Vol 2. New York: Dover Publications, 1890.

Janssens, Jules. "Al-Ġazālī's *Maqāṣid al-Falāsifa*, Latin Translation of." In *Encyclopedia of Medieval Philosophy*, vol. 1, edited by H. Lagerlund, 387–90. Dordrecht: Springer, 2011.

Janssens, Jules. "Le Dānesh-Nāmeh d'Ibn Sīnā: un texte à revoir?" *Les Études philosophiques* 28 (1986): 163–77.

Janssens, Jules. "Ibn Sīnā: A Philosophical Mysticism Or a Philosophy of Mysticism?" *Mediterranea* 1 (2016): 37–54.

Johansen, Thomas Kjeller. "In Defense of Inner Sense: Aristotle on Perceiving that One Sees." *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 21 (2005): 235–85.

Johnstone, Mark. "Aristotle and Alexander on Perceptual Error." *Phronesis* 60:3 (2015): 310–38.

Jouvet, Michel. *The Paradox of Sleep. The Story of Dreaming*. Translated by L. Garey. Cambridge, MA: The MIT Press, 1999.

Kahn, Charles H. "Sensation and Consciousness in Aristotle's Psychology." *Archiv für Geschichte der Philosophie* 48 (1966): 43–81. Reprinted in *Articles on Aristotle*, vol. 4: *Psychology & Aesthetics*, edited by J. Barnes, M. Schofield, and R. Sorabji, 1–31. London: Duckworth, 1979.

Kärkkäinen, Pekka. "Medieval Theories." In *Sourcebook for the History of the Philosophy of Mind: Philosophical Psychology from Plato to Kant*, edited by S. Knuuttila and J. Sihvola, 61–79. Studies in the History of Philosophy of Mind 12. Dordrecht: Springer, 2014.

Kaukua, Jari. "Avicenna on the Soul's Activity in Perception." In *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*, edited by J. F. Silva and M. Yrjönsuuri, 99–116. Studies in the History of Philosophy of Mind 14. Dordrecht: Springer, 2014.

Kessels, Antonius Hendrik Maria. "Ancient Systems of Dream-Classification." *Mnemosyne* 22:4 (1969): 389–424.

Kinsberg, Leah. "Qurʾān and Ḥadīth: A Struggle for Supremacy as Reflected in Dream Narratives." In *Dreaming Across Boundaries*, edited by L. Marlow, 25–49. Boston: Ilex Foundation, 2018.

Knuuttila, Simo. "Aristotle's Theory of Perception and Medieval Aristotelianism." In *Theories of Perception in Medieval and Early Modern Philosophy*, edited by S. Knuuttila and P. Kärkkäinen, 1–22. Studies in the History of the Philosophy of Mind 6. Dordrecht: Springer, 2008.

Lameer, Joep. "Towards a New Edition of Avicenna's *Kitāb al-Ishārāt wa-l-tanbīhāt*." *Journal of Islamic Manuscripts* 4 (2013): 199–248.

Lamoreaux, John C. *The Early Muslim Tradition of Dream Interpretation*. Albany, NY: State University of New York Press, 2002.

Lautner, Péter. "The Notion of κοινὴ αἴσθησις and Its Implications in Michael of Ephesus." In *The Parva naturalia in Greek, Arabic and Latin Aristotelianism*, edited by B. Bydén and F. Radovic, 65–76. Cham: Springer, 2018.

Lefèvre, Charles. *Sur l'évolution d'Aristote en psychologie*. Louvain-la-Neuve: Éditions de l'Institut supérieur de philosophie, 1972.

Leroi, Armand Marie. *The Lagoon: How Aristotle Invented Science*. Bloomsbury: London, 2014.

Leunissen, Mariska. *Explanation and Teleology in Aristotle's Science of Nature*. Cambridge: Cambridge University Press, 2010.

Lloyd, Geoffrey E. L., and Gwilym E. L. Owen, eds. *Aristotle on the Mind and the Senses*. Cambridge: Cambridge University Press, 1978/2007.

López-Farjeat, Luis Xavier. "La versión árabe del *De divinatione per somnum* de Aristóteles y su impacto en Avicena y su teoría profecía." *Al-Qanṭara* 38:1 (2017): 45–70.

Lory, Pierre. *Le rêve et ses interprétations en Islam*. Paris: Albin Michel, 2003.

Lowe, Malcolm. "Aristotle's *De somno* and His Theory of Causes." *Phronesis* 23:3 (1978): 279–91.

Luria, Alexander Romanovich. *The Mind of a Mnemonist*. Cambridge, MA: Harvard University Press, 1968.

Malcolm, Norman. *Dreaming*. London: Routledge and Kegan Paul, 1959.

Mamelak, Adam N., and Allan Hobson. "Dream Bizarreness as the Cognitive Correlate of Altered Neuronal Behavior in REM Sleep." *Journal of Cognitive Neuroscience* 1 (1989): 201–22.

Manetti, Giovanni. *Theories of the Sign in Classical Antiquity*. Translated by C. Richardson. Bloomington: Indiana University Press, 1993.

McGinn, Colin. *Mindsight. Image, Dream, Meaning*. Cambridge. MA: Harvard University Press, 2004.

McGinnis, Jon. *Avicenna*. Great Medieval Thinkers. Oxford: Oxford University Press, 2010.

Menn, Stephen. "The Discourse on the Method and the Tradition of Intellectual Autobiography." In *Hellenistic and Early Modern Philosophy*, edited by J. Miller and B. Inwood, 141–91. Cambridge: Cambridge University Press, 2003.

Miller, Patricia Cox. *Dreams in Late Antiquity. Studies in the Imagination of a Culture*. Princeton: Princeton University Press, 1994.

Nuyens, François. *L'évolution de la psychologie d'Aristote*. Louvain-la-Neuve: Éditions de l'Institut supérieur de philosophie, 1973.

Oberhelman, Steven. "Galen, *On Diagnosis from Dreams*." *Journal of the History of Medicine and Allied Sciences* 38:1 (1983): 36–47.

Oberhelman, Steven. "The Interpretation of Prescriptive Dreams in Ancient Greek Medicine." *Journal of the History of Medicine and Allied Sciences* 36:4 (1981): 416–24.

Ogden, Stephen. "Avicenna's Emanated Abstraction." *Philosophers' Imprint* 20.10 (2020): 1–26.

Oser-Grote, Carolin M. *Aristoteles und das Corpus Hippocraticum: Die Anatomie und Physiologie des Menschen*. Stuttgart: Steiner, 2004.

Perälä, Mika. "Aristotle on Perceptual Discrimination." *Phronesis* 63:3 (2018): 257–92.

Pickavé, Martin. "Good Night and Good Luck: Some Late Thirteenth-Century Philosophers on Activities in and through Dreams." In *The Parva naturalia in Greek, Arabic and Latin Aristotelianism*, edited by B. Bydén and F. Radovic, 211–31. Cham: Springer, 2018.

Pigman, George W. III. *Conceptions of Dreaming from Homer to 1800*. London: Anthem Press, 2019.

Preus, Anthony. "*On Dreams* 2, 459b24–460a33, and Aristotle's *opsis*." *Phronesis* 13:2 (1968): 175–82.

Radovic, Filip. "Aristotle on Prevision through Dreams." *Ancient Philosophy* 36 (2016): 383–407.

Radovic, Filip. "The Case of Red-Stained Mirrors: Perception, Strange Phenomena, and the Role of Exemplification in Aristotle." In *Philosophical Problems in Sense Perception: Testing the Limits of Aristotelianism*, edited by D. Bennett and J. Toivanen, 77–89. Studies in the History of Philosophy of Mind 26. Dordrecht: Springer, 2020.

Radovic, Filip. "The Sense of Death and Non-Existence in Nihilistic Delusions." *Phenomenology and the Cognitive Sciences* 16:4 (2017): 679–99.

Reed, Graham. *The Psychology of Anomalous Experience. A Cognitive Approach*. London: Hutchinson & Co. Ltd., 1972.

Reed, T. M. "Dreams, Skepticism, and Waking Life." In *Body, Mind, and Method: Essays in Honor of Virgil C. Aldrich*, edited by D. F. Gustafson and B. L. Tapscott, 37–67. Boston: D. Reidel, 1979.

Revonsuo, Antti. *Inner Presence. Consciousness as a Biological Phenomenon*. Cambridge, MA: The MIT Press, 2006.

Revonsuo, Antti, and Christina Salmivalli. "A Content Analysis of Bizarre Elements in Dreams." *Dreams* 5:3 (1995): 169–87.

Ricklin, Thomas. *Der Traum der Philosophie im 12. Jahrhundert: Traumtheorien zwischen Constantinus Africanus und Aristoteles*. Leiden: Brill, 1998.

Russell, Bertrand. *The Analysis of Mind*. London: George Allen & Unwin, 1921.

Sartre, Jean-Paul. *The Imaginary. A Phenomenological Psychology of the Imagination.* Translated by J. Webber. London: Routledge, 1940.

Scheiter, Krisanna. "Images, Appearances, and *Phantasia* in Aristotle." *Phronesis* 57 (2012): 251–78.

Schofield, Malcolm. "Aristotle on the Imagination." In *Essays on Aristotle's De anima*, edited by M. C. Nussbaum and A. Oksenberg Rorty, 249–77. Oxford: Clarendon Press, 1992.

Segev, Mor. "The Teleological Significance of Dreaming in Aristotle." *Oxford Studies in Ancient Philosophy* 43 (2012): 107–41.

Sentesy, Mark. "Are Potency and Actuality Compatible in Aristotle?" *Epoché* 22:2 (2018): 239–70.

Shihadeh, Ayman. "Al-Rāzī's (d. 1210) Commentary on Avicenna's *Pointers*: The Confluence of Exegesis and Aporetics." In *The Oxford Handbook of Islamic Philosophy*, edited by K. el-Rouayheb and S. Schmidtke, 296–325. Oxford: Oxford University Press, 2017.

Shihadeh, Ayman. "Aspects of the Reception of Avicenna's Theory of Prophecy in Islamic Theology." *Proceedings of the American Catholic Philosophical Association* 86 (2012): 23–32.

Shihadeh, Ayman. "New Light on the Reception of al-Ghazālī's *Doctrines of the Philosophers* (*Maqāṣid al-Falāsifa*)." In *In the Age of Averroes: Arabic Philosophy in the Sixth/Twelfth Century*, edited by P. Adamson, 77–92. London: Warburg, 2011.

Sims, Andrew. *Descriptive Psychopathology: Symptoms in the Mind: An Introduction to Psychopathology*. 2nd ed. London: W. B. Saunders Company Ltd., 1995.

Siwek, Paweł. *Les manuscrits grecs des Parva naturalia d'Aristote*. Collectio philosophica Lateranensis 4. Rome: Desclée, 1961.

Smith, Christopher Upham Murray. *The Animal Spirit Doctrine and the Origins of Neurophysiology*. New York: Oxford University Press, 2012.

Smith, Christopher Upham Murray. "Beginnings: Ventricular Psychology." In *Brain, Mind and Consciousness in the History of Neuroscience*, edited by C. U. M. Smith and H. Whitaker, 1–19. Dordrecht: Springer, 2014.

Sobol, Peter G. "John Buridan on External and Internal Sensation." In *Questions on the Soul by John Buridan and Others: A Companion to John Buridan's Philosophy of Mind*, edited by G. Klima, 95–106. Historical-analytical Studies on Nature, Mind and Action 3. Cham: Springer, 2017.

Sobol, Peter G. "Sensations, Intentions, Memories, and Dreams." In *The Metaphysics and Natural Philosophy of John Buridan*, edited by J. M. M. H. Thijssen and J. Zupko, 183–98. Leiden: Brill, 2001.

Sosa, Ernest. *A Virtue Epistemology. Apt Belief and Reflective Knowledge*. Vol. 1. Oxford: Clarendon Press, 2007.

Sprague, Rosamond Kent. "Aristotle on Red Mirrors (*On Dreams* II 459b24–460a23)." *Phronesis* 30:3 (1985): 323–25.

Taylor, Richard C. "Averroes and the Philosophical Account of Prophecy." *Studia graeco-arabica* 8 (2018): 287–304.

Taylor, Richard C. "Averroes on the Attainment of Knowledge." In *Knowledge in Medieval Philosophy*, edited by H. Lagerlund, 59–79. The Philosophy of Knowledge: A History 2. London: Bloomsbury Academic, 2019.

Taylor, Richard C. "*Cogitatio, Cogitativus* and *Cogitare*: Remarks on the Cogitative Power in Averroes." In *L'Élaboration du vocabulaire philosophique au moyen âge*, edited by J. Hamesse and C. Steel, 111–46. Turnhout: Brepols, 2000.

Taylor, Richard C. "Remarks on *Cogitatio* in Averroes' *Commentarium magnum in Aristotelis De anima libros*." In *Averroes and the Aristotelian Tradition: Sources,*

Constitution and Reception of the Philosophy of Ibn Rushd (*1126–1198*), edited by G. Endress and J. A. Aertsen, 217–55. Leiden Brill, 1999.

Theiss, Peter. "Albert the Great's Interpretation of Neuropsychiatric Symptoms in the Context of Scholastic Psychology and Physiology." *Journal of the History of the Neurosciences* 6 (1997): 240–56.

Thomsen Thörnqvist, Christina. "Aristotle and His Early Latin Commentators on Memory and Motion in Sleep." In *Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle's De memoria et reminiscentia*, edited by V. Decaix and C. Thomsen Thörnqvist. Studia Artistarum 47. Turnhout: Brepols, 2021.

Thomsen Thörnqvist, Christina. "Sleepwalking Through the Thirteenth Century: Some Medieval Latin Commentaries on Aristotle's *De somno et vigilia* 2, 456a24–27." *Vivarium* 54 (2016): 286–310.

Thomsen Thörnqvist, Christina. "A Stain on the Bronze: Some Medieval Latin Commentators on *De insomniis* 2.459b23–460a23." In *The Embodied Soul: Aristotelian Psychology and Physiology in Medieval Europe Between 1200 and 1420*, edited by M. Gensler, M. Mansfeld, and M. Michałowska. Historical-Analytical Studies on Nature, Mind and Action. Cham: Springer [in press].

Thomsen Thörnqvist, Christina. "Walter Burley's *Expositio* on Aristotle's Treatises on Sleep and Dreaming: An Edition." *Cahiers de l'Institut de Moyen-Âge Grec et Latin* 83 (2014): 379–515.

Tracy, Theodore. "Heart and Soul in Aristotle." In *Essays in Ancient Greek Philosophy*, vol. 2, edited by J. P. Anton and A. Preus, 321–39. Albany: SUNY Press, 1983.

Treiger, Alexander. *Inspired Knowledge in Islamic Thought: Al-Ghazālī's Theory of Mystical Cognition and Its Avicennian Foundation*. London: Routledge, 2012.

Van Cleve, James. *Problems from Reid*. New York: Oxford University Press, 2015.

Van der Eijk, Philip J. "Aristotle on 'Distinguished Physicians' and on the Medical Significance of Dreams." In *Ancient Medicine in Its Socio-Cultural Context*, vol. 2, edited by P. J. van der Eijk, M. H. F. J. Horstmanshoff, and P. H. Schrijvers, 447–59. Leiden: Brill, 1995.

Van der Eijk, Philip. *Medicine and Philosophy in Classical Antiquity. Doctors and Philosophers on Nature, Soul, Health and Disease*. Cambridge: Cambridge University Press, 2005.

Van der Eijk, Philip, and Maithe Hulskamp. "Stages in the Reception of Aristotle's Works on Sleep and Dreams in Hellenistic and Imperial Philosophical and Medical Thought." In *Les Parva naturalia d'Aristote: Fortune antique et médiévale*. Edited by P.-M. Morel, 47–75. Paris: Sorbonne, 2010.

Walzer, Richard. "Al-Fārābī's Theory of Prophecy and Divination." *Journal of Hellenic Studies* 77 (1957): 142–48; reprinted in *Greek Into Arabic: Essays on Islamic Philosophy*, edited by R. Walzer, 206–19. Cambridge, MA: Harvard University Press, 1962.

Weijers, Olga, et al. *Le travail intellectuel à la Faculté des arts de Paris: Textes et maîtres (ca. 1200–1500)*. 9 vols. Turnhout: Brepols, 1994–2012.

Wijsenbeek-Wijler, Henriette. *Aristotle's Concept of Soul, Sleep and Dreams*. Amsterdam: Hakkert, 1978.

Windt, Jennifer. *Dreaming. A Conceptual Framework for Philosophy of Mind and Empirical Research*. Cambridge, MA: The MIT Press, 2015.

Windt, Jennifer, and Thomas Metzinger. "The Philosophy of Dreaming and Self-Consciousness: What Happens to the Experiential Subject During the Dream-State?" In *The New Science of Dreaming*, vol. 3: *Cultural and Theoretical Perspectives*, edited by D. Barrett and P. McNamara, 193–247. London: Praeger, 2007.

Wirmer, David. "Der Begriff der Intention und seine erkenntnistheoretische Funktion in den *De anima*-Kommentaren des Averroes." In *Erkenntnis und Wissenschaft: Probleme der Epistemologie in der Philosophie des Mittelalters*, edited by M. Lutz-Bachmann, A. Fidora, and P. Antolic, 35–67. Berlin: Akademie Verlag, 2004.

Wolfson, Harry Austryn. "The Terms *taṣawwur* and *taṣdīq* in Arabic Philosophy and Their Greek, Latin and Hebrew Equivalents." *The Moslem World* 33:2 (1943): 114–28.

Woolf, Raphael, "The Coloration of Aristotelian Eye-Jelly: A Note on *On Dreams* 459b–460a." *Journal of the History of Philosophy* 37 (1999): 385–91.

Zippel, Nicola. "Dream Consciousness: A Contribution from Phenomenology." *Rivista Internazionale di Filosofia e Psicologia* 7 (2016): 180–201.

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