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COMMON TO BODY AND SOUL:
AVICENNA ON SLEEP AS AN AFFECT OF
THE ANIMAL BODY*


Introduction

We commonly refer to sleep as a state of rest, when the eyes are closed, the body is inactive, and the mind is unconscious. We can label this vulgate definition of sleep a ‘negative’ view, since sleep is referred to as a condition of basically perceptive and locomotive deprivation. Nowadays, neurologists reject this definition on the basis of the discovery of different sleep stages with distinct neurological functionalities. However, this negative definition of sleep harks back to the first scientific account of this phenomenon provided in the *De somno et vigilia* (*On Sleep and Wakefulness*, henceforth *De somno*), the third among the treatises making up Aristotle’s *Parva naturalia*¹. One might therefore be tempted to believe that this treatise shaped subsequent reflection

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1. The treatises making up the *Parva naturalia* are: (i) *De sensu et sensibilibus* (436a1–449b3); (ii) *De memoria et reminiscencia* (449b3–453b11); (iii) *De somno et vigilia* (453b11–458a32); (iv) *De insomniis* (458a33–462b11); (v) *De divinatione per somnum* (462b12–464b18); (vi) *De longitudine et brevitate vitae* (464b19–467b9); (vii.a) *De iuventute et senectute*, and (vii.b) *De vita et morte* (467b10–470b5); (viii) *De respiratione* (470b6–480b30). The *De spiritu* (481a1–486b4), which is sometimes added to these, is spurious. The reference edition for Aristotle’s *Parva naturalia*, whose text I quote in this article, is Aristotle, *Parva naturalia*, ed. W. D. Ross, Oxford 1955, 1970².

Le sommeil. Théories, représentations et pratiques (Moyen Âge et époque moderne). Textes réunis par B. Andenmatten, K. Crousaz et A. Paravicini Bagliani, Firenze, SISMEL – Edizioni del Galluzzo, 2024, pp. 169–208.

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on this topic. However, in the Islamicate world, this was not the case because, as far as we know, Arabic authors never had access to this treatise, nor indeed to the *Parva naturalia* generally, as we presently know them. Rather, they had at their disposal a ninth-century adaptation, which combined fragments of the Aristotelian text with Neoplatonic and medical elements, thus altering Aristotle's exposition on this and other topics. The Arabic version of the *Parva naturalia* circulated under the title *Kitāb al-Ḥiss wa-l-maḥsūs* (*Book of Sense Perception and What is Sensed*, henceforth *Kitāb al-Ḥiss*), which was apparently borrowed from the first treatise of Aristotle's original collection². It consists of three treatises (*maqāla*), encompassing the topics of the organs and objects of external senses (first treatise); memory and recollection, sleep, dreams, and divination (second treatise); and length and shortness of life (third treatise)³. As we shall see, in the second treatise of this adaptation, sleep is no longer a state of perceptive and locomotive inactivity, but is rather the context for a peculiar form of perception, opposite to the one that characterizes the state of wakefulness, thus modifying the overall negative characterization of sleep we find in Aristotle. However, it is worth mentioning that, as we shall also see, at a certain point in

2. The Arabic text of the adaptation is preserved in one single, acephalous, and rather late manuscript, namely MS Rampur, Raza Library, Ar. 1752, discovered by Hans Daiber (see Hans Daiber, «Salient Trends of the Arabic Aristotle», 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*, Leiden 1997, 29-41). R. E. Hansberger is currently preparing the critical edition of the text.

3. For the text and the contents of the Arabic adaptation of Aristotle's *Parva naturalia*, see Rotraud E. Hansberger, «Averroes on Divinatory Dreaming», in *Forms of Representation in the Aristotelian Tradition – Volume Two: Dreaming*, Leiden 2022, 110-49; 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. Supplementing the Science of the Soul*, Cham 2018, 99-121; ead., «*Kitāb al-Ḥiss wa-l-maḥsūs*: Aristotle's *Parva Naturalia* in Arabic Guise», in *Les Parva naturalia d'Aristote: Fortune antique et médiévale*, Paris 2010, 143-62; ead., «How Aristotle Came to Believe in God-given Dreams: The Arabic Version of *De divinatione per somnum*», in *Dreaming Across Boundaries: The Interpretation of Dreams in Islamic Lands*, Washington – Cambridge 2008, 50-77; ead., *The Transmission of Aristotle's Parva naturalia in Arabic*, unpublished doctoral thesis, University of Oxford 2007.

his exposition, Aristotle himself seems to suggest that sleep is not complete inactivity. Be that as it may, the Arabic adaptation of the *Parva naturalia* might have been the source that fostered Avicenna's understanding of sleep.

In the first part of this paper, I will present the context(s) in which Aristotle refers to sleep in his biological writings and how he defines it and explains its function in his *De somno*. Then I will outline the main changes that Aristotle's account of sleep undergoes in the *Kitāb al-Hiss* and how this influences the exposition of sleep provided by Arabic authors before Avicenna. In the second part of the paper, I will turn to Avicenna's account of sleep as it is formulated in the fourth treatise of his *Kitāb al-Nafs* (*Liber de anima seu Sextus de naturalibus* in Latin⁴, *Book of the Soul* in English, henceforth *Nafs*)⁵, with supplements contained in other writings of his. Completing the article is an appendix that offers an integral translation of *Nafs* IV, 2, the chapter in which Avicenna explains the physiology of sleep.

4. The Latin translation of Avicenna's *Nafs*, which is preserved in fifty manuscripts, was produced in Toledo between 1152 and 1166 by Avendauth Israelita, who has been identified with the Jewish philosopher and historiographer Abraham Ibn Daūd (Avendauth in Latin, d. ca. 1180), and the archdeacon Dominicus Gundisalvi, or Gundissalinus (d. after 1181), the translator of other parts of Avicenna's *Šifā'*.

5. All quotations of and translations from the Arabic of Avicenna's *Kitāb al-Nafs* are based on *Avicenna's De Anima [Arabic Text], being the Psychological Part of Kitāb al-Shifā'*, ed. F. Rahman, London – New York – Toronto 1959, 1970². The quotations from Avicenna's *Nafs* are usually followed by the reference to the page and line number of the corresponding passage in the edition of the Latin translation in square brackets (see Avicenna Latinus, *Liber de anima seu Sextus de naturalibus IV-V*, édition critique de la traduction latine médiévale par S. van Riet, introduction sur la doctrine psychologique d'Avicenne par G. Verbeke, Louvain – Leiden 1968; Avicenna Latinus, *Liber de anima seu sextus de naturalibus I-II-III*, édition critique de la traduction latine médiévale par S. van Riet, introduction sur la doctrine psychologique d'Avicenne par G. Verbeke, Louvain – Leiden 1972). The same quotation scheme is followed in the case of other sections of the *Šifā'* whose Latin translation is edited in the Avicenna Latinus series. Unless otherwise noted, all translations from Arabic are mine. The English translation of Aristotle's texts is that provided in *The Complete Works of Aristotle. The Revised Oxford translation*, ed. J. Barnes, Princeton 1984, with minor modifications.

*Common to Body and Soul: Sleep between Greek and Arabic Aristotle*Aristotle's *De somno et vigilia*

In the incipit of the *De sensu*, Aristotle firstly claims that he is going to deal with activities (πράξεις), either common or specific, belonging to animals and all living beings⁶. This general claim is subsequently refined and the connection of this investigation with that of the soul more clearly explained. First, Aristotle mentions activities either common to all animals or specific to some of them, like perception, memory, passion, desire, appetite in general, pleasure and pain. Then he refers to four pairs of more fundamental activities either shared by all living beings or pertaining to some classes of animals. These pairs are: (1) wakefulness and sleep; (2) youth and old age; (3) inhalation and exhalation; and, (4) life and death. A fifth pair is then added, that is, (5) health and disease, because these states concern what is alive, that is, endowed with soul, and therefore their treatment falls under this investigation⁷.

Aristotle claims that he will determine the nature of those activities or states (what they are, τί τε ἕκαστον αὐτῶν) and for what reasons they occur (καὶ διὰ τίνας αἰτίας συμβαίνει). The reason they supplement the investigation conducted in the *De anima* is that all the items in the two lists, both those belonging to animals (all or some) and those belonging to all living beings, or to some classes of animals, are said to be common to body and soul (κοινὰ τῆς τε ψυχῆς ὄντα καὶ τοῦ σώματος, 436 a7-8; κοινὰ τῆς τε ψυχῆς ἐστὶ καὶ τοῦ σώματος, 436 b2-3). However, Aristotle

6. *Sens.* 1, 436 a1-5.

7. On the kind of investigation conducted in the *Parva naturalia* in general and in the *De sensu* in particular, its relation to that conducted in the *De anima* and, especially, to the inquiry into sensation, and its place in Aristotle's philosophical project, see P.-M. Morel, «Common to Soul and Body' in the *Parva Naturalia*», in *Common to Body and Soul: Philosophical Approaches to Explaining Living Behaviour in Greco-Roman Antiquity*, Berlin – New York 2006, 121-39; and T. K. Johansen, «What's New in the *De Sensu*? The Place of the *De Sensu* in Aristotle's Psychology», in *Common to Body and Soul*, 140-64.

does not limit himself to this general consideration. He clarifies the dependence of those activities (or states) on both body and soul, and the fact that most of them belong to animals: they are all connected with sensation. In the *De anima*, firstly, sensation is said to occur in the soul through the mediation of the body and, secondly, to be the ground on which animals are distinguished from plants. All the activities or states listed in the *De sensu* imply sensation either as a concomitant (μετά) or as a medium (διά): some of them are affections or states of sensation; others are means of preserving it; others entail its destruction or privation⁸. Thus, the investigation of those activities or states in the *Parva naturalia* depends, at least partially, on the study of sensation conducted in the *De anima*.

Indeed, in the prologue to the *De anima*, Aristotle mentions the investigation of the affections (πάθη) and activities (ἔργα) of the soul as a way to grasp the nature of the soul itself⁹. If all of these do not belong exclusively to the soul but are common to the composite of body (matter) and soul (form) – because their occurrence in the soul determines a transformation in the body – then the soul would not be separable from the body and its general investigation pertains to the natural philosopher (φυσικός) who inquiries into enmattered forms and their *per se* attributes¹⁰. The observation of the occurrence of these affections of the soul makes Aristotle conclude that all of them are also common to the body. There, however, Aristotle refers primarily, though not exclusively, to what we would call emotions, together with a cursory mention of desire and sensation in general¹¹. Therefore

8. *Sens.* I, 436 b2–10. Both Morel, «‘Common to Soul and Body’», 125–26, and Johansen, «What’s New in the *De Sensu*?», 151, make a similar comment.

9. *De an.* I, 1, 403 a3–5.

10. The investigation of the theoretical intellect, which takes place in *De an.* III, 4–5, seems to escape this framework. At least in three passages from the *De anima*, Aristotle suggests that the theoretical intellect requires a different approach (*De an.*, II, 1, 413 a3–5; II, 2, 413 b24–7; II, 3, 415 a11–12). A similar consideration can be found in *Metaph.* VI, 1, 1026 a4–6; XII, 3, 1070 a24–26, and *De part. an.*, I, 1, 641 a32–34. For a thorough analysis of these passages, see T. Alpina, *Subject, Definition, Activities: Framing Avicenna’s Science of the Soul*, Berlin – Boston 2021, in part. 29–40.

11. *De an.* I, 1, 403 a5–10. See, more conclusively, 403 a16–19.

this list echoes the first, narrower list at the beginning of the *De sensu*, while not overlapping with the five pairs of activities mentioned afterwards, which are more fundamental and general than the others and go beyond the scope of the *De anima*. In this connection, the beginning of the *De partibus animalium* is relevant. There Aristotle favors a unitary investigation of affections (πάθη) like sleep, inspiration, growth, decay, and death over a piecemeal one. These affections are common to all animals and their discrete treatment in relation to different animal classes would inevitably entail useless repetition¹². The concise list here is thus comparable with the most exhaustive one provided in the *De sensu*. Sleep, therefore, belongs to the widest group of affections, which are common to body and soul because they involve sensation¹³. After recalling the general background of Aristotle's discussion of sleep, we can now turn to the *De somno*¹⁴.

The *De somno* is the first part of a tripartite project, which Aristotle outlines at the beginning of this writing, aiming to elucidate the phenomenon of sleep and wakefulness (*De somno*), dreams (*De insomniis*), and oneiromancy, that is, a form of divination based upon dreams (*De divinatione per somnum*)¹⁵. The part specifically devoted to sleep is described as follows: "With regard to sleep and waking, we must consider what they are; whether they are peculiar to the soul or to the body, or common to both; and if common, to what part of soul or body they belong. Furthermore, why they belong to animals, and whether all animals share in them both, or some partake of the one only, others of the other only, or some partake of neither and some of both" (1, 453 b12-16). The purpose of Aristotle's exposition is to account

12. *De part. an.* I, 1, 639 a19-24.

13. Here I agree with Johansen about how to translate and interpret τὰ μέγιστα (*the greatest*, 436 a7, 13), that is, as a reference to the great extension of this group of affections belonging to soul and body. See Johansen, «What's New in the *De Sensu*?», in part. 148-49.

14. For the presentation of the programme and the different phases of the investigation conducted in the *De somno*, I rely on the excellent paper by A. Falcon, «Definition, Explanation, and Scientific Method in Aristotle's *De somno*», *Manuscripta*, 42.4 (2019), 516-43.

15. *Somn.* I, 453 b11-24. The unity of this tripartite project is also recalled at the end of the *De divinatione per somnum*. See *De div.* 2, 464 b16-18.

scientifically for sleep and wakefulness and to determine why animals (either all or some) experience both. Following Falcon's analysis, three parts are detectable in Aristotle's investigation of sleep, which are also reflected in the internal subdivision of this treatise into three chapters. In the first chapter, Aristotle introduces the phenomenon of sleep and wakefulness by gathering the observable features belonging to each. The second chapter singles out the proper subject of sleep and wakefulness and the reason why animals alternate between these two states. Lastly, the third chapter is devoted to the physiological processes determining episodes of sleep.

This is not the place for an exhaustive presentation of Aristotle's argumentative strategy in the *De somno*, for which I refer the reader to the abovementioned article by Andrea Falcon. Here I will limit myself to recalling the salient features of Aristotle's account of sleep as they emerge from the three chapters. Firstly, sleep and wakefulness are said to be contraries and, as a consequence, to share the same subject, that is, the same part of the animal: "First, then, it is clear that waking and sleep belong to the same part of the animal (τῷ αὐτῷ τοῦ ζῴου): for they oppose each other (ἀντίκεινται γάρ), and sleep is evidently a privation of waking (στέρησις τις ὁ ὕπνος τῆς ἐγρηγόρσεως)" (453 b25-27). Secondly, Aristotle identifies the actual exercise of perception as the criterion for distinguishing these two contrary states: "The criterion by which we know the waking person to be awake is identical with that by which we know the sleeper to be asleep; for we assume that one who is exercising sense-perception is awake, and that everyone who is awake perceives either some external movement or else some movement within himself" (454 a1-4). Having related sleep and wakefulness to the presence or absence of perception as the criterion for distinguishing between them, Aristotle manages to include sleep among the states that equally belong to body and soul, as promised at the beginning of the *De sensu*: "But since the exercise of sense-perception does not belong to soul or body exclusively, then (since the subject of actuality is identical with that of potentiality, and what is called sense-perception, as actuality, is a movement of the soul through the body, κίνησις τις διὰ τοῦ σώματος τῆς ψυχῆς) it is clear that it

is not an affection of soul exclusively, and that a soulless body has not the potentiality to perceive” (454 a7-10). As a consequence, Aristotle ascribes sleep to all animals and, at the same time, formulates a preliminary definition of sleep: “That, therefore, all animals sleep is clear from these considerations: for the animal is defined by its possessing sense-perception, and we say that sleep is, in a certain way (τρόπον τινά), an immobilization (ἀκίνησίαν) and like a fettering (δεσμόν) of sense-perception, whereas its liberation and release is waking. But no plant can partake in either of these affections; for without sense-perception there is neither sleep nor waking” (454 b23-29).

Aristotle thus refers to sleep as a sort of immobilization and like a fettering of perception, a characterization that also occurs a few lines before (οἷον δεσμός τις καὶ ἀκίνησία, 454 b10-11). Upon closer inspection, however, the wording that Aristotle uses to introduce this characterization, namely *in a certain way* (τρόπον τινά) and *like* (οἷον), seems to suggest that he does not consider sleep a state of complete sensory and motion deprivation. This would jibe with *Somn.* 2, 456 a24-27, where Aristotle adds that, while asleep, some animals move and perform acts similar to those performed while they are awake as a result of perception, that is, dreams. Aristotle then defers the discussion of this form of perception to another place, which might be a reference to the *De insomniis*¹⁶. There, dreams, which are attributes of the perceptive part of the soul¹⁷, are said to be images caused by the movement of the sensible things stored in the heart, the centre of perception, during sleep¹⁸.

In the second chapter of the *De somno*, Aristotle tackles two issues: the primary subject of sleep and the purpose for which it

16. *Somn.* 2, 456 a24-27: “Some [animals] move in their sleep, and perform many acts similar to waking acts, but not without an image or a sensation; for a dream is in a certain way a sense-impression. But of them, we have to speak later on.”

17. *Insom.* 1, 459 a11-14: ὑποκείσθω μὲν οὖν, ὅπερ ἐστὶ καὶ φανερόν, ὅτι τοῦ αἰσθητικοῦ τὸ πάθος, εἴπερ καὶ ὁ ὕπνος· οὐ γάρ ἄλλω μὲν τινι τῶν ζῴων ὑπάρχει ὁ ὕπνος, ἀλλὰ δὲ τὸ ἐνυπνιάζειν, ἀλλὰ τῷ αὐτῷ. See also 459 a21-22: φανερόν ἐστι τοῦ αἰσθητικοῦ μὲν ἐστὶ τὸ ἐνυπνιάζειν, τούτου δ’ ἢ φανταστικόν.

18. *Ivi*, 3, 462 a29-31: ἀλλὰ τὸ φάντασμα τὸ ἀπὸ τῆς κινήσεως τῶν αἰσθημάτων, ὅταν ἐν τῷ καθεύδειν ᾗ, ᾗ καθεύδει, τοῦτ’ ἐστὶν ἐνύπνιον.

occurs in animals. Since sleep is an affection of the perceptive part of the soul, its primary subject must be that in which sensation primarily inheres. This subject is the heart, namely the centre to which all atomic perceptions are conveyed: “For there is one sensory function, and the controlling sensory organ is one, though differing as a faculty of perception in relation to each genus [...]; it is therefore evident that waking and sleeping are an affection of this (*sc.* the heart)” (455 a20–26). As for its purpose, sleep facilitates the preservation of a body that will otherwise be completely worn out by the activities of life, which make use of the bodily organs as instruments: “We conclude that its (*sc.* of sleep) end is the conservation of animals (σωτηρίας ἕνεκα τῶν ζώων)” (455 b22)¹⁹.

The third and last chapter of the *De somno* is devoted to the physiological aspects of sleep. Here Aristotle causally links sleep and wakefulness “to nutrition and the transformation of nourishment into blood (or into its analogous substance in bloodless animals)”²⁰. To summarize Aristotle’s exposition on the physiology of sleep, I will use Falcon’s words: “When the exhalation produced in the process of digestion enters into the veins, it becomes a warm substance moving up quickly through the veins toward the upper part of the body. When it has reached the brain, this hot substance is cooled off” – the main function of the brain, according to Aristotle, is cooling the entire organism. “At that point this substance, which will at some point be transformed into blood, is ready to flow inward toward the heart. Sleep happens precisely in connection with the sudden concentration of blood in the region around the heart. So, the brain produces sleep without being actually affected by it. What is affected by sleep is the heart because the latter is the seat of the common-sense organ”²¹ in which all perceptions are gathered, and perception is precisely what is inactive during sleep.

19. It is noteworthy that Aristotle and his followers will consider the weariness of body parts, which, in turn, entails the weariness of the corresponding functions, as a clue to the inseparability of the soul from the body and, at the same time, as an argument in favor of the separability of the intellect, which, having no body seat, is not affected by bodily decay in any way.

20. Falcon, «Definition, Explanation, and Scientific Method», 534.

21. *Ivi*, 535–36. See *Somn.* 3, 456 b17–28.

The Arabic Adaptation *Kitāb al-Ḥiss wa-l-maḥsūs*

As stated at the beginning, Aristotle's genuine exposition on sleep in the *De somno* was not the ground on which authors in the Islamicate world built their own account of the phenomenon. Nonetheless, the Arabic readers had at their disposal a treatment of this topic in the second treatise of the *Kitāb al-Ḥiss*, that is, the adaptation of Aristotle's *Parva naturalia*. The second treatise covers the topics of memory and recollection, sleep and wakefulness, dreams, and divination. In particular the "Chapter on sleep and wakefulness" (*Bāb al-naʾwm wa-l-yaqāza*), which is the longest section of the *Kitāb al-Ḥiss*²², contains the adaptation of the *De somno*, *De insomniis*, and *De divinatione per somnum*. It is worth recalling that the fragments of Aristotle's original text, which are contained in it, are interspersed with new material depending on a medical, Neoplatonic tradition. As R. Hansberger has shown, this treatise is primarily devoted to the theory of the 'spiritual faculties', that is, the imaginative or formative faculty (*muṣawwir*), the faculty of thought or cogitation (*fikr*, which is different from intellect), and the faculty of memory²³. These are the three post-sensory faculties located in the different cavities of the brain. They hold an intermediary status between external senses and the intellect: they are responsible for progressively stripping away the corporeal aspects from the objects of the five external senses collected within the common sense in order to distinguish the sensible form from its formal core, namely the *ma'nān* (*meaning, intention*). However, being connected with sensible particular forms, the object of these spiritual faculties is always particular²⁴. These faculties will be the ground for the subsequent elaboration of the theory of the so-called internal senses (*ḥawāss* – or *quwan*, faculties – *bāḥina*)²⁵.

22. Hansberger, *The Transmission of Aristotle's Parva naturalia*, 136.

23. The theory of the three spiritual faculties depends on Galen's identification of these three faculties and their localization in the different cavities (or ventricles) of the brain, and also on Nemesius of Emesa's *De natura hominis* (*On the Nature of Man*).

24. See Hansberger, «Averroes on Divinatory Dreaming», 112–13.

25. On Avicenna's theory of internal senses see T. Alpina, «Retaining,

The incipit of the “Chapter on sleep and wakefulness” is relevant to the present paper. There, by further elaborating on the less prominent aspects of Aristotle’s account of sleep (e.g. the presence of motion and perception even during sleep)²⁶, the adaptor transmits an account of sleep where it becomes the context that favors internal rather than external sensation, thus paving the way for the new theory of internal senses and, in particular, for divinatory dreams bestowed from the Deity during sleep, in which Aristotle explicitly declares not to believe²⁷.

Since the edition of the Arabic text of the *Kitāb al-Ḥiss* is currently under preparation by R. Hansberger, I will quote an excerpt from the beginning of the “Chapter on sleep and wakefulness” in the translation she provided in a recent article. This excerpt will prove to be extremely relevant to Avicenna: “Therefore, the privation [or: absence] (*‘adam*) of sleep is waking. This can be verified and recognized when [we consider] the waking and the sleeping person. [...] (2) The difference between the perception of the waking and that of the sleeping person is that the sleeper perceives internally only (*anna l-nā’im innamā yuḥissu min dāḥil*) – and that [kind of] perception of his [takes place] without any movement on his part (*wa-ḥissahū dālika min ḡayr ḥaraka minhu*) – whereas the waking person perceives externally, that [kind of] perception [taking place] through movement (*wa-l-yaqzān yuḥissu min ḥāriḡ wa-dālika l-ḥiss bi-ḥaraka*)”²⁸. Concerning a longer portion than the quoted excerpt, R. Hansberger writes that “in this passage the adaptor uses a string of keywords taken from the Greek text [...] in order to create a strict dichotomy according to which sleep is associated, among other

Remembering, Recollecting: Avicenna’s Account of Memory and Its Sources», in *Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle’s De memoria et reminiscencia*, Turnhout 2021, 67–92, and the bibliography quoted there.

26. See n. 16.

27. See Hansberger, «How Aristotle Came to Believe in God-given Dreams». As for the Aristotelian claim, see, for instance, *De div.* 1, 462 b14–28.

28. The most recent translation can be found in Hansberger, «Averroes on Divinatory Dreaming», 117–18. A less recent translation with the transcription of the Arabic text can be found in Hansberger, *The Transmission of Aristotle’s Parva naturalia*, 159–60.

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 less “noble” than the state of sleep”²⁹. In our excerpt, it is evident that the adaptor splits Aristotle’s description of the state of wakefulness as marked by the perception of external things or internal movements into two halves: he connects internal perception and absence of movements with sleep, and external perception and movements with wakefulness³⁰. Before turning to Avicenna, I want to note briefly that, before him, al-Kindī and al-Fārābī make reference to an Aristotelian treatment on sleep, which might be the one contained in the Arabic version of the *Parva naturalia*³¹. In al-Andalus, in 1170 ca., Averroes wrote an epitome of Aristotle’s *Parva naturalia* which, in all likelihood, he read in the version of the Arabic adaptation. This epitome was then translated into Hebrew and Latin³².

29. See Hansberger, «Averroes on Divinatory Dreaming», 118–19.

30. *Somn.* 1, 454 a3–4: καὶ τὸν ἐγρηγορότα πάντα ἢ τῶν ἐξωθέν τινας αἰσθάνεσθαι ἢ τῶν ἐν αὐτῷ κινήσεων. I have discussed this passage above.

31. In the *Treatise on the Quantity of Aristotle’s Books and What is Required for the Attainment of Philosophy* (*Risāla fī kammiyya kutub Aristūṭālīs wa-mā yuḥtiāḡu ilayhi fī taḥṣīl al-falsafa*, ed. Guidi-Walzer) al-Kindī mentions *De sensu et sensibilibus*, *De somno et vigilia*, and *De longitudine et brevitate vitae*, together with the *De anima*, among the psychological writings (this reflects the contents of the *Kitāb al-Ḥiss wa-l-maḥsūs*). By contrast, in al-Fārābī’s *Philosophy of Aristotle* (*Falsafat Aristūṭālīs*, ed. Mahdī) the *Parva naturalia* are said to encompass the following topics: (i) the condition of health and disease (*De sanitate et morbo*); (ii) the different ages (*De iuventute et senectute*); (iii) length and shortness of life (*De longitudine et brevitate vitae*); (iv) life and death (*De vita et morte*); (v) the senses, the sensory organs, and sensible objects (*De sensu et sensibilibus*); (vi) the types of local motion (*De incessu animalium*); (vii) respiration (*De respiratione*); (viii) the status of sleep and waking, dreams and dream-visions (*De somno et vigilia*; *De insomniis*; *De divinatione per somnum*); and (ix) memory and recollection (*De memoria et reminiscencia*). Al-Fārābī’s list of topics seems to depend on the introductory lines of Aristotle’s *De sensu et sensibilibus*, 1, 436 a6–b1. In this connection it is worth recalling that the beginning of the *Kitāb al-Ḥiss* is missing. See n. 2 above.

32. See Averrois Cordubensis *Compendia librorum Aristotelis qui Parva naturalia vocantur*, ed. H. Blumberg, Philadelphia 1972, Introduction, xi–xiii.

Sleep as an Accident of the Animal Body in Avicenna

In the very same way in which he does not devote a separate writing to memory and recollection, Avicenna does not compose a distinct treatise on sleep and wakefulness. Rather, most of the topics dealt with in the Arabic adaptation of the *Parva naturalia* are covered in the *Kitāb al-Nafs* (*Book of the Soul*) which is the sixth section of the portion of his magnum opus – that is, the *Kitāb al-Šifāʾ* (*Liber sufficientiae* or *Sufficientia* in Latin³³, *Book of the Cure/Healing*, henceforth *Šifāʾ*) – that is dedicated to natural philosophy.

Elsewhere, I have explained that, concerning memory and recollection, Avicenna might have included these topics in the *Nafs* because, by elaborating on the theory of the ‘spiritual faculties’ found in the *Kitāb al-Ḥiss*, he formulated a more complex doctrine of the internal senses, among which he also counted memory and recollection³⁴. Since all internal senses are soul faculties, not simply phenomena common to body and soul, their treatment cannot but belong to the science of the soul (or psychology)³⁵.

33. For an overview of the Latin translation of Avicenna’s *Šifāʾ* see T. Alpina, A. Bertolacci, «Introduction», *Documenti e studi sulla tradizione filosofica medievale*, 28 (2017 – special issue: The Latin Translations of Avicenna’s *Kitāb al-Šifāʾ*), vii–xviii.

34. In *Nafs* I, 5, 44.3–45.16 [87.19–90.60], Avicenna lists internal senses and their functions as follows: *ḥiss muštarak* (or *baṭāsiyāʾ/fanāsiyāʾ*), namely the *common sense* located in the front part of the first cavity of the brain, which gathers the *ṣuwar* (forms) impressed upon the five external senses; *quwwa muṣawwira*, *form-bearing faculty*, or *ḥayāl*, *imagery*, located in the rear part of the first cavity of the brain, which retains the sensible forms perceived by the common sense; *quwwa mutaḥayyila*, *imaginative faculty* or *imagination* located in the central cavity of the brain, near the vermiform substance, which combines or distinguishes the sensible forms, and is called *quwwa mufakkira*, *cognitive faculty*, when it is used by the intellect; *wahm*, *estimation*, located at the end of the central cavity of the brain, which perceives the *maʿānin*, that is, the non-sensible attributes of what is perceived by the external senses; *quwwa ḥāfiẓa* or *mutaḍakkira*, *memory* or *recollective faculty* located in the rear cavity of the brain, which retains the *maʿānin* perceived by estimation. More on Avicenna’s internal senses in Alpina, «Retaining, Remembering, Recollecting», 73–75.

35. Alpina, «Retaining, Remembering, Recollecting». See also N. Fancy, «The Science of Sleep in Medieval Arabic Medicine. Part 1: Ibn Sīnā’s Pneumatic Paradigm», *Chest*, 163.3 (2023), 662–66.

Though related to the same context, the case of sleep and wakefulness is slightly different from that of memory and recollection. Sleep and wakefulness are states common to body and soul and are treated in the *Nafs* to provide the physiological conditions in which the organic body stands when the specific form of perception expounded in chapter IV, 2 occurs. This form of perception is that for which the imaginative faculty (*quwwa mutaḥayyila*) is responsible when it acts independently of the external senses and comes into contact with the celestial realm. This perception results in veridical, divinatory dreams, and sleep is presented as a physiological condition favoring such a perception, since during sleep impulses from the external senses do not interfere with the activity of the imaginative faculty. However, the same sort of perception might also occur during waking in the case of more powerful souls, such as the prophet's³⁶. For this reason, the outline of sleep and wakefulness comes at the very end of IV, 2, not as its primary topic, but as a supplement to the account of the activities of the imaginative faculty. However, Avicenna refers to sleep and wakefulness also in other places in and outside the *Nafs*³⁷. I will begin by reviewing those latter and then I will move to the main exposition of the topic in *Nafs* IV, 2.

Samā' ṭabī'ī I, 6 and *Nafs* IV, 4: the Context

Avicenna seems to be aware of the fact that Aristotle classifies sleep among the so-called *πάθη*, the affections of the composite, living substance. In chapter I, 6 of his *Samā' ṭabī'ī*, which is the

36. On this aspect, see P. Lory, *Le rêve et ses interprétations en Islam*, Paris 2003.

37. Here I should say that I will not discuss the account of sleep provided in the third chapter of the writing known under the title *Ta'bīr al-ru'yā* (*Interpretation of Dreams*) or *Risāla al-Manāmiyya* (*Epistle on dream-states*). Though attributed to Avicenna, the author of this text seems to be Abū Sahl al-Masīhī, Avicenna's teacher of medicine. For an appraisal of this work, see D. Gutas, «The Study of Avicenna: Status Quaestionis atque Agenda», *Documenti e studi sulla tradizione filosofica medievale*, 21 (2010), 45–69, in part. 51, and id., *Avicenna and the Aristotelian Tradition: Introduction to Reading Avicenna's Philosophical Works – Second, Revised and Enlarged Edition, Including an Inventory of Avicenna's Authentic Works*, Leiden – Boston 2014, in part. 526.

first section on natural philosophy in the *Šifā'* and corresponds to Aristotle's *Physics*, he mentions sleep when he talks about the accidents of the composite of matter and form. Accidents can occur either because of an external agent or from the thing's very substance. Within this latter, Avicenna distinguishes those deriving from the thing's form, those originating from the thing's matter, and those determined by both: "[a)] Some of those accidents occur from something external. [(b)] Other accidents occur from the thing's substance. [(ba)] Some of the latter group might follow upon matter, like blackness in the black person, the scars of wounds, and standing upright. [(bb)] Others might follow upon form, like acumen, joy, the capacity for laughing and the like in the human being (for even if the existence of the capacity for laughing inevitably requires the existence of matter, it originates from and begins with form)³⁸. You will also find that some accidents which necessarily follow upon form (whether originating from it or occurring due to it in some other way) do not need the participation of matter. The science of the soul will ascertain that for you (*wa-dālika idā haqqaqa laka 'ilm al-nafs*)³⁹. [(bc)] Some common accidents begin [to exist] because of both [matter and form], like sleep and wakefulness (*ka-l-nawm wa-l-yaqaza*), although some of them are closer to form, like wakefulness, whereas others are closer to matter, like sleep"⁴⁰. Sleep is thus considered an accident (*'araḍ*) that occurs to someone in virtue of both form and matter, which we can paraphrase as soul and body, although to be concise one may say that it befalls something primarily because of its matter (body). We can now turn to the *Nafs*, to which Avicenna himself refers in the quoted passage from *Samā' ṭabī'ī*.

38. Here Avicenna is referring to the so-called *propria*, that is, the properties coextensive with a substance's essence without being part of it. The human being's capacity for laughing is the standard example for a *proprium*.

39. Here Avicenna might be referring to those concomitants stemming from a substance's form, which are not material in themselves but happen to be in matter. An example might be those *ma'ānin* (*meanings, intentions*) perceived by estimation, which in themselves are immaterial like good or evil. See *Nafs* II, 2, 60.10–61.5 [118.6–119.15]. On this passage, see Alpina, *Subject, Definition, Activity*, 141, n. 34.

40. *Samā' ṭabī'ī* I, 6, 35.14–36.1 (ed. Zayed, Cairo 1983) [61.44–56].

In *Nafs* IV, 4, Avicenna deals with the locomotive faculty and a mode of prophecy connected with it. However, since desire is an essential factor in accounting for locomotion, in this context Avicenna also discusses the desiderative faculty and its two branches, namely the irascible faculty and the concupiscible faculty. In this connection, he mentions ‘emotions’ as activities and accidents of the two branches of the desiderative faculty. They are said to occur to the soul while it is in the body because they do not occur without the participation of the body. However, in introducing those accidents, Avicenna makes a general remark about these kinds of activities or accidents, here called *states* (*aḥwāl*): “Thus these states come to be only because of the participation of the body (*fa-l-aḥwāl lā takūnu illā bi-muṣārakat al-badan*). The states that belong to the soul because of the participation of the body are according to [several] divisions. [(i)] There are those (*sc.* states) that belong primarily to the body, but because it (*sc.* the body) has a soul. [(ii)] There are those that belong primarily to the soul, but because it (*sc.* the soul) is in the body. [(iii)] There are those that belong equally to the two (*sc.* body and soul). [(i)] Sleep and wakefulness, and health and disease are states belonging to the body, and whose principles are from it. Thus, they belong primarily to the body, but they belong to the body only because it has a soul (*fa-hiya laḥū auwalan walakinna innamā hiya li-l-badan bi-sabab anna laḥū nafsān*)” (197.10–15 [60.58–64]).

Here two remarks can be made. Firstly, Avicenna seems to combine the list of affections (πάθη) that Aristotle mentions in the prologue to the *De anima* together with those mentioned at the beginning of the *De sensu*, which is missing in the Arabic adaptation of the text we presently know. Secondly, Avicenna seems to conform to and refine the class [(bc)] of accidents provided in *Samāʿ ʿṭabī* I, 6. Class [(bc)] referred to accidents jointly owing to both matter and form, although some of them are closer to the matter, like being asleep, whereas others are closer to the form, like being awake. In *Nafs* IV, 4, Avicenna seems to focus on the same class of states (or accidents) common to body and soul. Within this class, he distinguishes three different subclasses: that of states primarily belonging to the body

because it is ensouled; that of states primarily belonging to the soul because it is in the body; and that of states belonging equally to body and soul. Together with health and disease, sleep and wakefulness are said to belong to the first subclass, that of the states whose principles are from the body (*wa-mabādi'uhā minhu*, 197.14 [60.63]). However, unlike what he does in *Samā' tabī'ī* I, 6, in characterizing both sleep and wakefulness as belonging to the ensouled body and deriving from it, Avicenna does not connect the former with matter and the latter with form.

Nafs IV, 2: the Physiology of Sleep

The title of *Nafs* IV, 2 immediately locates Avicenna's exposition on sleep and wakefulness in the framework of his doctrine of veridical dreams and one mode of prophecy, which are both related to the imaginative faculty among the internal senses⁴¹. In so doing, Avicenna seems to follow the same approach to the topic we saw in the *Kitāb al-Hiss*, though relegating the exposition of sleep to the end of the chapter instead of the beginning. As we said earlier, sleep and wakefulness provide the context for the occurrence of veridical dreams and their interpretation in ordinary people and prophets respectively. At the end of *Nafs* IV, 2, Avicenna acknowledges that this is the reason why he must deal with those states in this chapter: "Since this (*sc.* the topic of veridical dreams and imaginative prophecy discussed so far) is what depends on sleep and wakefulness (*wa-idā kāna hādā mā yata'allahu bi-l-naum wa-l-yaqāza*), here we must briefly indicate the matter of sleep and wakefulness (*fa-yağibu an nadulla hāhunā bi-iḥtišār 'alā amr al-naum wa-l-yaqāza*)" (181.5-6 [33.58-59]). In the final lines of the chapter, where the exposition on sleep and wakefulness ends, in a way very similar to what Aristotle says at the beginning of the *De sensu*, Avicenna underscores the connection of sleep and wakefulness with sensation: they are accidents found only in what has sensation (*fī 'awāriḍ dī l-ḥiss*, 182.8). This

41. "[Chapter] on the activities of the form-bearing and the cogitative faculty among the internal senses. In it there is also a discourse on sleep and wakefulness, veridical and deceptive dream, and a mode of the properties of prophecy".

final remark is echoed in a passage from the first chapter of the *Kitāb al-Nabāt* (*De Plantis* in Latin, *Book of Plants* in English, henceforth *Nabāt*), the seventh section of the natural philosophy of the *Šifā'* following the *Nafs*, where Avicenna explicitly mentions which living beings share in sleep and which do not. There he writes: "Since plants do not have sensation (*lā ḥiss lahū*), they do not have sleep or wakefulness (*lam yakun lahū nawm wa-lā yaqāza*), because sleep (*al-nawm*) is some inactivity of sensation (*ta'aṭṭul mā li-l-ḥiss*), while wakefulness (*wa-l-yaqāza*) is some activation of sensation (*nuhūd mā min al-ḥiss*)" (I, 4.4-6). As we shall see in analyzing *Nafs* IV, 2, though concise, this remark contains all Avicenna has to say about sleep and wakefulness and about who takes part in these states⁴².

Like Aristotle, Avicenna considers sleep and wakefulness opposite states. However, his account shows more dependence on the pseudo-Aristotelian *Kitāb al-Ḥiss*. Firstly, based on the order and length of exposition, Avicenna seems to grant primacy to sleep

42. In his *Kitāb al-Ḥayawān* (*Liber de animalibus* in Latin, *Book of Animals* in English, henceforth *Ḥayawān*), which is the eighth and last section of the natural philosophy of the *Šifā'*, Avicenna dwells more on differences between animals concerning sleep. See *Ḥayawān* IV, 2, 64.13-65.7 (eds. 'A. Muntaṣir, S. Zāyid, 'A. Ismā'il, Cairo 1970): "As for the state of sleep of animals, every blooded, land animal sleeps and is awake (*fa-innahu yanāmu wa-yastayqizu*). Everyone having eyelids closes them during sleep. Animals other than human beings might also dream: among quadrupeds, this is evident from their behaviors, movements, and sounds during sleep. The sleep of animals laying eggs is light, not deep, and likewise [sleep] is feeble in testaceous animals. However, their being asleep (lit.: their sleep) is not evident from their eyes because their eyes do not have palpebral margins, so one perceives that they are asleep from their stillness, and from the fact that sometimes, being inattentive, they are caught by hand or hit by the trident. All species of fish sleep most during the night than during the day. Among marine animals, there are those sleeping on the sea bottom, others on the sand. Some of them sleep under the rocks, some others in the depth [of the sea], and some others sleep in the channels [made by] beach rocks. Those that sleep in the sand create a configuration on the sand, which indicates that they are hidden in it, thus they are (read: can be) hit by the trident. Selaceus animals are so immersed into sleep during the day that they are caught by hand. Dolphins sleep and their blowhole emerges [from the water when they are asleep]. Their snoring during sleep has been heard. Also, insects sleep. Their rest and silence indicate it. Children do not produce dreams that are reckoned until the age of four. Among human beings, some do not dream until they are older, some do not dream at all."

over wakefulness: in ordinary people, the independent activity of the imaginative faculty dealt with in IV, 2 occurs predominantly during sleep. Secondly, Avicenna significantly associates wakefulness with external perception and voluntary motions, and sleep with its privation and a general turn to the inside. Following the Arabic adaptation of the *Parva naturalia* and framing his exposition on sleep accordingly, Avicenna believes that sleep is characterized by the absence only of sensation and motion elicited from outside: “We say: wakefulness (*al-yaqāza*) is a state where the soul makes use of the senses or the locomotive powers on the outside at will (*ḥālā takūnu l-naḥs fīhā musta‘mila li-l-ḥawāss aw li-l-quwā l-muḥarrika min ḡāhir bi-l-irāda*), for which there is no necessity. Sleep is thus the privation of this state (*fa-yakūnu l-naʿwm ‘adam ḥādīhi l-ḥālā*). In it (*sc.* in sleep) the soul turns away from the external side to the internal one” (181.6–8 [33.59–63]).

What characterizes the state of wakefulness is external perception (here *ḥawāss* with no further specification refers to the five external senses) and voluntary motive faculties directed to the outside, the motion they enact being not necessary, contrary to the internal movements which are necessary, like, for instance, those involved in digestion, respiration, and the pulse. Avicenna does not recall the type of perceptions or motions occurring during sleep because he has already provided their account throughout *Nafs* IV, 2. For this reason, he only says that, during sleep, the soul turns from the external to the internal side. The reader, who is by now familiar with the rest of the chapter, will immediately understand what he means by *internal side*. Going further, in this final exposition, Avicenna aims to determine the conditions that make the soul turn to the inside, which can be labelled as his *physiology of sleep*.

Avicenna mentions three ways by which the soul reverts to the inside, the state proper to sleep. As we shall see, all of them amount to something connected with the body or, to be precise, pneuma (or spirit, *rūḥ*): “The soul’s turning away [from the external to the internal side] occurs in one of the following ways: [(i)] either because of the weariness (*li-kalāl*) befalling it (*sc.* the soul) from this (*sc.* external) side; [(ii)] or because of a concern occurring to it from that (*sc.* internal) side; [(iii)] or

because organs disobey the soul (*li-‘iṣyān al-ālāt iyyāhā*)” (181.9–12 [33.63–66]).

These three alternatives need to be spelt out. Weariness is connected with a state affecting the pneuma. According to Avicenna, who follows Galen’s medical teachings, pneuma (*rūḥ*) is the bodily instrument or primary vehicle (*maṭiyya*, *markab*) of the soul⁴³. Originating in the heart at the moment of generation, pneuma carries the soul’s faculties throughout the body⁴⁴. Weariness dissolves pneuma, makes it weak and thus unable to expand throughout the body. As a consequence, the soul’s faculties which it carries, which normally make contact with the external world, follow it and recede to the internal side, becoming inactive (only on the external side!)⁴⁵. This weariness, in turn, might be caused by either (a) bodily movements, or (b) thoughts, or (c) fear. Bodily movements are not further

43. *Nafs* V, 8, 263.9–13 [175.49–55]: “Firstly, we say: the primary vehicle of the bodily psychic faculties (*al-quwā l-naṣāniyya al-badaniyya maṭiyyatuhā l-ūlā*) is a subtle body (*ḡism laṭīf*), which passes through the outlets (*nāfid fī l-manāfid*), spiritual (*rūḥānī*). This body is pneuma (*rūḥ*). If the faculties of the soul, which are attached to the body, did not pass through carried in a body, the congestion of the [bodily] passages would not obstruct the penetration of the locomotive, sensitive, and also imaginative faculties [into the bodies]. However, it does cause an obstruction, which is evident to those who have undertaken medical experiments (*‘inda man ḡarraba l-taḡārib al-ṭibbiyya*).” See also *Nafs* III, 8, 151.19–153.13 [268.45–271.84], and IV, 2, 179.9–10 [30.6–7] (§10 of my translation in the Appendix). Cf. Galen, *PHP*, VII, 3, 444.12–15 (ed. De Lacy): εὐλογον οὖν [...] τὸ πνεῦμα [...] ὄργανον δ’ ὡς ἔφην εἶναι τὸ πρῶτον αὐτὸ τῆς ψυχῆς.

44. On Avicenna’s conception of pneuma/spirit, see T. Alpina, «Al-Ġūzḡānī’s Insertion of *On Cardiac Remedies* in Avicenna’s *Book of the Soul*: the Latin Translation as a Clue to his Editorial Activity on the *Book of the Cure?*», *Documenti e studi sulla tradizione filosofica medievale*, 28 (2017), 365–400; id., «Between Matter and Form: Complexion (*Mizāj*) as a Keystone of Avicenna’s Scientific Project», *Early Science and Medicine*, 28 (2023), 398–428; D. Jacquart, «La notion philosophico-médicale du spiritus dans l’Avicenne latin», in *Body and Spirit in the Middle Ages. Literature, Philosophy, Medicine*, Berlin – Boston 2020, 13–33. See also Fancy, «The Science of Sleep in Medieval Arabic Medicine».

45. Cf. *Qānūn* I, ii, ii, I, 13, 160.4–5 (ed. Ḡāmī’a Hamdard, New Delhi 1981–96): “The predominant characteristic of the state of sleep is that, during it, heat is hidden inside, whereas coldness is manifest”. Here Avicenna is in all likelihood referring to the innate heat (*ḥār ḡarīzī*) carried along with pneuma.

explained. Avicenna might be thinking here of the activities of the external senses and locomotion, which involve body parts (i.e. sensory organs and muscles and sinews, respectively). These continuous activities wear out the relevant organs/body parts and, together with them, pneuma that is in them, which conveys the appropriate soul faculty to its specific bodily seat, which is the instrument for performing its activity. By thoughts (*afkār*), which are connected with cerebral activities, Avicenna might be referring to the activities of the internal senses, in particular cogitation⁴⁶. These thoughts cause the brain's overheating, with the consequent need for moistness to cool it down. The result is sleep, which moistness induces. As for fear, Avicenna seems to consider sleep as a mild physiological reaction to it, similar to fainting (the response to fear might even be death).

The second alternative involves an activity occurring inside (*fī l-bāṭin*). Avicenna immediately connects this with digestion: nourishment and humors require pneuma and all the related innate heat to perform complete digestion. Given that pneuma is occupied with digestion, its activity on the external side, i.e. external sensation and locomotion, stops. Sleep thus occurs when pneuma withdraws from the external side due to some involuntary activities or movements that summon it on the internal side, like those involved in digestion (as we have seen, these activities or movements are the opposite of those occurring during wakefulness, which are voluntary, elicited from outside)⁴⁷.

The third and last alternative concerns organs' disobedience, which happens when they do not perform the activities for which they have been created. Avicenna explicitly refers to nerves, which should allow pneuma, and with it the soul's faculties, to reach the relevant body parts. When these organs are obstructed by vapors or food, which waits to be digested, or when pneuma is too heavy to move because of excessive moist-

46. See *Nafs* V, 5 235.8-9 [127.48-49]: "For thoughts and reflections are movements (*fā-inna l-afkār wa-l-ta'ammulāt ḥarakāt*) that prepare the soul for the reception of the emanation, [...]" This might be a reference to the movements of pneuma accompanying the activities of internal senses, especially those of the imaginative/cogitative faculty. On the imaginative/cogitative faculty, see n. 34 above.

47. See the passage from *Qānūn* quoted in n. 45.

ness and remains motionless in them, sleep occurs. This is actually a proof of the existence of pneuma and of its function as vehicle of the soul's faculties⁴⁸.

Ultimately, for Avicenna, sleep is the state in which the soul turns inwards as a result of some affections occurring to pneuma, that is, its primary bodily vehicle. This explains why sleep is said to be a state common to body and soul, but primarily tied to the body. Sleep befalls the soul, making it move inwards, because, like wakefulness, it is an accident occurring in those having sensation, for which the (animal) soul is responsible. However, in order for sleep to occur, some affections must primarily befall pneuma, which is the soul's primary bodily seat and first bodily attachment. As we have seen, sleep occurs either because the activities of the soul faculties it carries wear pneuma out – sleep is then a physiological reaction to fatigue and a means to safeguard the integrity of the animal's body⁴⁹; or it occurs because pneuma is summoned inwards to attend necessary, involuntary activities like digestion, which are essential to the body's survival and likewise carried by pneuma (these activities, however, are internal, not facing or immediately interacting with the outer world like those making use of sense organs); or sleep occurs because the physical constitution of pneuma itself, or of the nerves through which it moves (its primary instruments), prevents it from expanding throughout the body, as it would naturally do.

Conclusion

Aristotle was the first to devote an autonomous, philosophical exposition to the phenomenon of sleep (and its contrary) in the

48. See the passage quoted in n. 43.

49. This Aristotelian theme – the need for sleep in order to regain strength – is not explicitly addressed in *Nafs* IV, 2. However, Avicenna refers to it in *Qānūn* I, ii, ii, I, 13, 159.15–18: “We say: sleep strengthens all the natural faculties by retaining innate heat, and relaxes the psychic faculties by moistening the channels of psychic pneuma, relaxing them, and roiling the substance of pneuma by preventing dissolution. Rather, sleep removes any kinds of fatigue and blocks excessive depletions [...]”

De somno. His characterization of sleep can be considered negative overall⁵⁰. For, despite a passage at the very end of *De somno* 2 (further elaborated later on in *De insomniis* 1), he generally describes sleep as a condition of sensory and motion deprivation. Moreover, he also accounts for the necessity of sleep and the physiological aspects of this phenomenon. However, in the philosophical tradition of the Islamicate world, the philosophers who attempted to provide an explanation for sleep (and wakefulness) did not have Aristotle's exposition on the topic as we know it from the *De somno*. Rather, they knew it through the *Kitāb al-Hiss*, a ninth-century adaptation of it, composed within the Kindī's circle, where excerpts from Aristotle's original Greek text were combined with Galenic and Neoplatonic material. The result of this combination was an account of sleep which, perhaps based on those passages in which Aristotle also acknowledges the presence of a form of perception and motion during sleep (*Somn.* 2, and *Insom.* 1), considers it the proper context for specific inward perceptions and motions. In particular, this exposition seems to aim at conferring philosophical dignity upon the phenomenon of divination through dreams. In his *De divinatione per somnum*, Aristotle firmly rejected the possibility that human beings could receive from above the knowledge of future events through direct contact with the deity. By contrast, in the Islamicate world, this possibility did not need to be accepted because it represented an undisputed central tenet of the *Qur'ān*. Consequently, sleep became a topic of interest when philosophers started exploring the context favoring such a supernatural con-

50. I do not want to argue that Aristotle's account of sleep implies a negative evaluation of the affection itself. Here, I label only Aristotle's description of sleep as *negative*. In this connection, I totally agree with Ph. van der Eijk when he writes that "in *On Sleep*, Aristotle defines sleep negatively as the inability of the sense faculty to be activated [...]. Aristotle's negative definition of sleep does not, however, imply a negative evaluation of the «affection» (*pathos*): sleep is a good thing and serves a purpose, for it provides rest to the sense-organs, which would otherwise become overstretched, since they are unable to be active without interruption." See Ph. van der Eijk, «Aristotle on Cognition in Sleep», in *Sleep*, T. Wiedemann, K. Dowden (eds), Nottingham 2003, 25-40, in part. 28. I warmly thank K. Crousaz for directing my attention to this passage.

tact and the knowledge deriving from it. We can count Avicenna among these interested philosophers.

Avicenna accounts for sleep in his *Nafs*, where he discusses how the imaginative faculty can act freely and thus make contact with the celestial realm. There, by following the adaptation, he even grants preeminence to sleep over wakefulness (what ordinary people experience during sleep in terms of veridical dreams can be experienced during wakefulness only by powerful souls, like the prophet's). Although sleep is not the primary focus of the exposition in *Nafs* IV, 2, Avicenna devotes the last part of this chapter to its physiology, that is, to the causes determining it in order to supplement the exposition of the activities of the imaginative faculty with the physiological context in which they occur. Nonetheless, the exposition of the causes of sleep is crucial for understanding why Avicenna considers sleep primarily as an affection of the body. Sleep befalls the soul as a consequence of affections occurring to pneuma, that is, to a *sui generis* body occupying a middle rank between body and soul, which is responsible for carrying the soul's faculties throughout the body and is actually involved in their activities. For this reason, though an accident common to body and soul, sleep cannot but be primarily tied to the body, or, to be precise, to pneuma.

APPENDIX

Translation of *Kitāb al-Nafs* (*Book of the Soul*) IV, 2

NOTE TO THE TEXT

The following translation is based on the text of Avicenna's *Kitāb al-Nafs* edited by Fazlur Rahman in 1959.

In square brackets are all expressions that needed to be supplemented in order for the translation to be understandable, and the reference to the pagination of Rahman's edition (= [R.]). Divisions and subdivisions are entirely mine.

TRANSLATION

[(IV.2)]

[Chapter] on the activities of the form-bearing and the cogitative faculty among the internal senses. In it there is also a discourse on sleep and wakefulness, veridical and deceptive dream, and a mode of the properties of prophecy

[1. The form-bearing faculty or imagery and its retaining activity for common sense and the imaginative/cogitative faculty]

Let us make a discourse on the form-bearing faculty first. We say: the form-bearing faculty, which is imagery, is the last [faculty] in which the forms of sensible things are firmly established. Its side towards the sensible things is common sense. Common sense brings to the form-bearing faculty by way of storing what the [external] senses bring to it (sc. the common sense). Then, the form-bearing faculty stores it. The form-bearing faculty may also store things that are not among those brought by the sense. For, the cogitative faculty may act upon the forms that are in the form-bearing faculty by combining and breaking them up because they are its objects. [R170] When it (sc. the cogitative faculty) combines one form with another or separates one of them from another, it can entrust [the form-bearing faculty] with retaining it (sc. the form resulting from this operation of combination or separation) in itself, not because it is a deposi-

tory for this [kind of] form in virtue of the fact that this form is related to something [else] and comes from inside or outside. Rather, it is a depository for it only because it is this form in this manner of abstraction⁵¹. If this form were to come from outside, like what is in it (sc. the form-bearing faculty), as a result of combination and separation, this faculty would firmly hold it. The same would happen if this form were to appear to this faculty due to another cause. If due to some cause, either from imagination and cogitation, or because of some celestial configuration, there happens that a form is represented in the form-bearing faculty, and the mind is absent from or inactive in considering [this form], that [form] can be impressed in the common sense itself according to its disposition, so one hears sounds and sees colours that do not exist in the outer world (lit. outside) and whose causes are not from outside. This often happens when the intellectual faculties are at rest or estimation is inattentive, and when the rational soul is busy with observing imagery and estimation. Thus, there, the specific activities of the form-bearing and the imaginative faculties become so strong that the forms these faculties bring to it (sc. the common sense) are represented as [forms that are] sensed⁵².

[2. All the faculties belong to one single soul]

[2.1 A faculty can distract the soul from another faculty]

Let us add a further clarification⁵³. We say: it will become clear to us later⁵⁴ that all these faculties belong to one single soul and serve the soul. Thus, let that be conceded as a fact and

51. i.e.: according to the same level of abstraction as the forms coming from the common sense. For the fact that the contents of imagery acquired through the external senses and, ultimately, the activity of the common sense, and that the contents of imagery deriving from the activity of combination or separation of the imaginative/cogitative faculty enjoy the same level of abstraction, see *Nafs* II, 2, 59.14–60.10.

52. This passage echoes the second argument that Avicenna advances in *Nafs* IV, 1 in order to prove the existence of the common sense. See *Nafs* IV, 1, 164.14–165.8, § 1.3.2 of my translation provided in the appendix to «Retaining, Remembering, Recollecting».

53. Lit.: Let us add this as a clarification.

54. See *Nafs* V, 7.

let it be known that the soul's being busy with one of these distracts it from assisting the other faculties in their activity, or restraining them from deviating [from their activity], or making them do what is right. For when it is busy with internal things the soul is such that it pays no attention to firmly holding external things. Thus, it does not firmly hold sensible things as they deserve. [R171] By contrast, when it is busy with external things, the soul [is such that] it pays no attention to using the internal faculties. For, when the soul is completely attentive to external sensible things, then, in the moment in which it turns its attention to that, its imagination and recollection weaken. When the soul is oriented towards the activities of the concupiscible faculty, these activities subdue the activities of the irascible faculty. By contrast, when the soul is oriented towards the activities of the irascible faculty, these activities subdue the activities of the concupiscible faculty. In general, when the soul is oriented towards perfecting the motive activities, the perceptive activities weaken, and vice-versa. So, if the soul is not busy with the activities of some faculties at the expenses of the activities of some [other] faculty, but rather it is at rest as if [equally] isolated [from all its faculties], then the most powerful and most active faculty overpowers [the others]. By contrast, if the soul is not distracted by some faculty and some accident from educating another faculty, which the soul only restrains from its excessive movements, having the soul or estimation controlling it, that faculty overpowers and penetrates its activities which, by nature, are free of acting. What happens to the soul when it is not busy with the activity of a faculty (or faculties) is due either to some harm, or to weakness, which diverts [it] from its perfection, as happens in the case of diseases and fear, or to relaxation, as happens in the case of sleep, or to the fact that it frequently turns [its] attention to the use of the faculty towards which it is turned at the exclusion of others.

[2.2 How the soul distracts the imaginative faculty from its specific activity]

Furthermore, the soul distracts the imaginative faculty⁵⁵ from its specific activity in two ways: [(i)] sometimes it is just as it

55. Lit.: Furthermore, the imaginative faculty is a faculty that the soul...

happens when the soul is busy with the external senses, and the form-bearing faculty turns towards the external senses and is set in motion by what comes to it from them, so that [those things] are not handed over to the imaginative, cogitative faculty. The imaginative faculty is then distracted [R172] from its specific activity. The form-bearing faculty is also distracted from its [capacity for] isolating [itself] with the imaginative faculty: what both (sc. the form-bearing faculty and the imaginative faculty) need from the common sense remains stable, and is busy with the external senses. This is one way. [(ii)] Sometimes it occurs when the soul makes use of it (sc. the imaginative faculty) in its activities, which are connected with it in terms of discernment and cogitation⁵⁶. This, in turn, occurs in two ways. [(ii.i)] One is that [the soul] takes over the imaginative faculty, then it makes use of it and, together with it, of common sense in combining the forms themselves and breaking them up, following a sound goal the soul has. Because of that, the imaginative faculty cannot act as it would naturally do; rather it is driven by the rational soul, which acts freely on it. [(ii.ii)] The second way is that [the soul] distracts the imaginative faculty from the imaginings that do not match the existing things in the outer world (lit. outside). So, the soul averts the imaginative faculty from that, seeking to invalidate them. Then, [this faculty] cannot make a strong apparition and representation of them. If the imaginative faculty is distracted in both ways at the same time, its activity weakens. If its distraction ceases either in both ways altogether, as happens in the state of sleep, or in one way, as happens in the case of diseases that weaken the body and distract the soul from intellection and discernment, and in the case of fear, so that the soul weakens, it almost admits as possible what does not exist, and it turns entirely away from the intellect because of its weakness and its fear that bodily things would occur, as if the soul relinquishes the intellect and its managing, then the imaginative faculty can become stronger, come closer to the form-bearing faculty, make use of it, and their being combined together (sc. the imaginative

⁵⁶. See *Nafs* V, 5 where Avicenna explains how the rational soul uses the imaginative faculty, which then becomes cogitative, in the process of intellection.

and form-bearing faculty) becomes stronger. Then the activity of the form-bearing faculty becomes more evident, and the forms that are in the form-bearing faculty appear in the common sense; [R173] then [those forms] are seen as if they exist outside because the perceptive affection of what comes from outside and what comes from inside is what is represented in it (sc. the common sense), differing only in relation. For, if what is sensible is in reality what is represented, then when it is represented its state is like the state of what comes from outside. For this reason, the man who is insane, or afraid, or weak, or asleep, sees images standing just as he sees them in reality, when he is in a sound state, and likewise he hears sounds⁵⁷. When intellection or discernment gets one of those things, and attracts the imaginative faculty to itself by way of pointing, those forms and imaginings disappear.

[3. The powerful imaginative faculty of the prophet]

It happens that in some men the imaginative faculty is created very strong, predominant, so that the [external] senses do not take over it, nor [can] the form-bearing faculty resist it. The soul is also strong, and its orientation towards the senses does not neutralize its inclination towards the intellect and what is before (or: near) the intellect (*mā qibala l-ʿaql*)⁵⁸. While they are awake, these men experience (lit. have) what other men experience while they are asleep in terms of the state we shall inform [you] of later, that is, the state of perception that one who is asleep has of invisible things, either by ascertaining them through their [own] state⁵⁹ or through their images. Something like that might happen to these men while they are awake. In the middle of that, they would eventually withdraw from sensible things, and sometimes there might happens to them something similar to fainting. Sometimes this does not happen. Sometimes they see something in its [own] state, and sometimes they imagine its

57. See *Nafs* IV, 1, §1.3 of my translation provided in the appendix to «Retaining, Remembering, Recollecting».

58. It might be a reference to the Active Intellect/Giver of Forms, which is the tenth intelligence and, in the emanative scheme, comes before the human intellect.

59. i.e.: in the state in which they present themselves.

image (sc. the image of that thing) due to the [same] cause by which, while he is asleep, one images the image of what he has seen, as we shall explain later. Sometimes, an apparition presents itself to them, and they imagine that what they perceive is a speech coming from that apparition, which consists of audible utterances that are memorized and recited. This is the prophecy proper to the imaginative faculty, but here there are other [kinds of] prophecies, whose state will become evident⁶⁰.

[4. All men share in dreaming]

[R174] None among human beings is without a share in the matter of dreaming and the state of perceptions that happen in wakefulness. The cause of thoughts that occur immediately in the soul are certain contacts of which there is no awareness, nor [is there awareness] of what is connected with them either before or after them. They carry the soul⁶¹ to something else, different from its usual path. That might be of any genus. It can be something among the intelligibles, or something among the warnings, or some verse, or something else according to disposition, custom, and character. These thoughts occur due to causes that appear to the soul in most cases surreptitiously, and are like snatched signals that are not so stable as to be recollected, unless the soul promptly seizes them with a firm grip. Most of what these things do is to distract the imaginative faculty with a genus that does not correspond to that in which it was.

[5. The activity of the imaginative faculty on the contents of the form-bearing faculty and memory]

This imaginative faculty is such that it always devotes itself to the two depositories, namely the form-bearing faculty and memory, and always attends to the forms, beginning with a sensible or a remembered form, and moving from that [form] to something contrary, or similar, or to something that is part of it

60. The other two kinds of prophecy Avicenna discusses in *Nafs* are 'operative' prophecy, which is connected with the motive faculties (*Nafs* IV, 4), and 'intellectual' prophecy, which is connected with the theoretical intellect and the so-called sacred intellect (*Nafs* V, 6).

61. Lit.: the soul is carried by them...

due to some cause⁶². This is its nature. Moreover, there are innumerable particular causes for its peculiar move⁶³ from something to its contrary and not to [something to which it is] similar, or to [something to which it is] similar and not to its contrary. In general, the fundamental cause⁶⁴ in this must be that, when the soul brings together the consideration of meanings and forms, it is carried from the meaning to the form that is closer to it, either absolutely or because that meaning has been recently observed [**R175**] due to their combination (sc. of the meaning and the form) in the sense or in estimation. In a similar way, the soul is carried from the form to the meaning. The first cause that makes specific a form and not another, and a meaning and not another, is something coming to it from the sense, which has made it specific, or something coming from the intellect, or from estimation, then they made it (sc. a form or a meaning) specific, or due to something related to the celestial realm. When it has been made specific by that, its persistence and its move become specified due to the specification [operated by] the two sources (sc. of the meaning and the form), due to the states that are associated by custom [with them], and the temporal proximity of some forms and meanings. This might also happen due to celestial states. And this might happen due to things coming out from the intellect and the sense after the first specification to which they are attached⁶⁵.

[6. Recollection, interpretation, explanation]

Know that rational cogitation is afflicted by this faculty, in the sense that it is foremost preoccupied with the inattentiveness of this faculty. For, when it (sc. rational cogitation) makes use of it in the case of some form, heading for some goal, it is quickly carried toward another thing, unrelated to it, and from it toward a third thing. Then it makes the soul forget the first thing from which it started. The soul thus needs to recollect by seeking aid in backward analysis so that it returns to the starting point.

62. Cf. *Nafs* IV, 1, 168.15.

63. Lit: for the peculiarity of its move...

64. Lit.: the fundament of the cause.

65. Cf. *Nafs* IV, 1, 167.12–168.15.

When in the state of wakefulness it happens that the soul perceives something, or in the state of sleep that it comes into contact with the heavenly realm, as we shall describe later⁶⁶, if this faculty, because of its rest or its submission, makes the soul capable of firmly holding, and does not overpower it, by reducing the time in which the soul firmly holds what appears to it in terms of its imaginings [R176], that form takes strong possession of memory as it is and appears⁶⁷. In wakefulness, there is no need to recollect, and during sleep, to interpret, and in revelation, to explain. Here⁶⁸ interpretation and explanation take the place of recollection. On the contrary, if the soul does not firmly hold what it saw about that in the faculty of memory as it should, but rather the imaginative faculty parallels each single thing seen during sleep with a single or compound imagining or parallels a compound thing seen during sleep with a single or compound imagining by continuing to follow as a model what it sees here through an imitation that is composed of forms and meanings, the way in which the soul firmly holds within itself what it sees becomes weaker than the way in which the form-bearing faculty and the recollective faculty firmly hold what the imaginative faculty brings to them. Then, what has been seen of the heavenly realm is not established in memory. By contrast, that by which it is imitated is established.

Sometimes it happens that what is seen of the heavenly realm is something like the head and the beginning, so the imaginative faculty takes over the soul in a way that distracts it from completing what it sees, and after that, it is carried away, one move after the other, without imitating with those moves anything of what is seen of the heavenly realm, since that has been broken off. This is a mode of dream. The place of its interpretation is insignificant, whereas what remains of it are confused dreams. What of the dream belongs to the genus over which the imaginative faculty has dominion necessarily needs interpretation.

66. See *infra*.

67. Lit.: according to the memory's appearance and representation of it (sc. the form).

68. i.e.: during sleep.

[7. Dream interpretation in a dream]

[7.1 Recollection vs. actual interpretation]

A man might see the interpretation of his dream during his dream. That, in reality, is recollecting. For, just as the cogitative faculty has been firstly carried from the principle to the imitation due to the correspondence between the two, likewise it is not unlikely that this faculty is carried from the imitation to the principle. Thus, sometimes it happens that the cogitative faculty imagines its activity as occurring at another time, then it sees as if [R177] an interlocutor was talking to it about that. Sometimes this is not the case. Rather, it is as if the cogitative faculty has viewed something in a true way without the soul coming into contact with the heavenly realm, but it is an imitation on the part of the imaginative faculty to which the imitation belongs. Then, it would revert to the principle. This mode of true dream might occur to the imaginative faculty without the help of another faculty and, if the principle in it is that, it reverts [to the imaginative faculty]. Sometimes, this imitation imitates another imitation. Then it will need the interpretation by an interpreter another time. These things and states are not precisely determined.

[7.2 Men with sounder dreams]

There are men whose dreams are sounder. This happens when their soul is already accustomed to the truth and has subdued deceptive imagination. It happens more frequently that men interpret their dreams during their dreams when their attention is busy with what they saw. Thus, when they are asleep, [their] attention to that remains in the same state as it was, the imaginative faculty begins to imitate in a way contrary to that in which it imitated the first time.

[7.3 Heraclius' dream and its interpretation during his sleep]

It has been reported that the king Heraclius had a dream that preoccupied him⁶⁹, but he did not find [an interpretation] by the interpreters that would satisfy him. Then, when afterwards he went to sleep, that dream was interpreted for him in his sleep. It

69. Lit.: his heart.

(sc. the dream) included information of things that were to happen in the world and especially in his city and his kingdom. When those warnings were written down, they came out as it was interpreted for him in his sleep. This has been experienced in other cases.

[8. Imagination perceiving invisible things during wakefulness]

Among those who see these things during wakefulness, there are those who see this due to the nobility of their soul and the strength of their soul, their imaginative faculty, and their recollective faculty. Thus, the sensible things do not distract them from their specific activities. Among them, there are also those who see that due to the cessation of their discernment and because their soul turns away from discernment. For this reason, their imagination is powerful. Thus, they are capable of getting invisible things while they are awake. In getting the effluence of the invisible, the soul needs the internal faculties in two respects: [(i)] one is for representing⁷⁰ in it the particular meaning in a retentive way⁷¹; [(ii)] the second respect is for helping it, moving freely in [R178] the direction of its will, without distracting it and attracting it to their direction. Thus, a relation between the invisible on the one hand and the soul and its internal imaginative faculty on the other hand, and a relation between the soul and the internal imaginative faculty, are needed. If the senses make use of it or the intellect makes use of it in the intellectual manner we have mentioned, [the imaginative faculty] would not attend to other things, like the mirror when it is averted from a certain direction and moved towards another – for many things that are such as to be impressed on that mirror suddenly and unexpectedly due to some relation between the two will not be impressed [on the mirror]. And regardless of whether this distraction comes from the senses or from the control of the intellect, when one of the two is removed, the needed relation between the invisible on the one hand and the soul and the imaginative faculty on the other hand, and [that] between the soul and the

70. Passive in the Arabic.

71. i.e.: that will be stored in memory, which is the depository of meanings.

imaginative faculty, are almost in agreement. Then there appears in it that which appears as it appears.

[9. The principle of warnings during sleep]

Since the discourse about imagination has made us move to the matter of dream, there is no harm for us to indicate briefly the principle from which the warnings occur during sleep through the things we posit [elsewhere]. For, this will become clear to us only in the discipline of first philosophy⁷².

We say: the meanings of all the things that are in the world, past, present, and bound to be, exist in the knowledge of the Creator and in the intellectual angels in one respect, and in the souls of heavenly angels in another respect. These two respects will become clear to you in another place⁷³. Human souls are more similar to those angelic substances than they are to sensible bodies. There is no concealment nor avarice there⁷⁴. Veiling belongs only to the recipients, either due to their immersion in bodies or due to their contamination with things that attract [them] downwards⁷⁵. When there occurs to the human soul [even] the least significant cessation from these activities⁷⁶, a perusal of what is there⁷⁷ occurs. The most appropriate thing that the soul firmly holds [R179] is what is connected with that human being (sc. the human being possessing that soul), or his relatives, or his country, or his region. For this reason, most of the dreams that are remembered are peculiar to the man that has dreamed of them or to those close to him. Intelligibles appear to those whose concern are the intelligibles, whereas those whose concern are the benefits of human beings see them and are led towards them, and likewise according to this [line of] reasoning.

72. See *Ilāhiyyāt* X, 1.

73. See *Ilāhiyyāt* IX, 2-4, where Avicenna distinguishes celestial intellects and celestial souls, the remote and proximate principle of the celestial spheres respectively. In *Ilāhiyyāt* X, 1, celestial intellects and souls are also mentioned in the outline of Avicenna's emanative scheme.

74. i.e.: in the heavenly realm. A similar formulation can be found in *Adwīya qalbiyya* 1.

75. Lit.: to the lower side.

76. i.e. immersion and contamination.

77. i.e.: in the heavenly realm.

[10. The imitations of natural and voluntary things by imagination]⁷⁸

Not all dreams are veridical and such that one needs to occupy himself with them. For not all the imitations by the imaginative faculty are about what emanates upon the soul from the heavenly realm. Rather, most of what derives from there occurs [to the soul] only when this faculty ceases to imitate things that are closer to it. Among the things that are closer to it some are natural, some are voluntary.

The natural ones are those that derive from blending the powers of humors belonging to pneuma, which is the vehicle of the form-bearing and the imaginative faculty⁷⁹. For this faculty first imitates these things (sc. the natural things) and is occupied with them. It might also imitate pains that are in the body and accidents that are in it, as when the expulsive faculty, which belongs to the semen, is set in motion to ejaculate. Then the imaginative faculty imitates forms such that the soul would incline to have intercourse with them. Moreover, it imitates⁸⁰ food for the one who is hungry, and for the one who needs to evacuate it imitates⁸¹ a place for that [purpose]. For the one to whom there happens to be some body part hot or cold due to some heat or coldness, it imitates⁸² that that body part is placed near a fire or in cold water. It is wondrous that, just as there happens from the motion of nature some imagining of the ejaculation of the semen, likewise, sometimes, there happens for some cause some imagining of a desired form. Thus, nature is triggered to gather the semen and to send out pneuma, which spreads to the organ of copulation. Sometimes it ejects the semen. This might happen both in sleep and in wakefulness, even if there has been neither [R180] excitement nor lust.

As for voluntary things, it is that, during wakefulness, the soul is concerned with something to whose consideration and medi-

78. For the background of this paragraph, see M. Rashed, «Un ‘nouveau’ fragment arabe de la version kindienne du *De insomniis* d’Aristote et sa réception dans une recension des *Principes* des opinions des habitants de la cité vertueuse d’al-Fārābī», *Bulletin d’Études Orientales*, 68 (2020–2021), 329–57.

79. Lit.: that the form-bearing and the imaginative faculty mount.

80. Lit: food is imitated for...

81. See n. 80.

82. See n. 80.

tation the soul turns its attention. When someone is asleep, the imaginative faculty begins to imitate that thing and what is of the [same] genus of that thing. This is part of the remains of cogitation that occurs during wakefulness, and all these things are confused dreams. This might also be due to the impressions of heavenly bodies. For, in accordance with their mutual relations and the relations between their souls, they cause forms to occur in the imagination in accordance with [its] disposition. These forms are not representations of anything of the world of the invisible, nor warnings.

[11. What of the imaginative contents requires interpretation and explanation]

That which needs to be interpreted and explained is what is not related to anything of this whole. It is known that it occurred due to an external cause and had some indication. For this reason, the dream of the poet, the liar, the wicked, the drunk, the sick person, the sad person, and whoever is overpowered by a bad temperament or thought, is not sound for the most part. Likewise, for this reason, only the dream that occurs at dawn is for the most part valid, because at this time all thoughts are still and the motions of apparitions have come to rest. When the imaginative faculty during sleep at a similar time [of the day, sc. dawn] is not occupied with the body, nor severed from the retentive and the form-bearing faculty, but rather controls both, its service to the soul in this matter is as good as it should be, because it unquestionably needs, in that which comes to it of that, that its form (sc. the form of what comes to it) be impressed in these faculties in a suitable manner, either these forms themselves or their imitations.

[12. The relation of sound dreams to balanced temperament]

One must know that the men with the soundest dreams are those with the most balanced temperaments. For those with dry temperament, although they are very retentive, are not very receptive. By contrast, those with moist temperament, although they are quickly receptive, quickly relinquish [what they have received], so it is as if they have not received anything [in the first place], nor are they very retentive. [R181] Those with hot

temperament have confused motions, whereas those with cold temperament are dull-witted. The soundest of them is the one accustomed to the truth. For the habit to falsehood and vicious thoughts makes imagery wicked in terms of motions, not obedient to the guidance of reason. Rather, his state is the state of the imagery of the one whose temperament is corrupted [and is led] to confusion.

[13. Introduction to the exposition on sleep and wakefulness]

Since this (*sc.* the topic of veridical dreams and imaginative prophecy discussed so far) is what depends on sleep and wakefulness, here we must briefly indicate the matter of sleep and wakefulness.

[13.1 Definition of these two states]

We say: wakefulness is a state where the soul makes use of the senses or the locomotive powers on the outside at will, for which there is no necessity. Sleep is thus the privation of this state. In it (*sc.* in sleep) the soul turns away from the external side to the internal one.

[13.2 The causes of sleep and their explanation]

Its turning away [from the external to the internal side] occurs in one of the following ways: [(i)] either because of the weariness befalling it (*sc.* the soul) from this (*sc.* external) side; [(ii)] or because of a concern occurring to it from that (*sc.* internal) side; [(iii)] or because organs disobey the soul.

[(i)] What occurs from weariness is that the thing called pneuma – you will come to know it in its [proper] place (*sc.* *Nafs* V, 8) – dissolves and becomes weak, so it cannot spread [throughout the body] and thus sinks in, and the soul faculties follow it. This weariness might occur [(i.i)] either from body movements, [(i.ii)] or from thoughts, [(i.iii)] or from fear. [(i.iii)] Sleep, and even death, occurs from fear. [(i.ii)] Thoughts might make one sleep not from this (*sc.* external) side, but because they heat the brain and so attract moistness to it. The brain is consequently filled [by moistness] and so moistening makes him sleep.

[(ii)] What occurs due to a concern from inside is that food and humors are gathered inside. Then, they need that pneuma

comes to them with all its innate heat to facilitate their complete digestion. The external [dimension of the soul faculties] is thus hampered.

[(iii)] What occurs due to organs[' disobedience] is that [R182] nerves are filled and obstructed by vapors and food which penetrate them, so as to be digested, or pneuma has become too heavy to move because of excessive moistness.

[13.3 The causes of wakefulness]

Wakefulness occurs due to causes opposite to [all] that. Among these, there are the causes that make [something] dry, like heat and dryness; relaxation⁸³ and recreation which come about; and cessation of digestion. Then pneuma reverts to spread out. Among these, there is a vicious state that averts the soul from sinking in but summons it outside, like anger, fear for something close, or enduring something⁸⁴ painful.

[13.4 Conclusion of the exposition on sleep and wakefulness]

This falls under what we are involved in by way of accident, even though it is proper to the true nature of sleep and wakefulness that we deal with them with regard to the accidents of what has sensation.

83. Reading: *ḡamām*, as in the Cairo edition of Avicenna's *Nafs* (1975).

84. Lit.: matter.

ABSTRACT

Tommaso Alpina, *Common to Body and Soul: Avicenna on Sleep as an Affection of the Animal Body*

In his *De somno et vigilia*, Aristotle provides the first philosophical account of sleep (and wakefulness). He considers these as two contrary states: overall, the former is a condition of privation of the features that qualify the latter. Aristotle's account of sleep as we know it seems not to have influenced subsequent reflection on the topic in the Islamic world. Philosophers had access to an adaptation of this text in which fragments of the original Greek text were interspersed among material belonging to other (philosophical and medical) traditions. This adaptation develops some ideas, already present in the Aristotelian text, about sleep as the context for a specific form of perception and motion. The first philosopher in the Islamic world to engage with this text and provide a similar exposition on sleep was Avicenna (Ibn Sīnā, d. 1037). Being a philosopher and a physician, in his writing on psychology, Avicenna combines the philosophical account of the specific form of perception and motion occurring during sleep with an exposition of the physiological aspects connected with this state.

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