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On Common Sense, Estimation, and the Soul's Unity in Avicenna

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Abstract This paper addresses two questions related to the Themistius' alleged influence on Avicenna's theory of the common sense. The first question concerns the phenomenon of incidental perception, which Themistius explained by means of the common sense. For Avicenna, on the contrary, the explanation of cases like our perceiving something yellow as honey involves the faculty of estimation and the entire system of the internal senses that he coined, and this results in an analysis that is considerably more complex than Themistius'. The second question concerns Themistius' claim according to which an incorporeal spirit is the primary subject of perception. I argue that Avicenna departs from such a view both because for him, spirit is a corporeal substance, and because he insists that the subject of all cognition is the soul, not any of its faculties. Finally, I conclude by briefly considering other, more general ways in which Themistius could have influenced Avicenna's psychology.

The medieval reception of Aristotle's psychology was not a simple adoption of the doctrine put forth in the *De anima* and the *Parva naturalia*. The late ancient commentators had already introduced controversial questions of interpretation, which acted as catalysts for still more thorough transformations of the Peripatetic doctrine by philosophers writing in Arabic. One interesting avenue of such a transformative reception is constituted by Peripatetic cognitive psychology, and especially the emerging doctrine of the so called internal senses. In her erudite paper, Elisa Coda argues that the late ancient commentator and paraphrast Themistius (d. 389) played an especially important role in the later Greek and Arabic transmission of Aristotle's doctrine of the common sense (Gr. *koinē aisthēsis*, Ar. *ḥiss mushtarak*). In particular, she suggests that Themistius was a formative influence for Avicenna (d. 1037) whose fivefold model of the internal senses provided the starting point for most of the subsequent discussion in both Latin and Arabic.

In the following, I will raise some complications concerning the relation between Themistius and Avicenna. I believe that at the very least these complications warrant us to continue tagging the aforementioned model of the internal senses as properly Avicennian; although the theory of course does have its roots in late ancient soil, it is a remarkably new kind of outgrowth. This is not to say that Themistius was not an influence on Avicenna or other philosophical psychologists writing in Arabic. It has been argued that Themistius was central for Avicenna's abstractionist theory of cognition,¹ and he

¹ Taylor 2019. According to this theory, all cognition consists in the abstraction (*tajrīd*) of cognitive forms from their material attachments. Abstraction is a process that takes place in increasing stages: sense perception abstracts the form from its designated matter but still requires a constant causal connection between that matter and the sense organ; imagination abstracts from the causal connection but retains the sensible features; estimation

was demonstrably a formative source for Averroes' (d. 1198) notorious theory of the unicity of the material intellect.² But to what extent did he determine Avicenna's theory of the internal senses in particular?

Themistius' influence on Avicenna's theory of the common sense

Coda introduces two central pieces of evidence for her claim that "the Avicennian doctrine of the common sense owes much to Themistius' treatment" (INT REF: 5). The first of these is the phenomenon of our recognition of the sweetness of honey merely by seeing its colour, used by both Themistius and Avicenna as a case example by means of which to make a point about the intricacies in the perception of content more complex than the sensibles proper to each sense. In Themistius, the example is meant to show the importance of common sense in explaining the empirical fact that we can both distinguish between different sense modalities and perceive the same object under multiple sense modalities. For instance, we can truthfully say that this white thing is not this sweet thing.³ By the same token, we perceive honey as both yellow and sweet. Both phenomena require that there is one cognitive faculty that is capable of considering the two sensible contents simultaneously, and in the latter case of combining and comparing the separate inputs arriving through the eyes and the tongue, the respective organs of vision and taste. In the Arabic text of Ishāq ibn Hunayn (d. 910), the only extant Arabic translation and quite possibly the text Avicenna would have read,⁴ the relevant passage reads as follows:

When one senses that honey is yellowish red and that it is sweet, or that snow is cold and that it is white, one does not sense white at one time and cold at another time, but at one and the same time.⁵

Themistius' point about the two perceptions taking place at one and the same time is apparently to rule out any sort of inference or association by memory. For this it is crucial that there has to be *one* faculty that is capable of perceiving both sense modalities at one and the same time, and according to Themistius, this faculty is the common sense.

The second piece of evidence for Themistius' influence on Avicenna is that both authors allegedly rely on the same, or reasonably similar, notion of spirit (Gr. *pneuma*, Ar. *rūḥ*) to explain peculiar features of the common sense. As Coda shows, Themistius takes spirit to be the organ of

abstracts from the sensible features but retains the connection to a particular sensible object; and finally, intellection abstracts from the connection to any single particular.

² See Averroes, *Comm. in De an.*, ad III.7, 431b16-19, 480-502.

³ Cf. Thāmistiyūs, in *De an.* V, 148. I here cite exclusively the Arabic translation of Ishāq ibn Hunayn, the only extant Arabic translation and possibly the one Avicenna used (see, however, the next note). For references to the Greek text, please consult Coda's original paper.

⁴ This is uncertain, because as Coda mentions (17-18), an ambiguous reference in the bookseller and bibliographer Ibn al-Nadīm (d. 990) suggests that Ishāq may have produced two translations of the text, and there are reasons to believe that Avicenna may have used the other one. See also Frank 1958/9 and Lyons 1973, VIII-XI.

⁵ Thāmistiyūs, in *De an.* V, 148.12-15.

common sense, and goes on to argue that the real perceiver in sensation is this spirit, not the five organs. Let us quote in Ishāq's Arabic again:

It is shown by all this that primary vision is not in the [the organ] which sees (*al-nāẓir*), nor is primary hearing in the ears or taste in the tongue. Instead, primary vision, taste, smell, touch, and hearing only exist in the spirit that senses primarily. When we say that the senses are five in total, we only mean that the organs of sense are five, and that the sensing spirit flowing in the organs is like five [streams] flowing from [one] spring. When it comes to [what] the sense [is] in reality and in the primary manner, it is one and it employs these.⁶

In Coda's account, this spirit that is the real subject of sense perception is different from the organs of the five external senses, because it is incorporeal. Furthermore, it is precisely its incorporeality that enables it to perceive two sense objects at the same time, which would be impossible, were the objects inhering in one and the same corporeal substrate, for in that case they would have to be at least spatially distinct, inhering in different parts of that substrate. This in turn would raise again the question of how those two parts can figure together in a single perception. Besides, as Alexander of Aphrodisias (*fl. ca* 200) had already shown with his "immateriality thesis",⁷ there are cases in which the spatial distinction model will not work. Suppose, analogously, that we see because patches of colour travel from visible objects to our eyes through the intervening air, and that we can see patterns of colour because different colours in the pattern are transmitted by different parts of the air. Then, if one person were looking at a white wall and another person a black wall in a perpendicular angle to the first, exactly the same volume of air would have to transmit both whiteness and blackness, which collapses the model. Themistius argues along very similar lines for the incorporeality of the common sense:

As we have said many times, it does not become simultaneously white and black or hot and cold, for this is absurd.⁸ Instead, each sense notifies it of the kinds that are proper to [the sense]. When it comes to it, it is incorporeal by [its] *ma'nā*⁹ and it contains and has power over (*mushtamilatan mustahwidhatan*) the spirit that senses primarily. [The spirit] is that from which all the senses are fed, like from [one] spring, and to which all the notifications from sensible [things] are conjoined. Hence, [the faculty of common sense] is not acted upon by opposites, but it regards the opposites, determining and judging that the white [thing] is different from the black [thing] and the bitter is different from the sweet. [What was] absurd is not the determination of such opposite

⁶ Thāmistīyūs, in *De an.* V, 151.14-152.1.

⁷ Gregorić 2017, 52. I have not found an explicit reference to this argument in Avicenna. However, his theory of colour as a configuration of light, and the related denial of the corporeality of light (*Shifā'*: *Nafs* III.2-3), can avoid the problem by largely the same means.

⁸ Literally, disgraceful (*al-shani*).

⁹ Ishāq here renders the Greek *logos* by the notoriously ambiguous term *ma'nā*, which I hesitate to translate. In my understanding, the idea is that the essence of the common sense, as captured in a concept, entails that the common sense is incorporeal.

things simultaneously, just as it is not disgraceful to regard justice between opponents who contradict each other, but being simultaneously acted upon by opposite things.¹⁰

In order to be able to consider the two perceptual contents simultaneously, the common sense must be incorporeal. Notice, however, that unlike the Themistius' original Greek, Ishāq's Arabic translation does not specify that the spirit through which the common sense operates is incorporeal, only that the faculty itself is such by its essence.¹¹ This is an important point with regard to the question of Themistius' influence on Avicenna, to which we shall now turn.

Common sense and estimation

Let us begin, however, with our perception of honey. As Coda has shown, we find Themistius' example employed by Avicenna in *Shifā': Nafs* IV.1. Let me quote the relevant passage with some of the surrounding context:

[W]e make judgments about what is sensed by means of *ma'ānī*¹² that we do not sense, either because it is in their natures not to be sensed at all or because they are sensed but we do not sense them at the moment of judgment. As regards those in the nature of which it is not to be sensed, they are such as the hostility, maliciousness, and antipathy that the sheep perceives in the form of the wolf, overall the *ma'nā* it avoids, or the agreeability that it perceives from its fellow, overall the *ma'nā* it is fond of. These are things which the animal soul perceives but none of which is shown by the sense. Hence, the faculty by means of which they are perceived is another faculty, let it be called estimation (*al-wahm*). As regards those that are sensed, we see for instance something yellow so that we judge that it is honey and sweet. This is not brought about by that which senses at this moment. It belongs to the genus of what is sensed, albeit that the judgment itself is not sensed at all even if its parts belong to the genus of what is sensed. It does not presently (*fī l-hāl*) perceive [the sweetness]. Instead, it is a judgment that judges about [the sweetness] and can be mistaken about it. It is also due to that faculty.¹³

Although the example of perceiving something yellow as honey and therefore sweet is familiar from Themistius, the context shows that Avicenna is applying it to make a rather different point. He is not primarily interested in our capacity of perceiving different sense modalities together, a capacity he has discussed earlier in the context of common sense, along lines that do go back to the Peripatetic tradition

¹⁰ Thāmistiyūs, in *De an.* V, 151.5-13.

¹¹ Although Ishāq's Arabic is profuse in personal pronouns, it consistently distinguishes between the masculine (here in reference to *rūh*, or spirit) and the feminine (here in reference to the *quwwa*, or the faculty, of common sense) in this passage. I have spelled out the reference in square brackets.

¹² Throughout this passage, Avicenna uses the term *ma'nā* (pl. *ma'ānī*) in the technical sense denoting the cognitive objects proper to the faculty of estimation. In order to stay clear of the debate of how exactly the *ma'ānī* should be understood or how the term should be translated, I have chosen to let the Arabic term stand for this class of objects. I have presented my interpretation in Kaukua 2014.

¹³ Avicenna, *Shifā': Nafs* IV.1, 166.5-16.

but are not especially dependent on Themistius.¹⁴ Instead, he uses our perceiving the sweetness of honey by sight to make a point about incidental perception, the phenomenon of seeing a visible feature, recognising the object carrying that feature, and becoming aware of other features the object can be expected to have, even if these other features are not presently perceived.

More importantly still, it is not common sense but Avicenna's newly coined faculty of estimation that explains our perception of something yellow as honey and sweet. This is evident from the context provided in the quote: Avicenna introduces the case of the honey as another, parallel type of activity by the faculty responsible for the sheep's famous perception of the wolf's hostility towards it, a point that he emphasises at the very end of the passage. Moreover, there are systematic grounds on which he thinks common sense would not be able to explain such incidental perception. It is crucial to Avicenna's common sense, just as it was for Themistius', that the two sense objects of different modalities, which it perceives together, are simultaneously received through the respective senses. By contrast, the whole point about incidental perception is that one of the two contents is *not* presently sensed but rather brought to mind by other means.

The details of incidental perception would have to be spelled out by means of the Avicennian system of the internal senses. The process would go roughly as follows:¹⁵ recognising the *ma'nā* of honey in the presently sensed yellow, the estimative faculty orders the compositive imagination (*takhayyul*) to retrieve other sensible features of honey from *al-khayāl*, a storehouse of images, or a bank of purely sensible content. This observation points at a feature of Avicenna's cognitive psychology the relations of which to earlier authors, such as Themistius, would be worth charting in further research. Although Avicenna's approach in psychology is to analyse psychological phenomena by attributing the various acts constitutive of them to distinct faculties of the soul, it is clear that at least in complicated acts like incidental perception, he understood those faculties to function as a single whole.¹⁶ Indeed, there are very few cognitive phenomena that we can straightforwardly attribute to any single faculty. Thus, when assessing the similarities and differences between the functions of a cognitive faculty in Avicenna and any of his predecessors, it is important to consider how they understood the entire system of the faculties. If the systems are different, how does this affect the individual faculties?

Spirit, dualism, and the primary subject of perception

Let us then turn to the function of spirit in Avicenna's cognitive psychology. The first thing to note is that for Avicenna, spirit is not incorporeal but "a subtle body", as he puts it in the passage quoted by

¹⁴ Avicenna, *Shifā': Nafs* IV.1, 164-165.

¹⁵ This account is not entirely uncontroversial. Arguably the most prominent interpretation is in Black 1993, which I discuss in Kaukua 2014.

¹⁶ Avicenna's critics did not always appreciate this. For instance, Abū l-Barakāt al-Baghdādī (d. 1165), and later on Mullā Ṣadrā Shīrāzī (d. 1635/6), accused him of analysing the soul's primordial unity into pieces that he failed to put back together. See my concluding remarks for some further elaboration and references.

Coda.¹⁷ On the other hand, as we saw above, Ishāq's Arabic translation does not commit Themistius to the view that the spirit is incorporeal either. However, once the Themistian repercussions of the immateriality thesis are set aside, there are other, more plausible sources for Avicenna's conception of spirit and its role in cognitive psychology. As Coda mentions, most likely a stronger influence would have been Galen's (d. ca 216) medical theory of the brain and the entire neural network through which the spirit flows. In this regard, there are considerable similarities between the theories of vision of Avicenna and the medieval master of Optics, Ibn al-Haytham (d. 1040), the latter of whom would have been naturally much closer to Galen and the optical tradition than to Themistius. We also need to bear in mind the fact that according to Avicenna, operating by means of the spirit is by no means exclusive to the common sense. On the contrary, all of the cognitive faculties that have corporeal organs, and indeed even the motive faculties, rely on the swift movement of spirit through the neural network. For a concrete example, "it may happen that a desired form is imagined due to some cause, so that nature is then triggered to gather sperm and send out spirit to spread the organ of copulation, and sperm may be ejaculated".¹⁸ Here, spirit is involved both in the imagining that goes on in the brain, in the transmission of the relevant information to the other organs, and in the contractions and extractions of the muscles.¹⁹

In the passage that spells out the relation between common sense and spirit, Themistius also claims that the spirit, and by association the common sense employing it, is the primary subject of perception. Interestingly, Avicenna concludes his brief discussion of the faculty by saying that "in reality, that which senses is [the common sense]".²⁰ Is this another sign of Themistius' influence? The question is worth further research, but let me point out two possible complications. First, Avicenna is not entirely unambiguous about which of the faculties is ultimately responsible for sense perception: he goes on to say that it is the estimation that is the judge, or indeed the "greatest judge", in an animal.²¹ He also asserts that, notwithstanding his own attempts at assigning each of the internal senses, estimation included, to a distinct part of the brain, it would be more correct to say that the estimation has the entire brain as its organ, because it governs all the other faculties in its own operation.²² Finally, in a long passage from *Shifā': Nafs* V.7, designed to argue for the unity of the soul, Avicenna

¹⁷ Avicenna, *Shifā': Nafs* V.8, 263.9. This is not entirely insignificant, for there are questions, albeit ones quite unrelated to our present concern, in which the corporeality of the organs of the internal senses is of pivotal importance. Consider, for instance, Avicenna's argument for the corporeality of our faculty of imagination, by means of which we think about geometrical problems, in *Shifā': Nafs* IV.3, 188-192. For another example, he explains vertigo as due to the spirit's circular movement in the brain (*Shifā': Nafs* IV.1, 164).

¹⁸ Avicenna, *Shifā': Nafs* IV.2, 179.18-20.

¹⁹ Cf. also Avicenna, *Shifā': Nafs* III.7, 144; III.8, 152-4; and V.8, 265-6. Avicenna also specifies that spirit comes in different degrees of subtlety, depending on the function in which it is designed to serve (V.8, 263-264).

²⁰ Avicenna, *Shifā': Nafs* IV.1, 165.8.

²¹ Avicenna, *Shifā': Nafs* IV.3, 185.7 and 182.14, respectively.

²² Cf. Avicenna, *Shifā': Nafs* IV.1, 168-169; and V.8, 268.9.

emphasises that the ultimate subject acting and perceiving through all its faculties is the soul.²³ Perhaps closer analysis will show that there is no real confusion between these seemingly conflicting statements, but in any case it is clear that the common sense's role as the primary subject is considerably more complicated in Avicenna than in Themistius.

Secondly, and more importantly, saying that something senses or perceives in the primary sense of the word has a very specific meaning in Avicenna's explicitly dualist framework, and it requires further research to assert whether the same holds of Themistius. In *Shifā': Nafs* II.2, Avicenna makes a clear distinction between an extramental object of sensation and an immediate object that is subsequently taken as a representation of the extramental one:

The truth is that the senses need bodily organs, and some of them need intermediaries. For sensation is a kind of affection because it is a reception from them of the form of the sensible, and a change to conformity with the sensible in actuality. Thus the thing sensing in actuality is actually like the sensible, and the thing sensing in potency is potentially like the sensible. [...] Hence, in some respect the thing sensing senses itself, not the sensible body, because it is what is informed by the form which is the proximate sensible. As for the external thing, it is what is informed by the form, which is the remote sensible. Thus [the soul] senses itself, not the snow, and itself, not the cold, if we mean by [sensation] the closest sensation in which there is no intermediary.²⁴

Avicenna explicitly says that the subject of sensation, which he identifies as the soul, primarily senses itself, or the object represented in itself, and only secondarily the extraneous object the immediate object represents. This does not necessarily have to rule out the idea that the spirit in the brain, infused with the soul, is that which senses itself carrying a representation of an extramental form, along the lines of the passage from Themistius. However, once we read this passage in the light of a series of statements in the posthumous compilation of Avicenna's teaching known as the *Ta'liqāt*, the point becomes more radical. Here is a representative quote:

Perception (*al-idrāk*) only belongs to the soul, and [when it comes to] that which senses, only sensation (*al-iḥsās*) of and being acted upon by the sensed thing belong to it. As evidence of that, that which senses may be acted upon by that which is sensed while the soul is inattentive (*lāhiya*), and then the thing is neither sensed nor perceived.²⁵

Thus, it is only in the soul that sensation, or perception in the strong sense of the word emerges. I take this to mean that the corporeal faculties of sensation, including the common sense and the spirit through which it operates, amount to physical processes that are necessary but not sufficient conditions for sense perception as a mental phenomenon. To put this another way, sense perception as a mental phenomenon

²³ Avicenna, *Shifā': Nafs* V.7, 252-257. I have analysed this passage at length in Kaukua 2015, 64-72.

²⁴ Avicenna, *Shifā': Nafs* II.2, 66.5-14.

²⁵ Avicenna, *Ta'liqāt* §10, 30; cf. §11, 32; §462, 271; §998, 575-576; and §1005, 579.

requires that the soul's attention be directed at the operation of the relevant faculties through their respective organs. Furthermore, it is only on this level that perception becomes a properly cognitive phenomenon that we can assess in normative terms by asking questions about its veridicality. In this sense, neither the common sense nor the spirit that functions as its instrument is the primary subject of perception for Avicenna. As the lengthy argument in *Shifā': Nafs* V.7 clearly shows, for him there is only one subject of perception, that is the soul.

Conclusion

I take the foregoing observations to show that the question of the extent of Themistius' influence on Avicenna's cognitive psychology remains worthy of further research. Avicenna knew Ishāq's translation of Themistius' paraphrase of the *De anima*, but his nuanced theory of the internal senses cannot be straightforwardly traced back to that text. And where there are clear points of contact, they must be investigated in light of the differing frameworks of the two authors' general psychological doctrines.

One wonders, however, whether Themistius and other Aristotelian commentators exercised a more general type of influence on Avicenna, which made him cling on to remnants of Aristotelian psychology that he no longer really needed in his own system. The question of how to reconcile the unity of perception with real distinctions between the cognitive faculties, hinted at in the above, is a case in point. Once we have established a strict distinction between the mental and the physical, as in Avicenna, and once the unity of perception can be grounded in an incorporeal soul instead of a corporeal faculty, as again in Avicenna, can we not discard the old attempt to solve the problem of unity and difference by means of faculty analysis? There may be tendencies in this direction already in Aristotle,²⁶ and one might ask why the alternative explanation seems not to have developed among pre-Avicennian Aristotelians. Moreover, Plotinus' metaphor of messengers for the senses, which Coda maintains was important to Themistius, seems to yield to an interpretation in which only the king (that is, the intellect, as in Plotinus, or the incorporeal substance that functions as the human soul, as in Avicenna), and not the messengers, can perceive the content transmitted by the messengers. Given Avicenna's explicit insistence on substance dualism, the question becomes even more pertinent. Indeed, one of Avicenna's most perspicacious readers, the twelfth-century maverick thinker Abū l-Barakāt al-Baghdādī (d. 1165) claimed that the assumption of really distinct faculties that are responsible for cognitive acts is incoherent, for it leads to two subjects in each activity, namely the faculty whose task it is and the soul that is primarily responsible for it.²⁷ What is more, Abū l-Barakāt grounds his claim on an adaptation of Avicenna's aforementioned argument in *Shifā': Nafs* V.7, thus suggesting that his view is a natural

²⁶ Think of, for instance, Ar. *De an.* I.4, 408b11-17, where Aristotle says that instead of saying that "the soul pities or learns or thinks", we should rather say "that it is the man who does this with his soul". The terms are different but the underlying idea is similar.

²⁷ Abū l-Barakāt, *Mu'tabar* II.6.3.4, II.318-319.

consequence of Avicenna's own theory. He only takes the argument a step further, saying that the notion of faculty is superfluous, and indeed misguided, for we could do with one soul operating through different organs of the body. If Abū l-Barakāt was on the right track, we could say that Avicenna endorsed and further developed the faculty psychological tradition at a point in which the notion of a distinct faculty had become obsolete. Perhaps he was convinced about this method by the weight of the tradition and by the efforts that commentators like Themistius had invested in its development.

On another note, an interesting point of comparison to the present focus might be Themistius' influence on Averroes, whose painstaking reading of Themistius' and Alexander's interpretations of the material intellect was formative for his own notorious interpretation of a single material intellect for all human beings. What is more, Alexander's "immateriality thesis", which Coda mentions as an important impetus for Themistius' theory of the common sense, was pivotal for Averroes' notion of the spiritual or intentional existence of the perceived forms.²⁸ Perhaps Averroes saw Themistius as an ally in his return to an Aristotelian philosophy purified of the errors of innovators like "Avicenna [...] who changed people's doctrine [...] so much that it became mere opinion".²⁹

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²⁸ See the seminal study in Sorabji (1991).

²⁹ Averroes, *Tahāfut al-Tahāfut* III, 182.3-4.

³⁰ This edition has often been ascribed to Şerafettin Yaltkaya, by myself among others, but since he is not explicitly mentioned as the editor anywhere in the three volumes and since there are reasons to believe he in fact was not the editor (see Tunagöz 2017, 197, n. 32), I have decided to list this entry under an anonymous editor.

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