

**RELATION AS KEY TO GOD'S KNOWLEDGE OF
PARTICULARS IN THE *TAHĀFUT AL-TAHĀFUT* AND
THE *DAMĪMA*: A CROSS-TALK BETWEEN AVERROES,
AL-ĠAZĀLĪ AND AVICENNA**

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Abstract. This article deals with the divine knowledge of particulars in Averroes' *Tahāfut al-tahāfut* and *Damīma*. It examines how the concept of relation, generally neglected, is at the heart of the dispute between Avicenna, al-Ġazālī, and the Commentator. In al-Ġazālī's eyes, Avicenna's misconception of divine knowledge "in a universal way" is based on a misuse of relation in the case of God's knowledge. If particulars change and God does not, his knowledge of particulars, insofar as it undergoes change, can be considered a pure relation without ontological consequences. Averroes contests both al-Ġazālī's criticism and his proposal, despite the fact that, for different reasons involving the coming-to-be of human knowledge, he too employs the notion of pure relation in his *Long Commentary on the Physics*.

Résumé. L'article porte sur la science divine des singuliers dans le *Tahāfut al-tahāfut* et la *Damīma* d'Averroès. Il examine comment le concept de relation, généralement négligé, intervient au cœur de la dispute entre Avicenne, al-Ġazālī et le Cordouan. Aux yeux d'al-Ġazālī, Avicenne tire sa conception fautive d'une connaissance divine « par mode universel » d'un mauvais usage de la relation dans le cas de la science de Dieu. Si le singulier change et que Dieu, lui, ne change pas, l'idée serait d'envisager sa connaissance du singulier, en tant qu'il change, comme une relation pure, sans conséquence ontologique. Averroès conteste à la fois la critique d'al-Ġazālī et sa proposition, même si, d'un autre point de vue (le surgissement de la connaissance dans l'intellect humain), il recourt lui aussi à la relation pure dans son commentaire de la *Physique*.

Averroes' discussion thirteen of the *Tahāfut al-tahāfut* deals with God's knowledge of particulars, and, more precisely, with the idea that, according to the philosophers, God doesn't know particulars that

are conditioned by time. The title of al-Ġazālī's chapter, to which Averroes responds, is the following: "On refuting their statement that God [...] does not know the particulars divisible in terms of temporal division into what is, what was, and what will be ¹". The issue is obviously important, and it has received a lot of scholarly attention ². We can sum up the three main arguments very briefly: a) Avicenna first says that God knows particulars, but in a universal manner; b) al-Ġazālī criticizes him, pointing out that this argument does not make sense because it does not allow God to know terrestrial individuals as particulars, and so the argument is heretical; c) Averroes, lastly, responds to al-Ġazālī and rejects the accusation of infidelity made against the philosophers, without actually going back to Avicenna's argument. God, he says, knows particulars, but not in a universal or particular way. His knowledge defies description and has nothing in common with human knowledge produced by the realities it knows ³.

¹ See al-Ghazālī, *The Incoherence of the philosophers, Tahāfut al-falāsifa: A parallel English-Arabic text translated, introduced, and annotated by Michael E. Marmura*, Provo (Utah), 2nd ed., 2000, p. 134-135.

² See recently M. Di Giovanni, "Philosophy Incarnate: Ibn Rushd's 'Almohadism' and the problem of God's omniscience", in A. Bertolacci, A. Paravicini Bagliani, M. Bertagna (ed.), *La Filosofia Medievale tra antichità ed età moderna: Saggi in memoria di Francesco Del Punta*, Firenze, Edizioni del Galluzzo, 2017, p. 139-162.

³ See Averroes, *Tahafut al-tahafut (The Incoherence of the incoherence)*, transl. from the Arabic with introd. and notes by S. Van den Bergh, Cambridge University Press, 4th ed., 1987, p. 279-281 (cf. *Tahafot at-tahafot, L'Incohérence de l'incohérence*, ed. Maurice Bouyges, Beirut, Dar el-Machreq, 3rd ed., 1992, p. 460-463); cf. Averroes, *Decisive treatise & Epistle Dedicatory*, transl. Ch. E. Butterworth, Provo (Utah), Brigham Young University Press, 2001, p. 13-14; *Faith and Reason in Islam: Averroes' exposition of religious arguments*, transl. I. Y. Najjar, Oxford, Oneworld, 2001, p. 45-46 (cf. *Al-Kašf 'an manāhiġ al-adilla fī 'aqā'id al-milla*, ed. M. 'Ā. al-Jābirī, Beirut, Markaz dirāsāt al-waḥda al-'arabiyya, 1998, p. 129-130); *Ibn Rushd's Metaphysics: A translation with introduction of Ibn Rushd's Commentary on Aristotle's Metaphysics, book Lām*, by Ch. Genequand, Leiden, 1984, ch. 51, p. 197-198 (cf. *Tafsīr mā ba'd al-ṭabī'at, "Grand Commentaire" de la Métaphysique*, ed. M. Bouyges, 2nd ed., Beirut 1973, p. 1707-1709).

In other words, Avicenna was wrong to maintain that God knows in a universal way; but al-Ġazālī was wrong as well in claiming that the philosophers, meaning *all philosophers*, deny divine knowledge of singulars.

So those are the basics, as far as the arguments go, and they are well-known. Inevitably, one wants to ask of Avicenna, among other things: what does knowledge of particular things *in a universal sense* refer to, and above all, does it allow God to know the world as a set of particulars? Most articles on the subject have dealt with this⁴. In the present paper, by contrast, I would like to examine how this dispute integrates the crucial concept of relation, which I believe has been neglected.

My approach involves three main steps. First, I shall read some passages in al-Ġazālī to which Averroes responds, in order to see exactly why Averroes criticizes al-Ġazālī, and how he formulates his criticism. Then, briefly, I shall look at some of Avicenna's texts, in order to compare them with the reading of al-Ġazālī. Lastly, I'll return to Averroes' refutation.

Let's begin with al-Ġazālī's *Incoherence of the philosophers*. This discussion, as is well known, intends to refute the philosophers' argument that God doesn't know (that is, not in the particular sense, and therefore not at all, in the mind of al-Ġazālī) the particulars (*al-juz' iyyāt*), and more precisely, as I said, the particulars temporally divisible into what is, what was, and what will be (*al-munqasimat*

⁴ See M. E. Marmura, "Some aspects of Avicenna's theory of God's knowledge of particulars", *Journal of the American Oriental Society*, 82 (1962), p. 299-312; R. Acar, "Reconsidering Avicenna's position on God's knowledge of particulars", in J. McGinnis (ed), with the assistance of D. Reisman, *Interpreting Avicenna: Science and Philosophy in medieval Islam*, proceedings of the second conference of the Avicenna Study Group, Leiden / Boston 2004, p. 142-156; H. Zghal, "La connaissance des singuliers chez Avicenne", in R. Morelon and A. Hasnawi (ed.), *De Zénon d'Élée à Poincaré: Recueil d'études en hommage à Roshdi Rashed*, Louvain, Peeters, 2004, p. 685-71; P. Adamson, "On knowledge of particulars", *Proceedings of the Aristotelian Society*, 105 (2005), p. 257-278.

bi-nqisām al-zamān ilā al-kāʿin wa-mā kāna wa-mā yakūnu). According to the philosophers, says al-Ġazālī, at least according to those who maintain that God does not know Himself alone, God's knowledge of other things would exist only as universal knowledge (*ʿilman kullīyyan*)⁵.

Before refuting this claim, al-Ġazālī as usual presents his adversary's argument, in this case Avicenna's. It can be summarized as resting on two main points. First, it rests on the idea that, according to Avicenna, human knowledge of sublunar particulars has a triadic structure, which we must distinguish in the following order: the object known (*maʿlūm*), knowledge of the object known (*ʿilm*), and the knower (*ʿālim*). And second, it rests on the idea that, in this triadic structure, as in a chain of events, or a series of consequences, variation of the first element (the object known), leads to variation in the second (knowledge), whose change (*taġayyur*), in turn, induces a change in the third, and, more precisely, change in the *essence* of the third, that is, in the knower's essence (*fī dāti-hi*):

The change in the object known necessitates change in the knowledge (*taġayyur al-ʿilm*). For the reality of the essence of knowledge (*ḥaqīqat dāt al-ʿilm*) includes the relation to the specific object of knowledge, since the reality of the specific knowledge consists in its attachment to the specific object of knowledge as it <actually> is. Its attachment to it in a different manner necessarily constitutes another knowledge. Its succession necessitates a change in the state of the knower⁶.

To illustrate this point, al-Ġazālī uses the Avicennian example of the eclipse⁷. The eclipse, he says, has three states (*aḥwāl*): (i) the

⁵ See al-Ghazālī, *The Incoherence of the philosophers*, p. 134, 3-9: “[...] those who maintain that He knows things through a universal knowledge which does not enter time and which does not change in terms of the past, the future, and the present. Despite this, <Avicenna> claims that not even the weight of an atom, either in the heavens or on earth, escapes His knowledge, except that He knows the particulars by a universal kind <of knowing> (*bi-nawʿ kullīyy*).”

⁶ Al-Ghazālī, *ibid.*, p. 138, l. 10-16.

⁷ Cf. for example Avicenna, *Al-Šifāʿ: Al-Ilāhiyyāt (2)*, ed. I. Madkūr, M. Y. Mūsā, S. Dunyā and S. Zāyid, Cairo, 1960, ch. VIII, 6 (cf. *idem*, *The Metaphysics of the*

state of what it will be in the future, (ii) the state of its current existence, and (iii) the state of its having existed in the past. For these three states, we must correlatively distinguish three cognitions (of its existence yet to come, of its present existence, and of its past existence). Furthermore, writes al-Ġazālī, according to the philosophers' doctrine, the succession (*ta'āqub*) of these three cognitions over the receptacle (*maḥall*) that is the knower necessarily causes a change in him, and this is a change in essence⁸ (*taġayyur al-dāt al-ālima*), that is to say, three essentially distinct "states"⁹. As a result, we have the following:

state 1 of the object (future) → knowledge 1 → state 1 (of the knower)
 state 2 of the object (present) → knowledge 2 → state 2 (of the knower)
 state 3 of the object (past) → knowledge 3 → state 3 (of the knower)

In short, al-Ġazālī presents Avicenna as holding that the variation of the particular one knows must lead to, can only lead to, a variation, a change, in the knower's essence. This is the premise in virtue of which, according to al-Ġazālī, Avicenna's argument fails, since he draws his conclusion from this idea. Avicenna's reasoning could be reconstructed as follows. If it's true that knowing changing particulars

Healing: A parallel English-Arabic text transl., introd., and annotated by M. E. Marmura, Provo (Utah), Brigham Young University Press, 2005).

⁸ Al-Ghazālī, *The Incoherence of the philosophers*, p. 134, l. 9 – p. 135, l. 4.

⁹ The term *ḥāl* appears at every level of the triadic structure I've mentioned. A terrestrial thing that we know (an eclipse, for example) changes. It has different "states" (depending on whether we consider it before, while, or after it happens). The various cognitions that ensue from it, in line with the changes in the thing, are themselves different "states" that succeed one another over the same receptacle. And finally, these changes in cognitions, these different "states" of knowledge, will be matched down the line, by a change in the knower's essence, that is, according to the text, once again, a change in his "state". So we have, at least lexically, a conception of the knowledge of a changing particular thing that mobilizes the "state" on three inter-connected levels: the state of the object determines the state of knowledge, and the state of knowledge determines the state of the knower, understood as affection in the essence.

(*hawādit*) implies a change in the knower's essence, and that God, in His essence, cannot change, yet *He knows* (which we must maintain, at least to be faithful to the Qurʾān¹⁰) – the eclipse, in the present case, including its attributes and its accidents – and it follows that God can only know the particular through another mode, that is to say, first, through a knowledge that doesn't change¹¹ (*lā yaḥtalifu*), or, put another way (and the reformulation matters, because it exhibits theoretical elements related to the theological question of God's attributes), it means that God "is attributed" an eternal knowledge that does not change¹² (or that God's knowledge, which is in Him an eternal "attribute", does not change). God's knowledge, thus, doesn't change and entails no change (*tagayyur*) in His essence¹³ (*dāt*), and if He knows the *hawādit*, the temporal events, it will be through another mode, that is, Avicenna argues, "in a universal manner"¹⁴. So, al-Ġazālī concludes:

The Whole is thus known to Him – that is, unveiled to Him – in one homogeneous unveiling, unaffected by time [...] It is inconceivable that <God> knows anything that necessarily requires in defining it a relation to time, because this necessitates a change in <Him>. This, then, <is what they hold> regarding what is divisible in terms of time¹⁵.

For al-Ġazālī, however, this way of knowing amounts to refusing God the knowledge of particulars *qua* particulars¹⁶, and thus to ruining what, for example, concerns Muḥammad's prophecy, so much so that Avicenna's argument, despite its seeming subtlety, is completely unacceptable.

All of this is well known, but what is interesting for us is to see

¹⁰ See for example Qurʾān 34:3; 6:59.

¹¹ Al-Ghazālī, *The Incoherence of the philosophers*, p. 135, l. 10 (Arabic).

¹² *Ibid.*, p. 135, l. 8-9 (Arabic; 15 sq. Engl.): "<Avicenna> claims that <God> knows the eclipse and all its attributes and accidents, but by a knowledge eternally attributed to Him (*ʿilman huwa yattaṣifu bi-hi fī al-azal*) which does not change."

¹³ *Ibid.*, p. 135, l. 20 (Arabic); for the full passage, see p. 135, l. 10-33.

¹⁴ Cf. *ibid.*, p. 136, l. 9-26.

¹⁵ *Ibid.*, p. 136, l. 1-8.

¹⁶ Cf. *ibid.*, p. 136, l. 27 – p. 137, l. 11.

that, in al-Ġazālī's eyes, Avicenna's error is only the culmination of a mistake made in the beginning of his chain of reasoning, namely in his "obviously false" conception of knowledge of terrestrial particulars, and, more precisely, its modalities and implications.

If Avicenna was driven to make his absurd, extravagant – in fact, heretical – argument of God knowing singulars in a universal way, it was because he wanted to avoid attributing to God a temporal mode of knowledge of particulars that would be *ontologically committing*, which he believed *wrongly* to be the case and the only possible position¹⁷, and this error is due to a misuse of the notion of relation (*idāfa*) applied to science. That is what we have to examine closer.

The philosophers, according to al-Ġazālī, state that there are three types of "states" – the same term again – when it comes to relations, in other words, three ways to be in relation with something:

<The first is> a state which is a pure relation (*idāfa maḥḍa*) – as <for example> your being to the right or the left <of something>; for this does not refer to an essential attribute (*waṣf dātiyy*) but is a pure relation. Thus, if the thing which was to your right changes to your left, your relation changes but your essence does not change in any way. For this is a change of relation to the essence but <does> not <come about> through a change in the essence.

<The second> of this sort <is the case> when you are able to move bodies in front of you and these bodies, or some of them, cease to exist,

¹⁷ *Ibid.*, p. 137, l. 16 *sqq.*: "Their confusion <lies in saying> that these <the temporal sequence of events relating to the eclipse> are three different states and that different things, when succeeding each other over one receptacle, must necessitate a change <in the knower>. Thus, if at the time of the eclipse <God> 'knows' that <the one receptacle> would be <in the same state> as it had been prior <to the eclipse>, He would be ignorant, not knowing. If, <on the other hand, at the time of the eclipse> He has knowledge that <the eclipse> exists, but prior to this <time knowledge> that it will be, then His knowledge would change and His state would change. Change is thus the necessary consequence, since there is no other meaning for change except a difference in the knower. For whoever does not know a thing undergoes change when he comes to know it; and whoever has had no knowledge that <the eclipse> exists undergoes change when <this knowledge> is realized at the time of the existence <of the eclipse>."

where neither your innate capacity nor <other> power changes. This is because power is the power over the moving of body; first of all in the absolute <general sense>, and secondly over a specific <body> inasmuch as it is body. Thus, the relating of power to the specific body would not constitute an essential attribute, but <only> a pure relation. Therefore, the ceasing <of the bodies> to exist necessitates <only> the ceasing of the relation, not a change in the state of the one endowed with power.

The third <state is one which involves> change in essence (*tagayyur fī dāt*) – namely, that He would be knowing and then knows [...] This constitutes change. The change in the object known necessitates change in the knowledge. For the reality of the essence of knowledge (*ḥaqīqat dāt al-‘ilm*) includes the relation to the specific object of knowledge, since the reality of the specific knowledge consists in its attachment to the specific object of knowledge as it <actually> is. Its attachment to it in a different manner necessarily constitutes another knowledge. Its succession necessitates a change in the state of the knower. It is impossible to say that the essence has one knowledge which becomes knowledge of “what is” after being knowledge of “what will be” and then becomes knowledge of “what was” after being knowledge of “what is”. For knowledge is one, similar in its states; but <here> the relation <to the object> has changed, since the relation in knowledge is the reality of the essence of knowledge. As a consequence, change <in the knower> necessarily ensues; and this is impossible in the case of God¹⁸.

Thus, among these three kinds of relation, the first two are *pure relations* (*iḍāfa maḥḍa*): to be to the left or right of something, for example (first case); or to be able to move bodies in front of you (second case). If they are pure relations, it’s because these relations are not based on, or do not refer to any “essential attribute” of the being or the thing related. The relating of power to a specific body is not essential to the power, it doesn’t belong to its “reality”. In the same way, being to the right or the left of something is not essential to me, does not refer to any essential attribute in me, it doesn’t belong to my “reality”, and that is why if what is to my right or to my left changes or moves, my relation to it changes, but I do not change intrinsically, *i. e.*, in my essence. The change in the object does produce a change in relation,

¹⁸ Al-Ghazālī, *The Incoherence of the philosophers*, p. 137, l. 31 sq.

but not a change in the essence of the related being. The relations, here, are pure, which means they are like some links established from the outside, leaving the being or the thing related internally intact¹⁹.

The third and last state, the last way of being related to something, on the contrary, is not a pure relation, because the relation, this time, belongs to the reality of the thing related²⁰. And knowledge is an example of such a relation. The relation of knowledge isn't a pure relation, attached only from the outside (such as being to the right or left of something), rather, according to al-Ġazālī's understanding of Avicenna's position, it is a relation to the object known included in the very reality (*ḥaqīqa*) of the essence of knowledge (put another way, this relation is an essential attribute of knowledge), and therefore in this case, when the object changes, knowledge necessarily changes; if the object known changes, it involves a "change in the essence" of knowledge (*tagayyur fī dāt*), and consequently, it produces a change in the *dāt* of the knower²¹. But if such a change cannot be ascribed

¹⁹ On this, see R. Sorabji (ed.), *The Philosophy of the commentators 200-600 AD: A sourcebook*, vol. 2, "Physics", London, Duckworth, 2004, p. 64. For some sources, cf. Plato, *Theaetetus*, 155 B-C; Aristotle, *Phys.* III, 200 b 33 – 201 a 9; V, 2, 225 b 11-13; VII, 3, 246 b 11-12; *Metaph.* XI, 12, 1068 a 11-13; XIV, 1, 1088 a 30-5; Themistius, *On Aristotle Physics 5-8*, 170, 20 (*in Phys.* V, 2, 225 b 11-13) transl. R. Todd, London, Duckworth, 2008, p. 30; Philoponus, *On Aristotle Physics 3*, 367, 28 – 369, 1 (*in Phys.* III, 202 a 7), transl. M. J. Edwards, London, Duckworth, 1994, p. 38; Philoponus, *On Aristotle Physics 5-8*, 767, 21 sq., transl. by P. Lettinck, London, Duckworth, 1994, p. 121; cf. P. Lettinck, *Aristotle's Physics and its reception in the Arabic world*, Leiden / New York / Köln, 1994, p. 519 sq.

²⁰ See Aristotle, *Cat.*, VII, 8 a 31-32; transl. J. L. Ackrill, Oxford University Press, 1963: "Those things are relative for which *being is the same as being somehow related to something*." (Cf. *ibid.*, 6 a 35-37: "We call *relatives* all such things as are said to be just what they are, *of* or *than* other things, or in some other way in relation to something else.") Cf. D. Sedley, "Aristotelian relativities", in M. Canto-Sperber and P. Pellegrin (ed.), *Le Style de la pensée: Recueil de textes en hommage à Jacques Brunschwig*, Paris, Les Belles Lettres, 2002, p. 324-352 (who distinguishes between a "soft" relative and a "hard" relative); see also the classical study of M. Mignucci, "Aristotle's definition of relatives in *Cat.* 7", *Phronesis*, 31 (1986), p. 101-127.

²¹ Actually, two levels are overlapping here, which are not exactly the same: a) the

to God, divine knowledge must be conceived differently. According to al-Ġazālī's reconstruction, Avicenna's thesis would have followed from that.

Let me summarize al-Ġazālī's critique: the philosophers – meaning Avicenna here – are mistaken, according to al-Ġazālī. They are mistaken at the very beginning of their chain of reasoning, which leads to their impious argument about God knowing particulars in a universal way; and they are mistaken because they have a conception of human knowledge of particulars that involves ontological commitment such that variations in the object known must be matched by variations in the essence of the knower. The result invokes a doctrine of relation, applied to knowledge, according to which this knowledge, which includes in its very reality (*ḥaqīqa*) the relationship to the object known, would not constitute a pure, superficial relation (*idāfa maḥḍa*), one that is external to that which it relates, as if attached. On the contrary, it constitutes an “essential attribute” (*wasf datiyy*) of knowledge and its variation, as a result, would *ipso facto* bring about a variation in this knowing being.

Such is al-Ġazālī's reconstruction of the underpinnings of Avicenna's argument. One thing seems to be clear: even should we stop at this stage of the reformulation of the opposing argument, the issue of relation, coupled with the issue of attribution, in this case of the attribute “knowing”, is key, since it is the cause of the philosophical error. But there is a further importance of relation in the discussion. Relation is not only at issue when al-Ġazālī condemns Avicenna, but

change of the object known changes the essence of *knowledge*; b) the change in the essence of knowledge changes the essence of the *knower*. The first point, as it is said explicitly, follows from the fact that the relation to the object known is included in the essence of knowledge; and the second point, which here does not appear clearly, and depends on the Ġazālīan conception of the divine attributes, probably follows from the fact that science is an essential attribute of the knower. These two aspects are linked just a few lines later: “These differences reduce to relations that do not necessitate change in the essence of *knowledge* and, hence, do not necessitate change in the essence of the *knower* (al-Ghazālī, *The Incoherence of the philosophers*, p. 138, l. 31-34).”

also when he opposes Avicenna's own solution. What objections does al-Ġazālī voice? I indicate two.

First, why, he asks, do we not posit that God, fundamentally, could have one and the same knowledge of a particular thing, let's say, of an eclipse, one and the same knowledge valid for the eclipse before it happens, when it happens, and when it had already happened? Second, then, why not consider on this basis that the differences (*iḥtilāfāt*) that are introduced by the knowledge of the eclipse *as yet to come*, of the eclipse *as present*, and of the eclipse *as past*, constitute, with respect to the unique knowledge of the eclipse that we have just posited, only pure relations? Pure relations (*iḍāfa maḥḍa*) that do not produce any change (*tabaddul*) in the essence of the knower (*fī dāt al-ʿālim*). This would preserve the key idea: the immutability of the omniscient God. Here is what al-Ġazālī says:

With what <argument> do you deny one who says that God, exalted be He, has one knowledge of the existence of the eclipse, for example, at a specific time; and that this <same> knowledge before <the existence of the eclipse> is knowledge that it will be, being identical with the knowledge at the time of the eclipse and identical with the knowledge after the clearing <of the eclipse>; and that these differences reduce to relations that do not necessitate change in the essence of knowledge and, hence, do not necessitate change in the essence of the knower; and that <these differences> have the status of a pure relation? For, <in moving past you, an> individual <is first> on your right, <then> moves on to be in front of you, and then <moves> to your left. The relations thus succeed each other for you; but the one undergoing change is that moving individual, not yourself. This is how the state of affairs ought to be understood as regards God's knowledge²².

This is the move we must, above anything else, highlight in al-Ġazālī's reasoning, by which, first, he disconnects God's absolute knowledge of a thing – his, let's say, eternal knowledge (whether eternal means omnitemporal or extratemporal is irrelevant here) – from the chronological aspect of this knowledge, by which it is anchored in time, by which it incorporates time – in other words, the

²² Al-Ghazālī, *The Incoherence of the philosophers*, p. 138, l. 26 – p. 139, l. 2.

knowledge of this thing as future, as present or as past. His move, then, involves holding that this time-dependent nature of divine knowledge of particulars, its application to a thing *in its temporality*, constitutes nothing more for God's eternal knowledge, and therefore for God's essence itself, than a series of pure relations that leave the knowing subject intact.

In other words, the key to the problem of God's knowledge of particulars, whereby when the particular thing is changing, God cannot change²³, is, or could be, according to al-Ġazālī, the concept of pure relation, as applied, not to God's knowledge in its absoluteness, to the supratemporal knowledge God has of thing X²⁴, but rather to the knowledge He has of X *as an event*, or in its "eventness", that is, taking into account its temporal dimension²⁵.

Knowledge is an attribute (*ṣifa*) in God. It gives Him a state (*ḥāl*), one and the same state, which is (or could be) adequate to embrace all the different states of the particular object which, like everything else, He knows, without this variation in the state of the object known entailing a variation in the essence of His knowledge, nor, thus, more radically, in His essence, because – and this is what Avicenna and the other philosophers wouldn't have understood – "knowing X *as...*" (as future, as present, as past), could be predicated of God, just as "to the left of..." or "to the right of" is predicated of me when I am to the left or to the right of someone else (who has moved around me, without myself having moved and changed) – in other words, as Latin sources would say, by purely extrinsic denomination²⁶, or as a modern

²³ Actually, al-Ġazālī harks back to that at the end of his discussion.

²⁴ This science is surely based on a *ma'nā*. See discussion 6 of *The Incoherence of the philosophers* ("On the divine attributes"). On the question of divine attributes in Ash'arism, see D. Gimaret, *La Doctrine d'al-Ash'arī*, Paris, Cerf, 1990 (part II, ch. 3-6).

²⁵ This is of particular interest because it shows that al-Ġazālī uses a highly philosophical device, drawn from the Aristotelian tradition (the concept of pure relation; the issue of the absence of movement) which intersects with the theological legacy on divine attributes.

²⁶ See J. P. Doyle's definition of extrinsic denomination: "A designation of some-

philosopher would say, “by virtue of a mere Cambridge change²⁷”. It is, thus, the concept of pure relation that for al-Ġazālī yields this conclusion, which the philosophers get wrong, and which harks back to an important conceptual nuance in Ash‘arism, namely that the *iḥtilāf* of the states of known things does not necessarily entail a *tagayyur* in the knower²⁸.

From here, briefly, I would like to take a quick look backward as well as forward in time: backward, to Avicenna, who is the target of al-Ġazālī’s critique; forward, to Averroes, who contests the theologian’s critical reading on precisely this issue of relation, even if he also seems to use it in other closely related contexts.

First, I treat Avicenna²⁹. It is not always easy to find al-Ġazālī’s

thing not from anything inherent in itself, but from some disposition, coordination, or relationship which it has toward something else” (J. P. Doyle, “Prolegomena to a study of extrinsic denomination in the works of Francis Suarez, s. j.”, *Vivarium*, 22 (1984), p. 121-156, here p. 122-123, cit. in A. de Libera, *Archéologie du sujet*, vol. 2, “La quête de l’identité”, Paris, Vrin, 2008, p. 358). See A. de Libera, “Dénomination extrinsèque et ‘changement cambridgien’: Éléments pour une archéologie médiévale de la subjectivité”, in K. Emery Jr, R. L. Friedman and A. Speer (ed.), *Philosophy and Theology in the long middle ages: A tribute to Stephen Brown*, Leiden, Brill, 2011, p. 451-470; *idem*, “Le direct et l’oblique: Sur quelques aspects antiques et médiévaux de la théorie brentanienne des relatifs”, in A. Reboul (ed.), *Philosophical papers dedicated to Kevin Mulligan*, Genève, 2011, p. 317-347.

²⁷ On this classical notion of “Cambridge change”, see P. T. Geach, “What actually exists”, in *idem*, *God and the Soul*, London, Routledge and Kegan Paul, 1969, p. 65-74, esp. p. 71-72 (repr. from *Proceedings of the Aristotelian Society*, 42 (1968), p. 7-16). Cf. A. de Libera, *Archéologie du sujet*, vol. 2, p. 360 sq.

²⁸ See D. Gimaret, *La Doctrine d’al-Ash‘arī*, p. 277.

²⁹ On the topic of relation in Avicenna, see H. Zghal, “La Relation chez Avicenne”, *Arabic Sciences and Philosophy*, 16 (2006), p. 237-286; M. E. Marmura, “Avicenna’s chapter ‘on the relative’ in the *Metaphysics* of the *Shifā’*”, in G. F. Hourani (ed.), *Essays on Islamic philosophy and science*, Albany (N. Y.), 1975, p. 83-99; O. Lizzini, “Causality as relation: Avicenna (and al-Ġazālī)”, *Quaestio*, 13 (2013), p. 79-109; J. Decorte, “Avicenna’s ontology of relation, a source of inspiration to Henry of Ghent”, in J. Janssens, D. de Smet (ed.), *Avicenna and his heritage*, Leuven University Press, 2002, p. 196-284.

exact target or the text he is reading. Here, however, things appear to be quite clear-cut. What al-Ġazālī has before him is first and foremost the section on metaphysics in the *Dānesh-nāmeḥ*. When we open the metaphysical section, we read that the Necessary Being must indeed know the changing things, but without a change occurring in its essence (and al-Ġazālī agrees with that, of course). But if that is the case, if no change can occur in God's essence knowing the particular, then, Avicenna says, He can't know it in its contingency as we do. Why? Because to know something as contingent as we do involves something that, if applied to God, would be disastrous. We read, actually (in the French translation, which is here much better than the English one):

Tout ce qui est sujet connaissant d'une chose a en soi un caractère, autre que son caractère de relation à cette chose, et autre que l'existence de cette chose. Ce caractère n'est pas le même que l'état d'une chose étant à droite d'une autre chose, étant donné qu'il ne peut y avoir rien d'autre qu'une relation entre cette chose et l'autre chose, de sorte que si cette autre chose disparaissait, s'étant trouvée à droite de la première mais n'étant plus maintenant à sa droite, nul changement ne soit produit; mais seulement la relation et la liaison qu'elle avait avec cette autre chose n'existent plus, son essence étant toujours la même. Au contraire, la connaissance consiste en ce que lorsqu'une chose est sujet connaissant, elle l'est quand l'essence <de la chose à connaître> est existante; et lorsque cette <même> chose n'est pas sujet connaissant la connaissance consiste en ce que l'essence du connu n'existe pas³⁰.

First, indeed, any knowing subject of a thing has in him a feature (a "characteristic"; the Persian term is *ṣifa*³¹) that is different than the

³⁰ Avicenna, *Le Livre de science*, transl. M. Aghena and H. Massé, Paris, Les Belles Lettres, 2nd ed., 1986, p. 200. Cf. *The Metaphysica of Avicenna (Ibn Sīnā): A critical translation – commentary and analysis of the fundamental arguments in Avicenna's Metaphysica in the Dānīsh nāma-i 'alā'ī (The Book of scientific knowledge)*, P. Morewedge, New York, Columbia University Press, 1973, p. 64: in the English translation, the example of the thing being to the right of something else has disappeared!

³¹ I am grateful to Jules Janssens for his help on this matter. Cf. al-Ġazālī, *Maqāsid al-falāsifa*, ed. S. Dunya, Cairo, Dār al-ma'ārīf, 1961, p. 233, l. 21.

feature (“characteristic”) of being related to this thing. The very fact of being a knowing subject, writes Avicenna, is something and is based on some feature in the ipseity of the knower, this feature consisting of one thing being added to the knowing subject and resulting in a state. Second, this feature of the knowing subject, this *şifa*, is not identical, writes Avicenna, to the state of a thing being to the right of another thing, since this other thing can move, and the first thing, therefore, would no longer be on its right, without its essence having changed.

Knowing X, therefore, is not like being to the right or left of Y, since knowledge, unlike the pure relation that is position, as a feature, as a *şifa*, is ontologically committing, so much so that, when the object changes, not only does knowledge change, but the knower does as well, in his essence³². This cannot hold true for God and forces us, as a result, to posit another way in which the Necessary Being knows particulars.

It is obvious that al-Ġazālī, in the *Tahāfut*, draws his reconstruction of the philosophers’ position from this passage. But there are other similar passages, of course, with interesting lexical nuances. In the *Metaphysics of the Healing*, for example, ch. III, 10, Avicenna distinguishes several (at least three) kinds of relation, and after talking about a purely external relation to relatives, such as being to the right or to the left, he talks about a relation, where, this time, one of the relatives is based on an internal state of the subject, and he takes the example of knowledge³³. The knower is relative to the known, and

³² For the sake of completeness, we – or Avicenna – should add that the relation to the object is included in the essence of that *şifa*, which is itself in the essence of the knower.

³³ Avicenna, *The Metaphysics of the Healing*, III, 10, p. 117, l. 34 *sqq.*: “The relatives may be two things that do not require some other thing from among the things that have residence in the relative by virtue of which a relation between the two would occur. An example of this is that which is to the right of <something>, or to the left of <it>. For in that which is to the right of <something> there is neither a quality nor any other resident state of affairs through which it becomes related <as> being to the right of. <There is nothing that makes it so related> other than <its> very being to the right. <On the other hand> it may be required that

in the knower, inasmuch as he knows, a quality is formed (*kayfiyya*, according to the text) on which his relationship to the object known is established.

We find the same thing, but said differently, in *Al-Ta'liqāt*³⁴, which as Jules Janssens has convincingly shown, partly constitutes the original Arabic of the *Dānesh-nāmeḥ*³⁵. Indeed, we find there the idea that the knower is connected, related to the known thing by virtue of a disposition (*ḥayʿa*) that occurs in its essence. In knowledge, therefore, we are not dealing with a relation that is only a relation (which is the case of being to the right or to the left), but with an internal disposition of the subject associated with a relation – and a relation (it's not said here) which is included in the reality of this disposition.

We can see quite well what al-Ġazālī, who is responding to these texts, is doing. For him, the model should (or could) be thrown away, or, better still, turned on its head, in order to think correctly about God's knowledge of particulars (and reject the philosophers' conclusion). Turning it on its head means considering that divine knowledge of the thing as contingent, God's knowledge in its relation to the occurrence of a thing is without a qualitative or dispositional counterweight (foundation, property) *whose relation to the temporality of*

there should be in each of the two related things something by virtue of which it becomes related to the other, as in the case of the one who loves and the one who is loved. Thus, there exists in the lover an apprehending state, which is the principle of relation, while in the beloved there is an apprehended state which renders him loved by the lover. Such a thing may exist in one of the two things but not <in> the other, as in the case of the knower and the <object> known. For there has occurred in the essence of knower a quality (*kayfiyya*) – namely, knowledge – in terms of which he became related to the other. But no other thing has occurred in the essence of the object known: it became related only because something in the other had occurred – namely, knowledge.” Cf. *idem*, *Al-Mubāḥaṭāt*, ed. M. Bidārfar, Teheran, 1992, p. 93.

³⁴ Avicenna, *Al-Ta'liqāt ʿalā ḥawāšī Kitāb al-naḥs li-Ariṣṭūṭālīs min kalām al-ṣayḥ al-Raʿīs Abī ʿAlī Ibn Sīnā*, in ʿA. Badawī, *Ariṣṭū ʿinda al-ʿarab*, Koweit 1978, p. 13, l. 4.

³⁵ See J. Janssens, “Le *Dānesh-nāmeḥ* d’Ibn Sīnā: un texte à revoir?”, *Bulletin de philosophie médiévale*, 28 (1986), p. 163-177.

the object (the knowledge of X as... yet to come, present, future) *would be included in its reality*³⁶, and therefore would affect God Himself, and must (or rather could) be considered – contrary to what Avicenna says – as a purely extrinsic relation.

Let's now turn to Averroes. In the *Tahāfut al-tahāfut*, he immediately responds to the text we've read:

This sophistry is based on the assimilation (*tašbīh*) of divine knowledge to human and the comparison (*qiyās*) of the one knowledge with the other, for man perceives the individual through his senses, and universal existents through his intellect, and the cause of his perception is the thing perceived itself, and there is no doubt that the perception changes through the change in the things perceived and that their plurality implies its plurality.

As to his answer that it is possible that there should exist a knowledge the relation of which to the objects known is that kind of relation which does not enter into the essence of the thing related (*yakuna hāhunā ʿilm nisba al-maʿlūmāt ilay-hi nisba al-muḍāfāt allatī laysa al-idāfa fī ḡawhari-hā*), like the relation of right and left, to that which has a right and a left – this is an answer which cannot be understood from the nature of human knowledge (*fa-šayʿ lā yuʿqalu min ṭabīʿat al-ʿilm al-insāniyy*)³⁷.

When we consider Averroes' response, what is striking is its brevity. As often, he destroys in a few words al-Ġazālī's whole argumentation just condemning it as pure "sophistry". However, these ten lines are interesting. Al-Ġazālī, Averroes says, makes a double mistake: (a) first, he should not have taken human knowledge as a basis for conceiving of God's knowledge (as if human knowledge could be here an appropriate model); (b) second, he misunderstands what human knowledge is because such knowledge can't supply the paradigm of a pure relation that he is looking for (*i. e.*, of a relation without ontological commitment), given that human knowledge reveals an essential

³⁶ So, the solution is not (a) to deny in God any *šifa* and (b) to apply the notion of pure relation to the link between knower and object, but (c) to apply this notion to the link between knower and *the object's location in time*.

³⁷ Averroes, *Tahafut al-tahafut (The Incoherence of the incoherence)*, p. 279 sqq. (*Tahafot at-tahafot*, ed. M. Bouyges, p. 460 sqq.)

relation between knowledge and the (changing) object known.

Put another way, for Averroes, Avicenna is clearly wrong when he claims that God knows in a universal way, but he's not wrong when he thinks that human knowledge involves ontological commitment. And al-Ġazālī, for his part, is wrong not only when he builds on human knowledge to infer something about God, but also when he claims to infer something that human knowledge in itself *does not allow* (that is to say, the idea that to know something as... could be a pure relation, as if entailed by the reality of knowledge evident in human knowledge).

We have now to consider the appendix to the *Faṣl al-maqāl* ("Decisive Treatise"), the *Damīma*. Averroes notices that al-Ġazālī's solution uses this concept of relation (and more specifically, of pure relation), on the one hand, and on the other, he also responds within the framework of relation, at first in any case:

Abū Ḥāmid <al-Ġazālī> wanted to resolve this doubt in his book entitled *The Incoherence <of the philosophers>* by means of something not persuasive. That is because he made a statement whose meaning is this: he claimed that knowledge and what is known are related; and just as one of two related things may change and the other related thing not change in itself, so is it likely to occur with things in God's knowledge (may He be glorified). That is, they change in themselves, but His knowledge of them (may He be glorified) does not change.

An example of that with respect to what is related is for there to be a single column on Zayd's right, then for it to come to be on his left while Zayd has not changed in himself. And that is not sound, for the relation has changed in itself. That is, the relation that was right<-handed> has come to be left<-handed>. What alone has not changed is the subject of the relation, that is, the one bearing it – namely, Zayd. If that is so and if knowledge is itself the relation, then it must have changed when what is known changed, just as the relation of the column to Zayd changes when it <the column> changes – that is, when it comes to be left<-handed> after having been right<-handed> ³⁸.

³⁸ Averroes, *Epistle Dedicatory*, transl. Butterworth, in *idem*, *Decisive Treatise & Epistle Dedicatory*, p. 40.

According to al-Ġazālī, says Averroes, knowledge and the object known are like relatives, implying relatives connected to one another in a pure relation (without anything intrinsic in them underlying this relationship and changing along with the changing object). They are therefore connected as relatives in a pure relation. And, just as, in this case, one of the relatives can change (*tagayyara*) without the other changing, the things that God's knowledge knows (meaning here: terrestrial particular things) can change, without God's knowledge changing itself.

And to illustrate this, the same example of the column is used. A column could be located to the right of Zayd, then to his left, if the column changes and moves, but in himself, Zayd would not have changed. A change in the predicate (to the right of X, then to the left of X) does not correspond to any alteration, any essential variation. That is, according to Averroes, what al-Ġazālī is claiming: that God's *knowledge* of particulars must be considered as a column (if, this time, the column doesn't move...) about which one will say, without implying a change in it, that it is sometimes to the right of X, and sometimes to the left of X; like knowledge, in other words, whose relation to a particular moving object would not essentially alter it.

Well, says Averroes, this argument obviously does not work. Something isn't quite right in al-Ġazālī's analogy, which applies pure relation to God's *knowledge*.

Let's go back to the example of the column. It is true that the column doesn't change in itself when the individual moves to its right. But what is the column's equivalent in the case of divine knowledge? It could not be – as al-Ġazālī claims – God's *knowledge*, since knowledge *is* the relation, not the bearer of the relation. Knowledge is the relation, and this knowledge changes when the object changes, even if the bearer, the subject of the relation, does not change in himself. Thus, in this well-understood model, we can in no way save the immutability of divine *knowledge*.

A quick reading of Averroes' appendix gives the impression that he criticizes the paradigm of pure relation, as further developed by

al-Ġazālī³⁹. Al-Ġazālī was wrong to posit that God’s knowledge of an eclipse, for example, that will happen, and then happens, would be analogous to the state of the column that is to the left of Zayd, then to his right. Al-Ġazālī was wrong to imagine that he could predicate of God the predicate: “knower of X as future” or “knower of X as past”, just as we predicate of the column, sometimes the predicate “to the left of...”, and sometimes the predicate “to the right of...”, that is, by extrinsic denomination, by virtue of a pure relation, *and thus*, without any *varying* ontological commitment.

Why is this noteworthy? Because this model, whose use Averroes contests here, seems to be exactly the same as the one he uses as a reader of Aristotle – in a strictly philosophic way, therefore – when he comments the end of the chapter of ch. VII, 3 of Aristotle’s *Physics*⁴⁰.

I cannot treat the matter in depth here⁴¹, but let it suffice to recall that at the end of *Physics* VII, 3, Aristotle wishes to establish that the coming of a thought in the intellect, its original appearance, is neither an alteration nor a generation – that a concept does not occur, for example, like water that is boiled by becoming hot, or like a color appears on a white surface that progressively darkens⁴². Thought, knowledge,

³⁹ Here, I do not agree with M. Di Giovanni, “Philosophy incarnate: Ibn Rushd’s ‘Almohadism’ and the problem of God’s omniscience”, p. 148 sq.

⁴⁰ On *Phys.* VII, 3, see R. Wardy, *The Chain of change: A study of Aristotle’s Physics VII*, Cambridge, 2007; S. Maso, C. Natali, G. Seel (ed.), *Reading Aristotle’s Physics VII.3, “What is alteration?”*, Las Vegas (Nev.), 2012; G. Verbeke, “L’argument du livre VII de la *Physique*: Une impasse philosophique”, in I. Düring (ed.), *Naturphilosophie bei Aristoteles und Theophrast*, Heidelberg 1969, p. 250-267; repr. in *idem*, *D’Aristote à Thomas d’Aquin: Antécédents de la pensée moderne*, Leuven, 1990, p. 147-166; R. Brague, *Aristote et la question du monde: Essai sur le contexte cosmologique et anthropologique de l’ontologie*, Presses universitaires de France, 1988, p. 418 sq.

⁴¹ See J.-B. Brenet, “Pensée, dénomination extrinsèque et changement chez Averroès: Une lecture de *Physique* VII, 3”, *Archives d’histoire doctrinale et littéraire du Moyen Âge*, 82 (2015), p. 23-43; *idem*, *Je fantôme: Averroès et l’espace potentiel*, Lagrasse, Verdier, 2017, ch. 8; *idem*, *Averroès l’inquiétant*, Paris, Les Belles Lettres, 2015, ch. 10.

⁴² To be more precise: *Physics* VII, 3 deals with alteration (*alloiosis, istihāl, alteratio*). It explains what alteration is, what alteration really is, and tries to show

the *habitus* of knowledge, occurs, to be sure, but not through a motion, nor as a motion. Why is that? Because, according to Aristotle's text: that which possesses knowledge belongs eminently *to relatives*. If the states of the intellectual part of the soul cannot count as an alteration, it is because these states of the intellectual soul, their acquisition, their use and their loss, are *relatives*, rather than qualities. Aristotle writes (247 a 28 sq.):

No alteration belongs to the intellectual part of the soul either. For that which knows (τὸ ἐπιστήμον) is mostly said in the <category> of relation (μάλιστα τῶν πρὸς τι λέγεται). This is clear from the fact that the <phenomenon> of knowledge does not arise in those who have undergone change according to some potentiality, but only if something <else> is present (κατ' οὐδεμίαν γὰρ δύναμιν κινήθεισιν ἐγγίγνεται τὸ τῆς ἐπιστήμης, ἀλλ' ὑπάρξαντός). For we acquire knowledge of the universal from the experience of particulars⁴³.

that certain changes that might have looked like alterations are not in fact alterations. The reasoning is the following: (a) we could say that alteration is a change in the category of quality. And that's right; (b) but, given that there are different kinds of quality, what kind of quality, so to speak, is the good one? To what kind of quality does the phenomenon of alteration correspond? We must keep in mind Aristotle's *Categories* VIII, where Aristotle says that there are four kinds of quality (state and condition; natural capacity or incapacity; affective qualities and affections; shape and external form). So, which one corresponds to alteration? (c) Aristotle answers that alteration corresponds to the third kind: affective qualities and affections. This means that there is alteration, strictly speaking, only when there is a change involving these affective qualities, a change caused by these affective qualities. Put another way: alteration occurs solely in perceptible qualities. But that means, that (d) a "modification" in shapes and forms (the fourth kind of qualities), a "modification" in the taking on and casting off of them, is not an alteration, and also, that a "modification" in states and conditions (the first kind), *is not* an alteration, and so on. And that is what he tries to show *Physics* VII, 3.

⁴³ Two versions of *Physics* VII exist, and the version B, which is shorter and more elliptical, and which is not considered nowadays the best witness of Aristotle's teaching, is the one known and read by the arabs (and then by the latins). So I read the version B, and from now on I'll quote this version: Aristotle, *Physics*, VII, 3, version B (translation taken from: S. Maso, C. Natali, G. Seel (ed.), *Reading Aristotle's Physics VII*, 3, p. 29 sq.).

Let me restate the three main claims. 1) First, consider the general principle: *no alteration belongs to the intellectual part of the soul*. In fact Aristotle wants to show three things: (i) that there is no generation of states; (ii) that these states *in themselves* are not alterations; and (iii) that neither their acquisition nor their use is a generation or an alteration. The quoted paragraph focuses on the acquisition of knowledge rather than on the state that results from it, and it emphasizes that the original grasping of knowledge is itself neither a generation nor an alteration. 2) Second, consider the justification for this general principle: if no alteration belongs to the intellectual part of the soul, the reason is that what knows is mostly or pre-eminently said in the <category> of relation (“mostly” is important, because we should remember that Aristotle tends also to regard states as relatively stable *qualitative* conditions). So, knowledge, or thought occurs in the intellect as a relation, or perhaps, even better: *according to a relation*. It is not a question here of simply recalling that all knowledge is knowledge *of* something, but rather understanding that there is a *sui generis* mode of production of the relative, which instantaneously comes into being as soon as *another thing*, namely its correlative, is there. 3) And this is the third claim of our sentence: that which knows is mostly considered to be in the category of relation, says Aristotle, and in fact, knowledge occurs, not on account of a change in the intellect, but only – this is the crucial point, though at first a little bit enigmatic – *when something is present*.

In commenting on this⁴⁴, Averroes presents the appearance of

⁴⁴ Aristūṭālīs, *al-Ṭabī‘a*, ed. °A. Badawī, Cairo, 1964-1965, vol. 2, p. 762:

ولا في الجزء المميّز أيضاً من النفس تكون الاستحالة، فإنّ العارف أحقها بأنّ يكون إنما يقال من باب المضاف؛ وذلك بيّن من قبل أنّ المعرفة ليس تكون في العارف بأنّ قوة من القوى أصلاً تتحرك، بل إذا كان شيء ما.

“In the discriminating part of the soul, there’s no alteration either; actually, the knower is worthier to be said in the category of the relative. And this is clear by the fact that knowledge is not at all in the knower because a power would be moved, but when there is something.” Cf. Averroes, *In Phys. VII*, in *Aristotelis Opera cum Averrois Commentariis*, Venice, Apud Iunctas, 1562, vol. IV, f. 323B:

knowledge in the intellect as a pure relation. When the knower knows, the strictly knowing part in him, namely, the intellect (the text speaks of the *pars distinguens*, *al-juz' al-mumayyiz*), doesn't change; there's no alteration (*alteratio*; *istiḥāl*) in the intellectual part of the soul; if there is a change, so that this knowledge occurs, it is not a change in the knowing part, but a change in the body, in the *pneuma*, in the rest of the soul. Why is it the case? Why is there no alteration in the intellect? Because that which knows, the *cognoscens*, *al-ʿārif*, is mostly said in the category of relation (*mudāf*; *ad aliquid*), rather than in the category of quality. And as Aristotle puts it in *Physics* V, 2 there is no change in respect of relatives. But what shows that it is the case? The fact that when that which knows (the intellect, in fact) knows, it is not moved in itself, since knowledge occurs only because something is present, or, the text says more vaguely, "because there is something": *iḍā kāna šay' mā*.

It's not immediately clear, but we can easily understand (when we read what follows) what this "something" is, and what it means: when the intellect grasps and knows the universal, it is not moved or altered, and this knowledge, as a *hexis*, as a state, is not generated in itself. There is no process, with a beginning and an end. Knowledge simply occurs, instantaneously, when the particulars are present from which this universal is taken, abstracted, or to which it corresponds. As soon as these particulars are correctly disposed, present, in our sensitive soul, the intellectual part of this soul immediately grasps the corresponding universal, and the intellectual state, immediately, occurs, comes to be, without having been generated in itself, and without any real alteration in the intellect⁴⁵.

Neque est in parte distinguente de anima est alteratio. Cognoscens enim dignius dicetur de capitulo ad aliquid. Et hoc manifestum est quoniam cognitio non est in cognoscente ita quod aliqua potentia omnino moueatur, sed cum aliquid fuerit.

⁴⁵ Cf. Averroes, *In Phys.* VII, ch. 20, f. 323I: "After having explained that knowledge does not occur in us in such a way that <our> knowing part would be changed, but because something else is changed, he says what is this other thing, and he says: 'from experience', etc., that is: knowledge occurs in us when a change is produced by the reception and the consideration of particulars, since, when we examine

But this brings us back to al-Ġazālī's text, because to illustrate his point, Averroes first uses two examples: the first one is the example of the mirror (which is not very frequent in Averroes, compared, for example, to Avicenna⁴⁶), and the second one: the example of the column.

Our soul, Averroes says, or rather, our intellect, receives the universal form, or knowledge, or a scientific state, having been prepared accordingly, as soon as it has been suitably prepared, exactly as a mirror is prepared by its polishing to receive light or the forms of the objects when these objects are present, obviously, in the required conditions. The first grasp of knowledge, the coming to be of a universal form in us (of a scientific or intellectual state, if you want), which is neither generation nor alteration, is tantamount to the reception, in a mirror, of light, of colors, of external forms. When the iron of the mirror is well polished, and if light comes in, the mirror instantaneously reflects the forms placed in front of it, without any real change or alteration being made in the mirror itself. The second example of the column illustrates the same point: it is possible that without something changing at all, a different relational property becomes true of it. And here, according to Averroes, Aristotle seems to describe the "passage" (or the "jump") from potential to actual knowledge as a relational change, in so far as the knower, in fact, does not change, but

the particulars, from that occurs a universal knowledge in us according to a relation to them, that is, when there is in us more than one particular from one single species, a universal species immediately occurs in us, without any change occurring in it." *Et cum narravit quod cognitio fit in nobis, non ita quod pars cognoscens transmutetur, sed aliud, dixit quid est illud aliud, et dixit: Quoniam ex experientia etc., id est quoniam cognitio fit in nobis, quando transmutatur per receptionem particularium, et considerationem eorum, quoniam cum consideramus particularia, fit ex hoc cognitio uniuersalis in nobis secundum relationem ad illa, scilicet quod cum apud nos fit ex aliqua specie plus quam unum particulare, statim fit in nobis species uniuersalis absque eo quod in ipsa fiat transmutatio.*

⁴⁶ On this, see D. de Smet, M. Sebti, G. de Callatay (ed.), *Miroir et savoir: La transmission d'un thème platonicien, des Alexandrins à la philosophie arabomusulmane*, "actes du colloque international tenu à Leuven et Louvain-la-Neuve, les 17 et 18 novembre 2005", Leuven University Press, 2008.

something, the knowable object, enters in a relationship to him. We read:

Then <Aristotle> says: “and this is clear”, etc., *i. e.* the fact that knowledge doesn't occur in the knowing <subject> in such a way that the knowing part <itself> would be changed, but that it occurs when something else is changed, as it is the case with all the relatives, for example a column <placed like this or like that>. Actually, it's not the column in itself that changes when, placed on the left, it comes to be on one's right, but it is something else, for example Socrates. And it's the same with the production of knowledge, since this does not occur due to the fact that the knowing part <itself> is changed, but because it's something else that is changed, that is, that in respect of which this knowledge is said⁴⁷.

The advent of knowledge in the knowing part is not a change in the knowing part itself, no more than, according to Averroes, the advent of the predicate: “to the right” for the column, replacing the previous one: “to the left”, is a change in the column itself, of the column itself, when it is Socrates, who has moved *in reality*. In the case of relatives, Aristotle argues (in *Physics* V, 2), it may happen that when one correlative changes, the other gains a new relational property without being changed: it is only accidentally changed, not *per se*: the column accidentally changes when I am turning in circles around it. The argument, at first, is a striking one because it means that when I say “my knowing part knows” (if I could say that), I seem to predicate of my intellect a new predicate at a certain moment in time, without this new predication, and the truth of this predication, hinging on any change whatsoever in the intellect itself.

So in Averroes as a commentator of this thorny passage in Aristo-

⁴⁷ Averroes, *In Phys.* VII, ch. 20, f. 323H: *Deinde dicit: Et hoc manifestum est etc., idest quoniam cognitio non fit in cognoscente, ita quod pars cognoscens sit transmutata, sed fit quando aliud aliquid transmutatur, sicut est dispositio in omnibus relatiuis, verbi gratia in columna. Columna enim non transmutatur in se, quando de sinistra posita est in dextra, sed aliud, verbi gratia Socrates. Et similiter est dispositio in factione cognitionis, quoniam hoc non fit ita quod pars cognoscens transmutetur, sed quod aliud transmutatur, et est illud in respectu cuius dicitur illa cognitio.*

tle, it is the paradigm of pure relation that intervenes to remove the human intellect, in its exercise, from alteration and change, and it's apparently the same paradigm Averroes condemns in al-Ġazali, when the latter applies it to divine knowledge in order to preserve God's immutability. Averroes criticizes al-Ġazālī for applying this paradigm of pure relation (the image of the column) to God's knowledge, but then he proceeds to use it himself in his commentary on the *Physics*, in application to human knowledge.

How are we to understand all of this, and furthermore, is there a contradiction, or an incoherence? No, there is none. What Averroes criticizes al-Ġazālī for, in the *Tahāfut al-tahāfut* and in the *Damīma*, is using the paradigm of pure relation – wrongly – to explain the invariability of divine knowledge. What he does, in the *Long Commentary on the Physics*, is to use the same paradigm to explain, in keeping with Aristotle, the fact that knowledge, thought, does not occur as a motion, as a generation, as an alteration. That is what the example of the column here is used for: man is like a column when he is thinking, since thought occurs according to a relation, *and not because thought doesn't change when the object changes*.

Let me conclude with a few words. What we have seen allows us to make, I think, two claims: first, the technical notion of relation (as principally elaborated in Aristotle's *Categories* and in his *Physics*) is at the center of the discussion, in philosophical theology, concerning God's knowledge of particulars; second, Averroes doesn't always use this notion in the same way, since it is used, on the one hand, against al-Ġazālī, who promotes its theological relevance in order to understand divine knowledge, and, on the other hand, in his own philosophical system, in order to understand the coming to be of an intellectual disposition (*habitus*) in the human mind. Thus considered, the notion of relation is a nice example of an Averroean concept that is both wide-ranging and multi-faceted.

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