

Is '*Deus scit quicquid scivit*' an epistemic *sophisma*?

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I

A *sophisma* is "an ambiguous, puzzling or simply difficult sentence that has to be solved",² for which there are *prima facie* arguments for and against its acceptance; '*sophisma*' can also designate the series of arguments of the *probatio* and the *improbatio*. The arguments can depend solely on the signification of the sentence, or on some stipulated situation, a *casus*. I will refer in a broad sense to a sophismatic sentence in which there is an epistemic term, such as '*scit*' or '*ignorat*', as an 'epistemic sophism'. Not every epistemic *sophisma* broadly conceived deals with epistemic problems. By taking the arguments into account, we can offer a more fine-grained classification of epistemic *sophismata*, dividing them in pseudo-epistemic, quasi-epistemic and epistemic narrowly conceived.³ This classification concerns *sophismata* conceived as arguments, or series of arguments, not as sentences. It is interesting, however, to track different arguments associated with the same sentence, and therefore to individuate a *sophisma* as a sentence, as I do in the title of this paper. Instead of making a stipulation, I will ask the reader to bear in mind the somewhat instable character of these categories.

A pseudo-epistemic *sophisma* is an epistemic sophism whose proofs and disproofs do not depend on the epistemic term that figures in it. An example of a pseudo-epistemic sophism is '*impossibile est te scire plura quam scis*'. They figure, for instance, in two tracts from the beginning of the thirteenth century edited by L.-M. De Rijk, the *Tractatus Vaticanus* and the *Tractatus Florianus*.⁴ The series of *sophismata* in the first of these tracts begins with the famous '*album esse nigrum est possibile*', and the second tract includes the same sophism in a chapter dealing with modal propositions (*de propositionibus modalibus*). This sophism can be solved by distinguishing between the *de dicto*

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² Fabienne Pironet, "*Sophismata*", *Stanford Encyclopedia of Philosophy*, <<http://plato.stanford.edu>>, p. 1

³ I have proposed this classification in another paper, "Sophismes épistémiques : un essai de classification", to appear in the acts of the 2003 Geneva colloquium on *Sophismata*.

⁴ L.-M. De Rijk (ed.) *Some Earlier Parisian Tracts on Distinctiones Sophismatum*. Artistarium, 7. Nijmegen; Ingenium. 1988; *Tractatus Vaticanus*, p. 31; *Tractatus Florianus*, pp. 54-55.

and the *de re* readings: the modal term '*impossibile*' can be attributed either to the whole *dictum*, and then the sophism is true, or only to the *subiectum dicti*, and then the sophism is false. The argument does not depend at all on the term '*scire*'.¹

A quasi-epistemic sophism is a sophism whose *probatio* and *improbatio* are based on the epistemic term (or at least on one of the epistemic terms) that appears in it, exploiting features that are not proper to epistemic terms. One example of this category is '*Sortes decipitur nisi ipse decipiatur*'. The *Tractatus Florianus*, again, examines it along with sophisms that are not epistemic, like '*nihil est verum nisi ipsum sit falsum*' and '*nullus homo legit Parisius nisi ipse sit asinus*'.² The common problem of these *sophismata* seems to be the (possible) reflexivity of one of its terms ('*decipitur*', '*ipsum*', '*ipse*'), the denotation of falsity in two cases, i.e. the fact that the sentence signifies that one sentence, possibly itself, is false ('*decipitur*', '*falsum*'), and the implication (or a biconditional) associated with a negation by '*nisi*'.³ In the alethic sophism '*nihil est verum nisi ipsum sit falsum*' the argument runs as follows: from '*nihil est verum nisi ipsum sit falsum*' we obtain '*si non nihil est verum, ipsum est falsum*', that is equivalent to '*si aliquid est verum, ipsum est falsum*' (replacing '*non nihil*' by '*aliquid*'), an obviously absurd sentence. The argument depends on the reflexivity of '*ipsum*' and on the negation signified by '*nisi*'. In the epistemic version, '*decipitur*' is responsible both for the signification of the falsity of a proposition (that is, of the negation of the proposition that is believed by Socrates) and for the reflexivity. These features do not belong only to epistemic terms, as falsity and reflexivity can also be signified by terms that are not epistemic. Indeed, this is the case with the alethic sophism '*nihil est verum nisi ipsum sit falsum*'. One of the most interesting versions of '*Sortes decipitur nisi ipse decipiatur*' is due to William of Heytesbury.⁴ According to him, the crucial aspect of the sophism is that belief is a derivative notion: a belief must be about something. We see lurking the grounding paradox that concerns alethic predicates: for a proposition to be true (or false) it must be

¹ "Prima est duplex ex eo quod iste modus <im>possibile' potest attribui totali dicto, scilicet *te scire plura quam scis*'. Et sic prima est de dicto. Et sic probatur et sic est verum. Et est sensus : hoc dictum *te scire plura quam scis* est impossibile. Hoc enim dictum non potest nec potuit nec poterit esse verum. Ergo est impossibile. Et sic probatur. Vel isto modus 'impossibile' potest attribui subiecto dicti, scilicet huic quod est 'te'. Et sic est falsa. Et est sensus : 'tu non habes potentiam modo ut in alio tempore scias plura quam scis modo'. Et sic improbat." *Tractatus Florianus*, I, 7, p. 54-55.

² *Tractatus Florianus*, p. 57.

³ "'Nisi' consequentiam denotat cum negatione'", *Magister abstractionum* (unpublished edition by Mary Sirridge and Paul Streveler)

⁴ See section III, below.

about something. A similar lesson follows from the famous paper «*Buridan and Epistemic Paradox*» by Tyler Burge: some of the paradoxes about knowledge and belief have their roots in the reflexivity and derivative character of these notions, and in this regard, they are similar to the notions of truth and necessity.¹ These *sophismata* are quasi-epistemic.

Epistemic sophisms narrowly conceived are those whose proof and disproof arguments depend on features that belong only to epistemic terms. The third part of chapter IV of Buridan's *Sophismata* is constituted, at least *prima facie*, by this kind of *sophisma*. One example is '*tu scis denarios in bursa mea esse pares*'. The *casus* is a variant of Eubulides' famous hooded man paradox: I have two pennies in my purse, and you know that two is an even number, so you know that the number of pennies in my purse is even. But you believe that I have only one penny in my purse, and so believe that I have an odd number of pennies in my purse. In a nutshell, the solution is that such verbs as 'know' and 'believe' make the terms that follow them appellate the reasons under which they were imposed: of the number of pennies in my purse, you know that it is even, but you do not know that the number of pennies in my purse is even, indeed, you believe it to be odd. This solution concerns only verbs relative to "mental acts" that cause the *appellatio rationis*, the subject of this part of Buridan's *Sophismata*.

Some problems concerning the classification of sophisms start to pop up. To begin with, it is evident that the solution of the sophism '*tu scis denarios in bursa mea esse pares*' depends on a distinction of the scope of the verb, and this seems to be precisely the point of the distinction between *de re* and *de dicto* readings of a sentence. Moreover, the list of the verbs producing the *appellatio rationis* includes 'to signify' (*significare*),² and it is not obvious that this is an epistemic term. We can see the reason for the caution alluded to above: the proposed classification does not seem to be adequate even for such a well organized collection of *sophismata* as Buridan's.

As I have already noted, these categories are not meant as a classification of the sophismatic sentences, but as a means of seeking an understanding of the arguments associated with them, which seems to be the appropriate level for a philosophical classification. This fact has important consequences for the approach to the texts. If we concentrate on arguments, the same sophism can

¹ *Philosophical Studies* 34 (1978), pp. 21-35. Burge examines the sophisms '*Socrates scit propositionem scriptam in pariete esse sibi dubiam*' and '*Socrates sedet vel diijunctiva in pariete est Platoni dubia*' from chapter VIII of Buridan's *Sophismata*.

² John Buridan, *Summulae de Practica Sophismata* (ed. F. Pironet), Artistarium, 10-9. Turnhout; Brepols. 2004. cap. IV, tertia pars, p. 20, l. 20-23.

belong to different categories in different sophismatic collections – a *sophisma* may be called pseudo-epistemic, quasi-epistemic or epistemic in the narrow sense in some given author or text, as I have done above. The feeling of anxiety grows: the *probatio* and the *improbatio* are argumentative series that may well include different kinds of arguments. Knowing the medieval taste for the multiplication of arguments, we might fear that more than one of the proposed categories will often be found in the same text, and so the classification will be useless. While this is a possibility, we may find some relief in another consideration: the particular occurrences of sophisms in the sophismatic collections often have a hierarchical order, so that we can single out the argument that decides the truth-value of the sentence examined. We may also expect to find an order in the organization of the texts; while this may reflect a traditional way of understanding the *sophismata*, it mainly shows the comprehension of the problems at stake in each situation (we have seen this phenomenon in the examples above). The point of these rather abstract considerations will appear in the examination of a specific sophism.

II

I will take as my object of analysis different versions of the sophism '*Deus scit quicquid scivit*'. This *sophisma* appears in theological contexts, in particular in *Sentences*, I, d. 41, whose problem is described by Sten Ebbesen in the following way:

... how to describe an immutable God's knowledge of a temporally fixed event at different points of time, before, during, and after the event.¹

This description may be historically accurate, and may well explain the origin of the sophism, yet I think it somewhat misleading as far as the conceptual classification of the arguments associated with this sophism is concerned. The arguments associated with this sophism, at least in the texts I have examined, do not deal with the theological problem of divine knowledge, for it is not primarily about knowledge; it is not an epistemic sophism narrowly conceived, but a quasi-epistemic sophism. This paper will try to justify this claim.

I will begin by examining an anonymous text edited by Ebbesen and dated by him to the first half of the thirteenth century, sophism 10 of the *Sophismata*

¹ Sten Ebbesen. Doing Theology with Sophismata. Marmo, Constantino (ed.) *Vestigia, Imagines, Verba – Semiotics and Logic in Medieval Theological Texts (XIIth-XIVth Century)*. Brepols. 1997. p. 156

Parisius determinata a maioribus magistris tam Gallicis quam Anglicis
transmitted by ms. Vat. lat. 7678.

The *probatio* and the *improbatio* go as follows:

Probatio. Deus scivit omnia, et non est aliqua transmutatio facta in ipso, ergo Deus scit quicquid scivit.

*Contra. Deus scit etc., sed [[non]] scivit te <fore> nasciturum, sed quicquid scitur est verum, ergo te fore nasciturum est verum, ergo tu es nasciturus.*¹

The arguments are presented in a clear way:

Probatio:

1. *Deus scivit omnia,*
2. *et non est aliqua transmutatio facta in ipso,*
3. *ergo Deus scit quicquid scivit.*

Improbatio

4. *Deus scivit te <fore> nasciturum,*
5. *Ergo scit te fore nasciturum* [by 3 and 4]
6. *sed quicquid scitur est verum,*
7. *ergo te fore nasciturum est verum,*
8. *ergo tu es nasciturus*

The conclusion 8 is obviously absurd, and so is 7, to which it seems to be equivalent. It is not clear which premise must be abandoned. To refuse 4 would be equivalent to denying God's omniscience; 6 seems a well established thesis about knowledge. 5 follows from 3 and 4, and 3 seems to be a valid conclusion from the premises 1 and 2, themselves well entrenched theological theses.

As is usual among medieval scholars, the first stage of the solution is a distinction: *scientia* is in one way in the first cause and in another way in men. In man, the *scientia* is caused by things, and in the first cause, the *scientia* causes things. The fact that human science is caused explains its truth-condition (premise 6 above). The conclusion is that the truth-condition for knowledge is a derivative notion that can be blocked for divine science. This is precisely what sophism 38 of the same manuscript does. Those who accept the distinction between *scientia causans res* and *scientia causata a rebus* can concede the inference '*Deus scivit te non esse, ergo scit te non esse*',

¹ Sten Ebbesen. *Deus scit quicquid scivit*. Two sophismata from Vat. lat. 7678 and a reference to Nominales. *Cahiers de l'Institut du Moyen Age Grec et Latin*. 62 (1992), p. 183 – henceforward referred to as "Ebbesen 1992a".

... *sed ulterius non sequitur 'ergo tu non es', quia haec propositio 'quicquid scitur est verum' intelligitur solum de scientia causata a rebus.*¹

This distinction blocks the move from 4-6 to 7, for 6 does not apply to divine science, and so the sophism can be true about divine knowledge.

Essentially the same argument occurs in sophism 10. Just as for the human knowledge, the inference '*A exists, so the knowledge of A exists*' is not to be accepted, for a cause can exist without its effect, so God's knowledge can exist without what it causes. For this argument to be effective against the *improbatio*, it must block the conclusion 7, and this can be done only by rejecting 6. Divine knowledge of a *dictum* can exist without causing it to be true; God can know something that does not exist, that is, that is not true.

This answer is properly epistemic, depending on a distinction concerning two senses of the verb '*scire*', as applied to God and to creatures (or as it causes or is caused by things). However, it does not seem to be a satisfactory solution. In the *casus* of the sophism 10, you are already born, so what God knows (5) is not the case. For this to be a good answer to this problem, God would have to cause that you are yet to be born, so that His knowledge that can cause your birth can exist without causing it; He would have to undo the past, an implausible metaphysical thesis. If one is not willing to accept this, then it is not clear how this distinction can act as a solution to this *sophisma*. Indeed, He could have caused, in the past, that it be true now that you were still to be born, but then we should say that He could have known that you were still to be born, but not that He knows it now. Anyway, if, *per impossibile*, we granted that God could undo the past, he would have changed the *casus*. Not only does this seem to be a high metaphysical price to pay in order to explain God's knowledge of a changing world, but it is not even clear how this could be a solution to the sophism.

This is not the direction of the sophism. The *scientia causans res* exists both in God and in the *artifex*; if the solution is to depend solely on the distinction between the *scientia causans res* and the *scientia causata a rebus*, the *per impossibile* reasoning above (whose sufficiency is not beyond doubt) is not at our disposal. In a sense, it is clear that the *artifex*'s knowledge that causes the creation of an object exists at a time *t* when he does not use it, but that does not mean that his knowledge can cause, at a later time, the creation of the object at *t*. This solution is refused because neither the *artifex* nor God can be said to know a non-existent object in this sense.² At first sight, the author seems to

¹ Ebbesen, 1992a, p. 188.

² "Verbi gratia, scientia quoniam triangulus habet tres causatur a rebus, sed scientia quae est in artifice faciendi domum non causatur a domo, sed domus causatur ab

underestimate the possibilities that this distinction opens: if the knowledge of the *artifex* is the cause of the construction of the house, it can exist without the house. The point however is that a knowledge concerning a particular object cannot be based on the mere capacity to produce a given kind. A retired *artifex* retains his knowledge of how to build a house, and makes no use of it. But his knowledge does not concern a particular nonexistent house that he could have built. The argument establishes a conclusion concerning the knowledge of a particular fact (your birth), so, for a similar reason, it is not solved by this epistemic distinction. This first strategy, that is, a properly epistemic one, does not provide a solution to the *sophisma*.

After this, the discussion starts afresh. Instead of directly attacking the passage from 1-2 to 3, our *sophista* examines first its contraposition: if S knew that *p*, and no longer knows that *p*, then there is a change in S.¹

*Occasione huius quaeritur utrum hoc argumentum sit bonum,
'Deus scit hoc et non sci<e>t hoc, ergo transmutatio est in ipso.*

*Et patet per simile quod sit bonum: nam bene sequitur 'Socrates
scit hoc, et non sciet, ergo aliqua transmutatio erit in ipso'. Ergo
eodem modo videtur sequi 'Deus scit hoc et non sci<e>t, ergo
aliqua transmutatio erit in ipso'.²*

The text changes the opposition past–present to the couple present–future. The modal asymmetry between the past and the present, on one side, and the future, on the other, is not, however, important at this point, and so I shall keep the examples in the past. More importantly, the first premise is abandoned: as the

ipsa. Et eodem modo est de scientia divina sicut de scientia artificis; cum non possum dicere quod artifex sciat domum esse domo non existente, manifestum est quod eodem modo non potero dicere quod Deus sciat res esse [a] rebus non existentibus.”, Ebbesen, 1992a, p. 183.

¹ That this is the contraposition of the first consequence can be seen as follows (let *p* be ‘S knew that *p*’, *q* ‘there is no changing in S’ and *r* ‘S knows that *p*’):

- (i) $(p \wedge q) \Rightarrow r$ [probatio];
- (ii) $\sim r \Rightarrow \sim (p \wedge q)$ [(i), contraposition]
- (iii) $\sim r \Rightarrow (\sim p \vee \sim q)$ [(ii), De Morgan]
- (iv) $r \vee (\sim p \vee \sim q)$ [(iii), material implication]
- (v) $(r \vee \sim p) \vee \sim q$ [(iv), association]
- (vi) $\sim(\sim r \wedge p) \vee \sim q$ [(v), De Morgan]
- (vii) $(\sim r \wedge p) \Rightarrow \sim q$ [(vi), material implication]

² Ebbesen, *op. cit.*, p. 184.

omniscience is pointless in producing the argument, it is sufficient to suppose that a subject knows something that is unstable in time, and that this knowledge has itself some stability. Both conditions are fulfilled by human knowledge.¹

The problem of this argument can be seen in the *improbatio*:

- 4'. *S scivit te fore nasciturum,*
 2. *et non est aliqua transmutatio facta in ipso,*
 5'. *ergo S scit te fore nasciturum.*

This consequence is invalid. If *S* no longer knows something he used to know, there is a change to be explained, but it is not necessary to locate it in the knower – the world can change as well. What the first argument and its contraposition miss is that for the inference to be valid, we must assure that what is the object of knowledge in the first premise is still what is said to be known in the conclusion, so that the changing world will not prevent us from drawing the conclusion 5' from 4' and 2. We should keep track of time, and modify the *dictum* accordingly, to signify the same time (*idem tempus numero*) in the *dictum propositionis* in 4' and in the conclusion. In 4' the *dictum* signifies something that was true at the time *t* in which *S* had certain knowledge. If we want to say that *S* still has this very knowledge, then we have to say that he knows now, at a time after *t*, that something was true at *t*. Let us suppose that the knower has not changed during a lapse of time during which something that he previously knew ceased to be true (this surely can be granted for a knower less stable than God!). How should we describe his present knowledge of things past? The correct form of the consequence is:

... non valet hoc argumentum '*Deus scit quicquid scivit, sed scivit te fore nasciturum, ergo scit etc.*', sed debet sic inferri '*Deus scit quicquid scivit, sed scivit te etc., ergo sc[iv]it te fuisse etc.*', ut accipiatur *idem tempus numero quod prius erat, et illud est verum.*²

We can rewrite the argument as follows:

- 4'. *S scivit te fore nasciturum,*

¹ It is worth noting that Albert of Saxony, in his version of the sophism (*Sophismata*, I, 65), uses a human example; indeed – and this is of crucial importance for his solution – he writes the example in the first person: when you are sitting, I know that you are sitting, but when you stand up, I do not know it any more.

² "... non valet hoc argumentum '*Deus scit quicquid scivit, sed scivit te fore nasciturum, ergo scit etc.*', sed debet sic inferri '*Deus scit quicquid scivit, sed scivit te etc., ergo sc[iv]it te fuisse etc.*', ut accipiatur *idem tempus numero quod prius erat, et illud est verum*", Ebbesen 1992a, pp. 184-185.

2. *et non est aliqua transmutatio facta in ipso,*
 5''. *ergo S scit te fuisse nasciturum.*

5'' will not lead to the unwanted conclusion, and the *improbatio* is blocked. Instead, the argument goes as follows:¹

6. *sed quicquid scitur est verum*
 7'. *ergo te fuisse nasciturum est verum,*
 8'. *ergo tu fuisti nasciturus.*

There is no problem in accepting 8'.

But before drawing the right conclusion, the text explains why this is the way to correct the argument. If the problem is to keep track of time in a *dictum propositionis*, it will not be exclusive to the attribution of knowledge: 'scitur' is not the only predicate that can be attributed to a *dictum*. We may believe, or wish, or fear, or hope that something is the case, and 'that something is the case' is a *dictum propositionis*. A *dictum* may, in particular, be true or false, and the same problem will arise when, as time passes, we try to say what remains true. The very root of our problem seems to be precisely in the change in what is known, since we have made the supposition that the knower remains unchanged. We have to beware of the somewhat misleading influence that the truth-condition for knowledge can have on the understanding of the issue. Indeed, the change from truth to falsity prevents a phrase signified by a *dictum* from remaining the object of knowledge; but the argument can be recast using belief instead of knowledge (as does Heytesbury).² The crucial point is that 'verum' (and 'falsum') is a predicate that can be applied to *orationes*, and only to *orationes*, and so only what modifies the *orationes* themselves can count as a relevant circumstance – the assumption concerning the stability of the knower, however harmless, is alien to the main issue. The sophism will address this issue:

Ratio autem eorum qui[a] sic dicebant talis erat: Sit ita quod Socratem currere sit verum; si dicatur 'Socrates currit', haec propositio est vera pro tempore praesenti quod est in 'currit'; si postea dicam 'Socrates currit' non est eadem oratio, quia <aliud> tempus significatur numero, idem autem genere. Oporte[a]t <autem> ad hoc quod eadem sit oratio vel propositio, quod idem sit tempus <numero>; oporteret <ergo> cum istud

¹ "Eodem modo dicebat respondens quod debet inferri 'scivit te fore nasciturum, ergo scit quod tu fuisti nasciturus', <et> sic istud idem tempus numero repetitur, nec oportet dicere 'ergo scit te fore nasciturum'", Ebbesen 1992a, p. 185.

² Heytesbury, Soph. 20, p. 1 (ed. Pironet; <http://mapageweb.umontreal.ca/pironetf>)

tempus quod est in hac 'Socrates currit' sit praesens, et si dicatur post 'Socrates currit' istud praesens quod erat aliud est, <quia modo est> praeteritum et non praesens quod significatur in hac propositione 'Socrates currit' ultimo dicta – oportet ergo quod istud tempus si reiteretur quod reiteretur in praeterito. Unde si dicatur 'Socrates currit modo' et istud sit verum, non debeo aliquod tempus post dicere 'Socratem currere modo est verum', quia non esset eadem propositio, sed dicere 'Socratem currere fuit/ [[est]] verum', quia istud idem tempus quod erat ante praesens modo est praeteritum. Et hoc modo vera est 'Quod semel est verum semper est verum'.¹

This is the problem in its purest form, and what is at stake is not an epistemic matter, but a problem concerning the attribution of any predicate to a *dictum*. Indeed, for this problem to arise, there must be a term in the *sophisma* that can be attributed to a *dictum propositionis*, so in '*Deus scit quicquid scivit*' the term '*scit*' is essential. But the crucial feature on which the argument is based is not proper to epistemic terms: '*Deus scit quicquid scivit*' is a pseudo-epistemic sophism.

Let us suppose that Plato utters at time *t* the true *oratio* '*Socrates currit*'. Being happy at having said something true, he wants to say the same thing at a later time *t'*, and utters '*Socrates currit*'. Unfortunately, he has said a different *oratio* (and meanwhile, Socrates sat down). The *oratio* is partly individuated by the time signified, so that in order to say the same again, Plato should signify *t*, and not *t'*. Since the present tense of the verb signifies the time of utterance, in uttering '*Socrates currit*' at *t'*, Plato signifies *t'*. To signify *t*, that is, a time prior

¹ Ebbesen 1992a, 185. The *Anonymus Victorinus* is particularly acute here, using the indexical '*nunc*' to explain this point: "Ad aliud dicimus quod illud quod est acceptum a deo <<1-2 voces>> semper est verum [a] deo. Unde quod semel est verum [a] deo <semper est verum deo>, sed non sequitur 'ergo quod semel est verum semper erit verum', sed est <<fallacia>> secundum quid et simpliciter. Sed videtur primum accidere communiter, sc. quod semel est verum semper erit verum, quoniam, ut dicit Aristoteles, verbum <<si>>gnificat nunc esse; sed omne nunc est demonstrativum temporis, enuntiatio autem trahit identitatem vel diversitatem secundum identitatem vel diversitatem <<temporis>>; ergo, cum hoc quod dico 'nunc' sit demonstrativum temporis, erunt <pro>positiones diversae secundum quod nunc est diversum. Sed cum dico 'Socrates currit' <> 'currit' significat nunc esse; cum autem postea dico 'Socrates currit' aliud est nunc, ergo alia et alia est enuntiatio, ergo non est eadem, ergo cum veritas <<...>> sicut esse, haec propositio 'Socrates currit' primo enuntiata non erit falsa propter enuntiationem huius 'Socrates currit' secundo¹ enuntiatae, et ita numquam poterit esse <<falsa>>, sequitur "quod semel est verum semper erit verum"; quod est inconveniens".

to t' , he should have said '*Socrates cucurrit*'.¹ The same point holds if we make use of a term predicated of an *oratio*, saying, for instance, that it is true; we have to know the time in which the *oratio* is said to be true, and we will keep track of time by means of the verb by which the predicate 'true' is attributed to a *dictum propositionis*. If we say that the *oratio* is individuated by what it signifies, '*Socrates currit*' uttered at t is the same *oratio* as '*Socrates cucurrit*' uttered at t' , and not identical with '*Socrates currit*' uttered at t' .

This way of keeping track of time justifies the nominalist thesis: '*Quod semel est verum semper est verum*'. We can accept this as a metaphysical truth, but we still need to know what is said to be true. At first sight, it may seem that the issue is settled once we say that the *dictum propositionis* is what is always true. But the text does not seem to put much weight on the distinction between the direct and the indirect way of stating its argument. Anyway, as we try to say that a *dictum propositionis* is true, this very predication requires that we indicate the time at which it is said to be true, and once we learn how to do that, nothing prevents us from applying the same procedure directly to the sentence signified by the *dictum*. There is no need to postulate some atemporal bearer of the truth-value.² Since '*Socrates currit*' uttered at t , and '*Socrates cucurrit*' uttered at a later time may be said to be the same *oratio*, then it seems to be true to say of this of this *oratio* that if it was once true, it is always true. An *oratio* seems to be individuated by its truth-conditions, which include the signification of the time at which it must be evaluated, and if it is true (or, for that matter, false), it won't change its truth-value.

But utterances are tokens, irrepeatable events. They cannot be what is always true, since they do not always exist. The real problem is to see how different tokens can count as utterances of the same *oratio*, that is, the same type, so to speak. There is more than one way to count different tokens as tokens of the same *oratio*. In a sense, '*Socrates currit*' uttered at t and '*Socrates cucurrit*' uttered at a later time t' may be said to be the same *oratio*. But it is clear that two utterances of '*Socrates currit*' can count as two utterances of the same *oratio*. Indeed, there is at least one important Aristotelian argument to this effect:

¹ I will not consider the fact that an utterance of '*Socrates cucurrit*' at t' designates a class of instants of time prior to t' , among which t , and so cannot be said to signify strictly the same time, i.e. numerically the same time (whatever that means), as '*Socrates currit*' uttered at t .

² See the remark of Sten Ebbesen: "There is but a short step from this to holding that differently tensed propositions which are true respectively before, during and after some event signify one and the same dictum/truth", Ebbesen, Sten. What must one have an opinion about. *Vivarium*. 30 (1992), p. 74.

*Sed contra. Dicit Aristoteles quod una oratio et eadem numero susceptiva veritatis et falsitatis, ut haec oratio 'Socrates sedet', et vera est si Socrates sedeat, sed si dicatur 'Socrates sedet' Socrate non sedente, illa est falsa. Ergo cum ita sit quod una oratio et eadem numero sit vera et falsa, et eadem oratio non potest esse vera et falsa in eodem tempore, oportet ergo quod sit falsa in uno tempore et vera in alio....et ita manifestum est ex hoc quod dicebant falsum qui dicebant '<Quod> semel e<s>t verum etc.'*¹

So, an *oratio* can change its truth-value, and this can be the case only if it is not individuated by its truth-conditions.

We can now answer the sophism. The anonymous author mentions two opinions, according to both of which the sophismatic proposition is true.

The first *opinio* rejects and refutes the contraposition of the *probatio* ('if God knew that *p*, and no longer knows that *p*, then there is a change in God'), that, by *modus tollens*, would lead to the rejection of the antecedent. The change in the attribution of knowledge can affect the things known, and not the knower.²

The second *opinio* provides a more developed explanation: the sophism is true, and to draw the right consequence we have to keep track of time in the *dictum propositionis*, that is, from '*S scivit te fore nasciturum*' and '*non est aliqua transmutatio facta in ipso*' we can infer '*S scit te fuisse nasciturum*', and not '*S scit te fore nasciturum*'.

To draw the right conclusion, we have to know what is required for two tokens to count as the same *oratio*. There are two ways of doing that: two tokens can count as the same *oratio* either if they are compared to the *species in anima* or to the things.³ In the first case, two occurrences of a sentence are tokens of the same *oratio* if the *species in anima* signified by the spoken words are the same. In this case, two utterances, in different times, of '*Socrates currit*' are utterances of the same *oratio*. In the second situation, an *oratio* is identified by the things signified, and that means, *inter alia*, that they signify the same time; if I say '*Socrates currit*', and wish to say the same *oratio* later, I have to say '*Socrates cucurrit*', and not '*Socrates currit*'. The second case explains how the sophism

¹ Ebbesen 1992a, 185-6. See Arist. *Cat.* 5, 4a23-26; see also *Cat.*, 7, 7b28-34.

² "...illa transmutatio non provenit ali<qu>o modo ex parte sua sed a parte causatorum tantummodo, et propter hoc nulla est transmutatio a parte Dei sed solum a parte eorum, et propter hoc est vera 'Deus scit quicquid scivit', Ebbesen 1992a, p. 187.

³ "... oratio habet duplicem comparisonem: ad rem quam significat et ad animam sive species rei quae sunt in anima, quae significantur per voces.", Ebbesen 1992a, p. 188. The *Anonymus Victorinus* makes the same distinction.

is true, and justifies the nominalist *dictum* '*Id quod semel est verum semper erit verum*'. In order to predicate something of a *dictum* – that it is true or false, for instance – the second sense is the relevant one: it is necessary to consider the time at which it is evaluated. The same holds for the attribution of knowledge: one must keep track of time, and this is the point of the central argument of the sophism; otherwise, it would not be possible to understand how any knower can have a stable knowledge of a changing world. The move from an epistemic expression ('*Deus scit ...*') to an alethic predicate ('*verum*') shows that the solution to the sophism is not based on a distinction concerning an epistemic term, but on a proper understanding of the individuation of the bearer of truth-value, which is also the object of knowledge. As I have already said, this is a quasi-epistemic sophism.

III

Other versions of the sophism have arguments with basically the same structure. The *Magister Abstractionum* has a particularly interesting solution. According to him, we can accept the inference from '*Deus scit quicquid scivit*' and '*Deus scivit te non esse*' to '*Deus scit te non esse*', and refuse the further unacceptable conclusion '*ergo tu non es*'. Since everything is present to God, for Him there is no distinction between past and present, so everything that is in the scope of 'God knows that' is eternally present; '*esse*', as it figures in '*Deus scivit te non esse*', is eternally present. As we go from '*Deus scit te non esse*' to '*ergo tu non es*', we move from this eternal present to the temporal present, and there is an equivocation concerning '*esse*'. This solution is interesting because, while linking the solution to a phrase concerning God, it is not about a feature concerning His knowledge, but a metaphysical thesis about His relation to time. Again, it is a quasi-epistemic solution to the sophism, since it depends crucially on the phrase '*Deus scit...*', but not on a specific epistemic feature.

'*Deus scit quicquid scivit*' is N° 20 in William of Heytesbury's *Sophismata*. His arguments are essentially the same as those we have examined so far. The main argument of the *probatio* is that God knew something, and has not forgotten what He knew, and therefore knows what He knew.¹ As in the previous versions of the sophism, the *improbatio* exploits the difficulties in explaining how the

¹ "Probatum sic sophisma : Deus scivit aliquid, et nullius est oblitus quod scivit, igitur etc. ... Similiter : in deo non potest esse aliqua transmutatio; ergo in ipso non potest aliqua scientia transmutari in non scientiam nec e contra; igitur quicquid fuit aliquando scientia dei vel scientia in ipso adhuc est idem scientia in ipso vel ipsius scientia.", Heytesbury, *soph.* 20, p. 1.

knowledge persists as time passes.¹ The answer is negative: God does not know everything that He knew, because He does not know a false proposition. We can see that this answer corresponds to a way of individuating *orationes* according to the *species in anima*.

Here is the second argument of the *probatio*:

*Similiter: Deus scit quicquid credidit, quia scit omne verum et numquam credidit aliquod falsum, sed ipse non scivit aliquid quod ipse non credidit esse verum, igitur ipse scit quicquid ipse credidit esse verum, igit scit quicquid scivit.*²

This argument is invalid: God knows and believes all that is true, but only when it is true, and no longer knows and believes whatever were the objects of His knowledge and belief when they change from truth to falsehood.³ Again, this does not depend on God's omniscience; it is sufficient to suppose a knower who can track the truth of his beliefs as the world changes. As we move from knowledge to belief, we see that the truth-condition for knowledge is inessential. Even if the linking of a propositional attitude verb with a truth-bearer is crucial to the argument (so it is a quasi-*epistemic* sophism), the pivotal role is played by the connection between the truth-bearer and time (therefore, it is only a *quasi*-epistemic sophism).

Another epistemic distinction present in Heytesbury's solution is again interesting for the understanding of the mechanics of the sophism. As we have seen, according to him, the sophism is false: there is something that God does not know now though he knew it earlier, because there is something that he knew which is now false. Does it follow that there is ignorance in God?

*... non sequitur 'Deus non scit hoc falsum, ergo Deus ignorat hoc falsum': quia ignorantia tam significat non scire quam non cognoscere, et hoc est falsum. Deus enim cognoscit omne verum et omne falsum; ideo non ignorat aliquid.*⁴

¹ "Ideo si conceditur sophisma, contra : Deus scit quicquid scivit, et Deus scivit aliquid quod jam est impossibile, igitur Deus scit impossibile. Consequentia patet, et assumptum arguitur : quia Deus aliquando scivit istam propositionem 'tu non fuisti ante hoc instans quod jam est nec fuisti ante medium instans externae diei nec post', quorum utrumque est est jam impossibile.", Heytesbury, *soph.* 20, p. 2.

² Heytesbury, *soph.* 20, p. 1.

³ "Et ad probationem illius, quando arguitur sic, quid Deus scit ome verum, et numquam credidit aliquod falsum; igitur Deus scit quicquid credidit, negatur consequentia : quia licet Deus sciat omne quod est verum, non tamen scit omne quod fuit verum, quia multa fuerunt vera quae nunc non sunt vera, sed falsa.", Heytesbury, *soph.* 20, p. 4.

⁴ Heytesbury, *soph.* 20, p. 8.

This distinction, which also applies to human knowledge,¹ avoids an unwanted consequence of the negative answer. Is it not an epistemic solution to a marginal problem of the sophism? Indeed, this epistemic move shows that a quasi-epistemic decision has epistemic consequences. But – at least as regards the texts examined here – it also gives us some relief from the fear that our categories might proliferate. There is a central solution that leads to an answer to the sophism, and it is a quasi-epistemic solution.

¹ “Sed tunc forte arguitur quod tu non ignoras propositionem ‘homo est asinus’, dato quod cognoscas ipsum. Ideo dicitur huic concedendo conclusionem. Unde non sequitur ‘ista proposition est nescita a te; ergo est ignorata a te’, similiter ‘non scio aliquod incomplexum, et tamen non quodlibet incomplexum ignoro’, sed solum incomplexum quod non cognosco ignoro”, Heytesbury, *soph.* 20, p. 8-9.