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**“THIS IS SOCRATES”:
A MERTONIAN SOPHISM
ABOUT SIGNIFICATION**

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In his *Casus Obligationis* William of Heytesbury (d. 1380) presents a sophism arguing that if you know a disjunction, then you know the disjunct also. The sophism is presented in the context of an obligational debate and is based on four principles. In this paper we will outline the structure of Heytesbury’s sophism, identify the four principles on which the sophism turns and show how Heytesbury resolves the sophism. We then argue that Heytesbury’s resolution of this sophism is similar to how other authors resolved sophisms against the principle of suffixing.

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In his *Casus Obligationis* William of Heytesbury presents a sophism arguing that if you know a disjunction, then you know the disjunct also. The sophism is presented in the context of an obligational debate and is based on four principles. In this paper we will outline the structure of Heytesbury's sophism, identify the four principles on which the sophism turns and show how Heytesbury resolves the sophism. We then argue that Heytesbury's resolution of this sophism is similar to how other authors resolved sophisms against the principle of suffixing. Heytesbury presents the following sophism:¹

Item ponitur quod sortes et plato sunt coram te et bene scias quod hic est sortes et plato et nescias quid illorum sit sortes nec quid illorum sit plato tunc propono tibi istam hoc est sortes demonstrando unum illorum si conceditur contra omnis propositio de qua quis considerat et nescit ipsam esse veram nec scit ipsam esse falsam est sibi dubia ista est huiusmodi ergo etc. similiter dico si negatur. Si autem dubitatur ut est dubitanda contra tu scis ipsam significare sicut tu scis esse ergo tu scis eam esse veram. antecedens probatur sic. tu scis ipsam significare hoc esse sortem vel platonem et ita scis esse ergo scis ipsa significare sicut tu scis esse. Ad hoc respondetur admittendo casum et quando proponitur hoc est sortes dicitur dubitatur et ad argumentum cum dicitur tu scis ipsam significare sicut tu scis esse igitur etc. negatur consequens et ad probationem cum dicitur tu scis ipsam significare hec esse sortem vel platonem et ita scis esse ergo etc. negatur maior et cum dicitur quod ista propositio hoc est sortes non significat hoc esse sortem vel platonem quamvis consequatur ad eam quia significatio eius primaria et adequate est ista quod hoc est sortes et non totum hec hoc est sortes vel plato.²

¹ The sophisms presented in this treatise correspond to another group of sophisms found in 'De Scire et Dubitare.' The sophism treated in this paper is similar to sophism A4 in 'De Scire et Dubitare.' [Heytesbury, 1988: 439]

² "Again suppose that Socrates and Plato are present with you and you recognise that it is Socrates and Plato and you do not know which of them is Socrates nor which of them is Plato. Then I propose 'This is Socrates' to you pointing to one of them. If you concede it [I argue] against [your concession as follows]: You can't grant it because every proposition which someone considers and does not know to be true nor know to be false is doubtful to him. This is of that sort, so etc. Similarly it cannot be denied. If you doubt it [I argue] against that [doubt as follows]: you know it to signify as you know things to be, so you know it to be

The sophism is phrased in the context of an obligational debate. While it is not clear what the role of ‘Obligationes’ were or why they were taken to be interesting, the general idea is that they are a kind of oral debate between an opponent and a respondent. These debates were constrained by various rules which varied depending on the kind of disputation. The exact number and kinds of responses possible were debated by various authors.³ However, there were a number of elements common to all obligational debates. First, an obligational debate would begin with the opponent putting forward a casus. A casus can be thought of as the context that is used to frame the obligational debate. The context gives all of the background propositions that will be true for the duration of the debate. Heytesbury’s sophism has the following casus: there are two people with the respondent, Socrates and Plato. It is then stipulated that the respondent does not know which one is which but that they do know that the two men are Socrates and Plato.

When the casus is put forward, the respondent can either accept or reject the casus. Generally speaking, the only time a respondent is allowed to reject the casus is if the situation proposed makes it impossible for the respondent to respond well, e.g. if the casus leads to a formal inconsistency.⁴ As this is a sophism, Heytesbury presumes the situation to be consistent and so it needs to be accepted by the respondent.

After the casus is accepted, a number of things can happen, depending on the kind of obligationes in question. According to Walter Burley there were six kinds of obligational debates.⁵ In each case a positum is put forward and the respondent must treat the positum in a particular way. In the context of

true. The antecedent is proved like this: you know it to signify this is Socrates or Plato and things you know to be like that, so you know it to signify as you know things to be. To this one responds by admitting the case and when ‘This is Socrates’ is proposed, it is said that it is doubted and to the argument when it is said “you know it to signify as you know things to be, so etc.”, the consequent is denied and to the proof when it is said “you know it to signify this to be Socrates or Plato and things you know to be like that. so etc.”, the major is denied; it is said that the proposition ‘This is Socrates’ does not signify this is Socrates or Plato although it follows from it because its primary and adequate signification is that this is Socrates and not the whole that this is Socrates or Plato.” (Heytesbury. Casus Obligationis. Oxford Bodleian MS Canon. Class. Lat. 278).

³ For a good summary of this debate see: [Dutilh-Novaes, 2008: 484–498].

⁴ This is generally correct; however the rule changes slightly if the form of debate is impossible positio. Here, the only requirement is that the casus not be explicitly contradictory. The reason for this is that the opponent may not appeal to principles like *ex impossibile*.

⁵ [Burley, 1988: P. 371, 373, 378, 404, 409]. In what follows I am using the term ‘positum’ in a general way to describe what is put forward in the context of the obligational debate.

Heytesbury's sophism, the obligatio appears to be a kind of sit verum. Sit verum is described by Walter Burley as follows:

“‘Sit verum’ obligat ad statum mentis et cum triplex sit status animae, scilicet, status scientis, dubitantis et ignorantis, tripliciter fit haec obligatio, aut per verbum sciendi, aut per verbum dubitandi, aut per verbum ignorandi. Verbi gratia: sit verum te scire te currere; vel: sit verum te dubitare te currere.”⁶

While the term ‘sit verum’ is not explicitly used in Heytesbury's sophism, the sophism is set up in such a way that this seems to be the natural reading of the obligational debate. Here the respondent knows one thing and doubts the other. He knows that Plato and Socrates are both present with him, but he does not know which one of them is Socrates and which one of them is Plato. In this case the mental state created is one of doubt concerning which person is which.

Once the casus and positum are accepted, the obligatio proper begins. The opponent can put forward any number of propositions, one at a time. For each proposition the respondent has three options; he can either grant it, deny it or doubt it. The exact conditions under which the respondent should accept a proposition varied from author to author. In all cases, the response differed if the proposition was relevant or irrelevant to the casus. If the proposition was irrelevant, then the respondent was required to respond based on his actual knowledge, given the casus under which the positum is to be granted, denied etc. If the proposition was relevant, then the respondent should reply in a way that is consistent with the positum and what has already been granted. It seems that in Heytesbury's setting of the debate, the respondent should accept a relevant proposition if he knows it to be true, reject it if he knows it to be false, and he should doubt it if he does not know either way. The goal is for the respondent to remain consistent in his responses to the opponent. In this case, the sophism is supposed to show that the respondent should both doubt and accept the same proposition. Given the conditions Heytesbury uses to set up the debate, this would amount to the respondent knowing the proposition to

⁶ Sit verum creates an obligation on a state of mind, and since states of mind are of three kinds, namely, the state of knowledge, of doubt and of ignorance, this obligation is of three kinds, either through a verb of knowing, or through a verb of doubting, or through a verb of ignorance. For example, ‘Let it be true that you know you are running’, or ‘Let it be true that you doubt you are running’. Translation by Stephen Read.

be true, and not knowing the proposition to be true, which is inconsistent. The debate ends when the respondent contradicts herself or the opponent says ‘time’s up’.

Heytesbury’s sophism is based around what response the respondent should give to the propositio: ‘This is Socrates’. The sophism is set up without reference to any other propositio, so we may assume that this is the first propositio put forward in the debate. As we have already observed, he has three possible responses. Because of how the casus is set up, it is clear from the above conditions that the proposition cannot be granted. This is because we do not know if the person pointed to is Plato or Socrates. Hence, we do not know that ‘this is Socrates’. By similar reasoning, it is clear that the proposition should not be denied. So it seems that the respondent must doubt the proposition. It is to this response that Heytesbury presents the sophism in question. The sophism proceeds as follows:

Si autem dubitatur ut est dubitanda contra tu scis ipsam significare sicut tu scis esse ergo tu scis eam esse veram.

Here, it is helpful to be explicit about what the pronoun ‘it’ refers to.

If you doubt it [I argue] against that [doubt as follows]: you know it [the proposition, this is Socrates] to signify as you know things to be, so you know it to be true.

This is the first of a number of interesting principles that Heytesbury implicitly appeals to about the relationship between signification and knowledge. We will call this K-closure. It claims that:

If a proposition signifies as you know things to be, then you know the proposition is true.

This is one of four principles that Heytesbury will use to develop his sophism. He goes on to prove the sophism as follows:

*Antecedens probatur sic. tu scis ipsam significare hoc esse sortem vel platonem et ita scis esse ergo scis ipsa significare sicut tu scis esse.*⁷

The argument here is very compact. What Heytesbury is arguing is that, you know the proposition ‘this is Socrates’ to signify that the person being pointed to is Socrates or Plato. Hence, by K-closure, and suffixing, you know

⁷ The antecedent is proved like this: you know it to signify this to be Socrates or Plato and things you know to be like that, so you know it to signify as you know things to be.

the proposition to signify as you know things to be, hence you know ‘This is Socrates’ and so the proposition cannot be doubted.

Heytesbury’s argument makes use of two additional principles. The first is that signification is closed under consequence. What this means is that a proposition signifies all of the things that the proposition logically entails. In this case, since the proposition ‘this is Socrates’ entails ‘this is Socrates or Plato’ the principle tells us that ‘this is Socrates’ signifies ‘this is Socrates or Plato’. Now, per the casus, the respondent does know that ‘this is Socrates or Plato’ is true. To complete the sophism Heytesbury also appeals to the principle of suffixing. Suffixing is the principle that ‘if B entails C’ and ‘A entails B’ then ‘A entails C’. This principle, a form of transitivity, is used to connect ‘this is Socrates’ with the relevant knowledge conditions.

For the sake of clarity we present the sophism as follows:

Casus: There are two men with the respondent.

Sit verum: Let it be true that we know one of them is Socrates and the other is Plato, but we do not know which is which.

Propositio: This is Socrates. (This is said when pointing to one of the men.)

Sophism: You cannot doubt the propositio for the following reason:

- 1) ‘This is Socrates’ signifies this is Plato or Socrates (by closure under signification).
- 2) ‘This is Plato or Socrates’ signifies things as you know them to be (True, because of the casus).
- 3) ‘This is Socrates’ signifies things as you know them to be (Suffixing).
- 4) You know ‘This is Socrates’ is true. (K-Closure).

However, per the casus we do not know if this is Socrates or not, which is a contradiction. What goes wrong with this kind of argument? The argument is clearly fallacious. According to Heytesbury the problem is with the first premise. He denies that ‘This is Socrates’ signifies ‘this is Plato or Socrates’. Why? According to Heytesbury this is because:

Significatio eius primaria et adequate est ista quod hoc est sortes et non totum hec hoc est sortes vel plato.⁸

⁸ Its [the proposition ‘this is Socrates’] primary and adequate signification is that this is Socrates and not the whole that this is Socrates or Plato.

Heytesbury's response is to stress the 'primary and adequate signification' of the proposition. Heytesbury then goes on to argue that this kind of signification is not closed under consequence. We will come back to what Heytesbury might mean by 'primary and adequate' in our discussion of how this theory relates to Burley and others.

Heytesbury provides little motivation for why the proposition 'this is Socrates' does not signify 'this is Socrates or Plato'. All he tells us is that when we take propositions in this sense, they do not signify everything that they entail, only the proposition itself. This is not very illuminating. However, there are similar sophisms within the medieval literature that give some context to sophism. The following sophism occurs in a number of medieval authors:

Si dico Te esse asinum dico verum⁹

Forms of the sophism can be found in Buridan, Burley and Magister Abstractionum¹⁰ among others. The sophism is argued for as follows:

- 1) If I say that you are an ass, then I say that you are an animal.
- 2) If I say that you are an animal, then I say something true.

So, by suffixing/transitivity of the hypothetical,

- 3) If I say you are an ass, I say something true.

From this one can easily infer, you are an ass, which is not literally true. Burley provides an analysis of this sophism in his shorter treatises on logic.¹¹ His solution to this sophism is to distinguish two different senses the word 'say' can have. Burley tells us that:

Ad primum illorum dicendum, quod haec est distinguenda: 'Dico te esse animal', secundum aequivocationem, ex eo quod dictum 'te esse animal' potest supponere pro voce vel pro re.¹²

⁹ If I say you are a donkey, then I say the truth.

¹⁰ In Buridan see: [Pironet, 2004: 50]. For Magister Abstractionum see [Streveler, 1993: 144–167].

¹¹ [Burley, 2000: 7–9].

¹² [Burley, 1955: 205].

Here Burley makes the point that there is a possible equivocation on the use of the word ‘say’. In one case we are concerned with the utterance or the sound of the words and in the other case we are concerned with the ‘thing’. Using this distinction, it is possible to solve the sophism. If we read the proposition ‘if I say you are an ass then I say you are an animal’ as supposing for an utterance, then the proposition is false. If a person says ‘you are an ass’ they do not say anything about the person being an animal. However, if we take it in the second sense, then we must consider the meaning of the sentence. In this case, the second premise is false, because it is possible for the antecedent to be true while the consequent is false.¹³ Here Burley uses the argument of the sophism itself to prove the point. Just because you have said I am an animal, it doesn’t follow that you have said the truth, because the reason for inferring ‘You are an animal’ is on the basis of ‘You are an ass’, which is false.

Buridan’s response to the sophism is similar to Burley’s. Buridan’s response is that:

Obiectionem dico similiter quod nullus potest dicere te esse asinum, si haec oratio, te esse asinum sumatur significative. Sed si materialiter sumatur tunc aliquis bene dicit, te esse asinum, id est dicit istam propositionem, Tu es asinus, quae est falsa.¹⁴

Buridan casts the distinction as one between the significative and the material sense of the proposition. According to Buridan, ‘that you are a donkey’ cannot be taken significatively in the proposition ‘if I say you are a donkey, then I say the truth’ because when ‘that you are a donkey’ is taken significatively, it refers to a proposition, not a sentence. The term ‘say’ does not function on propositions, only sentences. This is akin to the conflation between colour is disyllabic and ‘colour’ is disyllabic. In the first case, the proposition is malformed, because it is referring to the concept of colour, not the word.

¹³ For this to go through, Burley is required to modify the conditions under which a proposition is true. For further discussion See Stephen Read’s Paper ‘Obligations, Sophisms and Insolubles’ in this volume.

¹⁴ [Pironet, 2004: 55–56].

English: To the other objection I reply in a similar manner that nobody can say *that you are a donkey* if the expression ‘that you are a donkey’ is taken significatively. But if it is taken materially, then someone can indeed say *that you are a donkey* i.e. he utters the proposition ‘You are a donkey’ which is false. [Buridan, 2001: 869]

However, if ‘that you are a donkey’ supposits materially, then it is possible to be uttered by a person, however it does not entail ‘that you are an animal’ because the sentence said nothing about animals.

The Magister Abstractionum sets up this sophism as follows:

Contra: Si aliquis dicit te esse asinum dicit te esse animal, et si dicit te esse animal dicit uerum, ergo a primo, si aliquis dicit te esse asinum dicit uerum.¹⁵

Unlike Burley and Buridan, the Magister does not draw the distinction between significative and material signification. However, his solution is similar to Burley’s in that he argues the second premise is false. He tells us that:

Sed interimenda est haec, <si aliquis dicit te esse animal dicit uerum>, eo quod antecedens potest esse uerum sine consequente, ut si, te non existente, dicat aliquis te esse animal. Aut etiam te existente in suo antecedente ad uerum potest antecedere falsum; uerbi gratia, ad te esse animal potest antecedere falsum...¹⁶

The Magister’s point here is essentially the same as Burley’s when the proposition stands for the things. The argument fails because the second hypothetical is false. It is possible for a person to say ‘you are an animal’ and to not speak the truth. Like Burley, the Magister is then required to change the truth conditions for a sentence to accommodate these kinds of sophisms and save the principle of sufficing.

What is relevant to our discussion of Heytesbury is the sense of ‘saying’ that is not closed under consequence. In the case of Burley, he rejects the major premise as false when the term ‘say’ supposits for an utterance. In the case of Buridan, the proposition ‘that you are a donkey’ can only be taken materially, not significatively. In both cases, there is a reading of the proposition that does not signify anything beyond what was uttered. In this sense

¹⁵ Textus erat olim in pagina «Resources for Research in Mediaeval Philosophy» (Peter King, Department of Philosophy, The University of Toronto).

¹⁶ ‘if someone says you are an animal he speaks the truth’, in that the antecedent can be true without the consequent, e.g., if when you don’t exist someone says you are an animal. Or even if you exist, in its antecedent from truth can be antecedent to falsehood. For example, you are an animal can have a false antecedent.

we can see Heytesbury's sophism as a more sophisticated form of these 'saying' sophisms. At the heart of the sophism is an equivocation on what it means for an utterance to supposit or what is signified when someone says 'X'. Our proposal is that for Heytesbury the 'primary and adequate' signification of a proposition is just the proposition signified by the utterance of the sentence. It does not signify anything beyond the utterance made. In this case 'This is Socrates' does not signify 'This is Plato or Socrates' since 'This is Socrates' says nothing about Plato. It is also clear that this kind of signification is *not* closed under consequence. If a person says 'X' it is clear that they have not said every consequence of X, since the only sentence that was uttered was 'X'.

In conclusion, Heytesbury's suffixing sophism turns on the false assumption that signification is closed under consequence. Specifically, Heytesbury points out that there is one reading of signification that is not closed under consequence and that this reading is sufficient to dissolve the sophism.

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В трактате «О диспуте с предписаниями» (Causus Obligationis) Уильям Гейтсбери (ум. в 1380) рассматривает софизм, доказывающий, что если известна дизъюнкция в целом, то известны также и входящие в нее дизъюнкты. Данный софизм рассматривается в контексте обсуждения диспутов с предписаниями и основан на четырех принципах. В настоящей статье мы опишем структуру софизма Гейтсбери, установим четыре принципа, на которых строится данный софизм, и продемонстрируем, как Гейтсбери его разрешает. Затем мы покажем, что выдвинутое Гейтсбери решение сходно с решением софизмов, направленных против принципа суффиксации, у других авторов.

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