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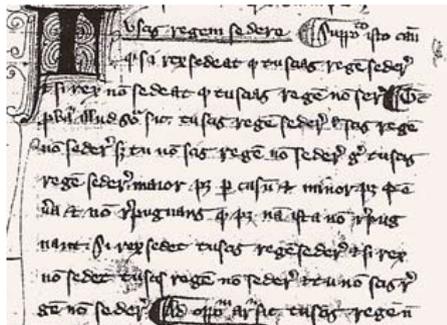
Kilvington's Doctrine of Obligations

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12 July 2010

Richard Kilvington

- ▶ Son of a priest from the diocese of York (probably in Kilvington, near Thirsk)
- ▶ Studied at University of Oxford (Oriental College) in the 1320s
- ▶ Wrote his *Sophismata* in the mid-1320s
- ▶ Also wrote *Quaestiones super De Generatione et Corruptione* before 1325, *Quaestiones super Physicam* (1325/26) and *Quaestiones super Libros Ethicorum* (1326/1332)
- ▶ Questions on Peter Lombard's *Sentences* (1334)
- ▶ Master of Theology (c. 1335)
- ▶ A member of the intellectual circle around Richard de Bury (Bishop of Durham) from 1335
- ▶ Took part in diplomatic missions in the service of Edward III
- ▶ Dean of St Paul's Cathedral, 1354
- ▶ Died in a second phase of the Black Death in 1361.

Sophismatic Disputations

- ▶ The structure of a sophismatic disputation:
 - ▶ Hypothesis
 - ▶ Proof(s) of a sophismatic proposition
 - ▶ Disproof(s)
 - ▶ Question(s)
 - ▶ Resolution
 - ▶ Replies to opposing arguments
 - ▶ Determination
- ▶ Kilvington's *Sophismata* contains 48 sophisms, the first 44 of which are on various matters in natural philosophy (physics), though mostly of a logical nature (e.g., about beginning and ceasing)
- ▶ The last four sophisms are on knowledge:
 45. 'You know this to be everything that is this'
 46. 'You know this to be Socrates'
 47. 'You know that the king is seated'
 48. 'A is known by you'

Sophism 47: 'You know that the king is seated'

"Suppose this hypothesis, that if the king is seated, you know that the king is seated, and if the king is not seated, you know that the king is not seated."

- ▶ Kilvington proceeds to prove, first, that you know that the king is seated:
 1. By the hypothesis, either you know that the king is seated or you know he is not
 2. But you don't know that the king is not seated
 3. So you know that the king is seated
- ▶ In a similar way, he shows that you don't know that the king is seated:
 4. By the hypothesis, either you know that the king is seated or you know he is not
 5. But you don't know that the king is seated
 6. So you know that the king is not seated
 7. Hence you don't know that the king is seated.

Contradiction.

- ▶ This is very puzzling. In particular, what justifies lines 2 and 5?
- ▶ The answer lies in the medieval theory of obligations.

Obligational Disputations

- ▶ A disputation between an Opponent and a Respondent
- ▶ Some authors distinguish as many as six types of obligation:
 - ▶ *Institutio* (or *Impositio*): where the Respondent is obligated to use a term with a new meaning
 - ▶ *Petitio*: where the Respondent is obligated to act in a certain way
 - ▶ *Positio*: where the Respondent is obligated to grant the *positum*
 - ▶ *Depositio*: where the Respondent is obligated to deny the *depositum*
 - ▶ *Dubitatio*: where the Respondent is obligated to doubt the *dubitatum*
 - ▶ *Sit verum*: where the Respondent is obligated to respond as if he knew, doubted or was ignorant of some proposition
- ▶ The primary type, on which we will concentrate, is *positio*
- ▶ Different authors present different accounts of the obligational rules
- ▶ The classic statement is standardly taken to be that described by Walter Burley, usually referred to as the *responsio antiqua*.

Walter Burley (or Burleigh)

- ▶ Born in Burley-in-Wharfedale, Yorkshire (near Ilkley) around 1275
- ▶ Master of Arts, University of Oxford (Merton College) by 1301
- ▶ Treatises on *Suppositions* and *Obligations*, 1302
- ▶ Studied and taught in Paris, before 1310 until 1326/7
- ▶ Doctor of Theology 1324
- ▶ *De Puritate Artis Logicae* ('On the Essentials of the Art of Logic'), 1324
- ▶ Also a member of Richard de Bury's circle
- ▶ Envoy to the Papal Court for Edward III from 1327
- ▶ Many works, including commentaries on Aristotle
- ▶ Died around 1344/5.

The *Responsio Antiqua*: *Positio*

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- ▶ A *casus*: a hypothetical background situation

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- ▶ there may follow an analysis of how well the Respondent responded.

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 - ▶ granted if (known to be) true,
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 - ▶ doubted if it is not known whether it is true or false.

An Example of Possible *Positio*

Casus Socrates and Plato are black

0. *Positum*: 'Socrates is white'

Accepted (possible)

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Analysis of
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2. 'Socrates and Plato are alike'

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- ▶ Arguably, there is a winning strategy for the Respondent—if he were not able, in principle, to give correct and consistent answers, he should not have accepted the *positum*
- ▶ However, it is not difficult to make mistakes in responses, of two kinds:
 - ▶ Either to think a proposition is irrelevant when in fact it is not
 - ▶ Or to confuse the treatment of relevant propositions (their logical relation to the *positum*) with that of irrelevant propositions (their own quality, as possibly modified by the *casus*)

Both confusions can clearly lead to the wrong response, and then the Opponent can exploit the mistake to force a contradiction.

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The second conjunct is a necessary truth, So arguably the whole conjunction follows from the *positum*, unless we insist on a narrower notion of consequence.

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 3. 'The king is sitting' Granted (follows from the *positum* and the opposite of what has been denied)

The theory is dynamic

- ▶ Burley's theory is dynamic—the response can depend on the order in which propositions are proposed: e.g.,

0. *Positum*: 'You are in Rome' Accepted (possible)
1. 'You are a bishop' Denied (irrelevant and false)
2. "'You are in Rome" and "You are a bishop" are alike [in truth-value]' Denied (inconsistent with the *positum* and the opposite of what has been denied)

although in the previous example, when proposed in the opposite order, (1) and (2) were granted.

- ▶ Indeed, responses can change:
 0. *Positum*: 'The king is sitting or you are running' Accepted (possible)
 1. 'The king is sitting' Doubted (irrelevant and unknown)
 2. 'You are running' Denied (irrelevant and false)
 3. 'The king is sitting' Granted (follows from the *positum* and the opposite of what has been denied)
- ▶ However, although what has been doubted can later be granted or denied, grant can never turn into denial or vice versa.

Analysis of Sophism 47

- ▶ Kilvington's sophism is cast as an obligational disputation
- ▶ First, Kilvington shows that you know that the king is seated:

0. *Positum*: 'If the king is seated, you know that the king is seated, and if the king is not seated, you know that the king is not seated'

Accepted (possible)

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0. *Positum*: 'If the king is seated, you know that the king is seated, and if the king is not seated, you know that the king is not seated' Accepted (possible)
1. 'Either you know he is seated or you know he is not' Granted (follows from the *positum* given Excluded Middle)

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| 0. <i>Positum</i> : 'If the king is seated, you know that the king is seated, and if the king is not seated, you know that the king is not seated' | Accepted (possible) |
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- ▶ Then, from the same *positum*, we show that you do not know that the king is seated:
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|--|---------------------|
| 1'. 'Either you know he is seated or you know he is not' | Granted (as before) |
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Contradiction.

Kilvington's Responses

Kilvington considers three different responses to the sophism:

- 3rd The third response seems to consist in refusing to accept the *positio*. Kilvington rejects this response
- 2nd The second response is Kilvington's preferred response—more below
- 1st Before he comes to that, Kilvington notes that in the second stage of the proof, at line 2', we denied what we had already granted at line 3 in the first proof
 - ▶ So we should then have granted 'You know the king is seated', and the second proof would have failed
 - ▶ Hence we should grant the sophism (i.e., 'You know the king is seated')

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- ▶ Kilvington rejects this response: if we had given the second proof first, this response would then instruct us to deny the sophism.
- 0. *Positum*: 'If the king is seated, you know that the king is seated, and if the king is not seated, you know that the king is not seated'

Accepted

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1. 'Either you know he is seated or you know he is not' Granted

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2. 'You know that the king is seated' Denied (irrelevant and false)

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| 1. 'Either you know he is seated or you know he is not' | Granted |
| 2. 'You know that the king is seated' | Denied (irrelevant and false) |
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| 1. 'Either you know he is seated or you know he is not' | Granted |
| 2. 'You know that the king is seated' | Denied (irrelevant and false) |
| 3. 'You know that the king is not seated' | Granted (follows from 1 and the opposite of 2) |
| 4. 'You know that the king is seated' | Denied (incompatible with 3) |
- ▶ This raises an important question about the purpose of obligational disputations.

The Purpose of Obligational Disputations

- ▶ Obligations have been variously described as:
 - ▶ Pedagogical exercises (Romuald Green, Mary Anthony Brown, Charles Hamblin, Jennifer Ashworth)
 - ▶ A primitive attempt at an axiomatic system (Philotheus Boehner—or at least a theory of logical deduction)
 - ▶ Tools for solving sophisms and insolubles (Eleonore Stump)
 - ▶ Experiments with counterfactual reasoning (Paul Spade, Norman Kretzmann)
 - ▶ and many other suggestions
- ▶ No record of any actual disputation, rather than discussion of the theory of obligations, has survived
- ▶ What is perhaps the longest contemporary description of the purpose of obligatory disputations says this:

“This art trains the Respondent so that he pays attention to what is granted and denied, in order not to grant two incompatible things at the same time. For in De Sophisticis Elenchis, Aristotle teaches the arguer to put forward many things so that the Respondent who does not remember because of the large number may be refuted as regards his response to the things put forward. It is partly from this that the art has derived its structure, so that as long as we pay attention we may keep ourselves from being tricked. Just as it is important for a liar to have a good memory in order to make claims without asserting contraries, so for someone who is good at responding it is appropriate that he respond formally regarding the things admitted, granted and appropriately denied and remembered.”
(Anon., *De Arte Obligatoria*)

Spade's Theory

- ▶ Kretzmann and Spade focus on Kilvington's Sophism 47 to argue that obligations "were an attempt to give a theoretical account of counterfactual reasoning"
- ▶ The key comes in Kilvington's second response to S47, his preferred response
- ▶ There Kilvington revised what he calls the "common usage" of the notion of irrelevant proposition (*loquendo de impertinenti ut communiter sumitur*)
- ▶ Kilvington focuses on Burley's "trick" for making the respondent grant any other false compatible proposition:

"Thus I say as regards a familiar example, . . . that when 'You are in Rome' has been posited, it is not the case that anything false that is compatible with it can be proved, such as 'You are a bishop' and the like. The reason is that once it is posited that you are in Rome, you would not grant this: "'You are in Rome" and "You are a bishop" are alike [in truth-value]' unless you were a bishop." (S47 q)

- ▶ Rather, Kilvington proposes that one should respond to irrelevant propositions not by reference to their actual truth-value (as far as we know it), but to what their truth-value would be if the *positum* were true.

Kilvington's Second Response

- ▶ Kretzmann and Spade's theory of obligations as experiments in counterfactual reasoning has some plausibility in describing Kilvington's theory
- ▶ Nonetheless, I think it is certainly wrong as a general account of obligations in other authors, such as Burley
- ▶ Moreover, I think it is also a misunderstanding of Kilvington's approach
- ▶ What Kilvington does is use the practice of obligations as a method of proof and disproof in sophisms, as noted by Stump
- ▶ The theory of obligations, as we find it in Burley (the *responsio antiqua*) is unsuited for this task
- ▶ For example, Kilvington is fond of a type of reasoning called by Mikko Yrjönsuuri (following Kretzmann) "the disputational meta-argument":

The inference is (known to be) valid

The premises are in doubt

So the conclusion cannot be denied.

- ▶ For if one denies the conclusion of a valid argument (that one knows to be valid), one must deny at least one of the premises, so the premises (as a whole) cannot be in doubt
- ▶ But this is inconsistent with Burley's rules, as we saw: the Respondent can be led to deny something he had earlier doubted.

Kilvington's Theory of Obligations

- ▶ We have no record of Kilvington's theory other than the oblique remarks he makes in the final pages of his *Sophismata*
- ▶ But he uses this disputational meta-argument throughout Sophisms 45-48, for example:

0. *Positum*: 'If the king is seated, you know that the king is seated'

Accepted

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- | | |
|---|----------|
| 0. <i>Positum</i> : 'If the king is seated, you know that the king is seated' | Accepted |
| 1. 'The king is seated' | Doubted |

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1. 'The king is seated'	Doubted
2. 'You know that the king is seated'	???

- ▶ According to Burley's rules, 2 should be denied as irrelevant and false (for although it follows from 0 and 1, 1 was not granted)
- ▶ However, the disputational meta-argument says 2 should not be denied, since it follows validly from 0 and 1, and 1 has been doubted
- ▶ Kilvington writes:

"If immediately after the positing of the hypothesis, 'The king is seated' were proposed, it should be doubted by you. Then, since 'You know that the king is seated' is a consequence, by the hypothesis, of 'The king is seated', therefore, if 'You know that the king is seated' is proposed to you for the same instant, it should not be denied. For otherwise it would follow that for some instant of the response there would be a good consequence and the antecedent should be doubted and the consequent denied, which is clearly not consistent." (S47 i)

Doubt and Doubting

- ▶ Kilvington's solution is that we should express doubt about 'You know the king is seated' as well as about 'The king is seated'
- ▶ He explains this by distinguishing two senses of 'doubt'
- ▶ Note that we can clearly contrast 'granted' (*concedenda*) with (known to be) 'true' (*vera/scita*), and 'denied' (*neganda*) with (known to be) 'false' (*falsa/nescita*)
- ▶ Kilvington is pointing to similar contrast between *dubitanda* and *dubia*: just because I am obliged to express doubt about something doesn't mean I do actually doubt it
- ▶ Hence, one cannot infer from an obligation to express doubt about something that one doesn't know it.

"It does not follow that because the proposition 'The king is seated' should be doubted by me (a me dubitanda) that the proposition is in doubt for me (mihi dubium) ... Nor does it follow that because this proposition should be doubted by me that it is not known by me." (S47 dd)

Knowledge and Doubt

- ▶ In the present case, 'You know the king is seated' should be doubted (*dubitanda*), that is, one should express doubt about it, even though you know the king is seated (if he is).
- ▶ Just as one often has to grant a proposition which one knows to be false (or about which one is in doubt), or deny one that one knows to be true (or again, about which one is in doubt), so too one may have to express doubt about a proposition that one knows to be true (or to be false)
- ▶ He writes:

"For [sometimes] a proposition must be doubted when it is known, and sometimes it must be doubted when it is not known whether it is known . . . To the argument, it must be granted that you know that the king is sitting or you know that the king is not sitting. But the minor premise that was joined to it, namely, 'You do not know that the king is not seated', must be doubted. For if the king is seated, you do not know that the king is not seated (by the hypothesis), and the antecedent ['The king is seated'] must be doubted, so the consequent must be doubted too." (S47 dd-ee)

Summary

- ▶ Kilvington's use of obligations is sufficiently different from Burley's that he needs to revise the rule governing responses to irrelevant propositions
- ▶ Whereas Burley's rule says that the response to irrelevant propositions should accord to their quality (outside the disputation), Kilvington proposes that the response should reflect what their quality would be if the *positum* were in fact true
- ▶ This avoids two (as Kilvington sees them) unfortunate consequences of Burley's theory:
 - ▶ That the Respondent can be forced to grant any false proposition compatible with a false *positum*
 - ▶ That responses can depend on the order in which propositions are presented by the Opponent, and can change from doubt to granting or denial.
- ▶ Whereas Burley's theory seems well suited to the use of obligations as logical exercises and training, Kilvington adapted it to serve as a method of proof and disproof in the examination of sophisms and other arguments
- ▶ Kilvington expressly distinguishes expressing doubt from being in doubt about some proposition, similar to the distinctions between granting and (knowledge of) truth, and denial and (knowledge of) falsehood.

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