

ROGER ROSETH AND MEDIEVAL DEONTIC LOGIC

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1. *The Development of the Logic of Will and the Logic of Norms*

William Ockham, John Buridan and some of their fourteenth century contemporaries discussed modal syllogistics quite differently from the way Aristotle and his thirteenth century commentators did. They began to treat modal logic separately with respect to modal sentences *de dicto* and *de re* and they further divided modal sentences *de re* into two groups depending on whether the subject terms refer to actual or possible beings. They thought that logicians should investigate the logical properties of different readings and the relations between them. The adherents of this approach regarded Aristotle's modal syllogistics as a fragmentary theory, the different parts of which presuppose different analyses of modal premises without a uniform reading of them which would make the whole theory consistent in the form presented by Aristotle. The impressive development of modal syllogistics in late medieval times was accompanied and probably enforced by a new modal semantics which shows similarities to modern possible worlds semantics. (See S. Knuuttila, *Modalities in Medieval Philosophy*, Routledge, London 1993 and 'Early English Discussions of Aristotle's Modal Syllogistics' in J. Marenbon, ed., *Aristotle in Britain during the Middle Ages*, Brepols, Turnhout 1996.)

The rise of the new modal logic was accompanied by an increasing interest in the question of whether there were other concepts with properties similar to those of basic modal notions. Many logicians thought that the logic of pure modal terms could be used as a model for studying the logical behaviour of related concepts. It became a kind of standard method of applied modal logic to consider whether the basic rules for modal sentences *de dicto*, viz.

$$(1) \frac{L(p \rightarrow q)}{Lp \rightarrow Lq}$$

and

$$(2) \frac{L(p \rightarrow q)}{Mp \rightarrow Mq}$$

held for other concepts showing *prima facie* similarities with the notions of necessity and possibility as well. The extensive lists of terms which were found interesting in this regard included *verum*, *falsum*, *per se*, *scitum*, *dubium*, *opinatum*, *creditum*, *apparens*, *notum*, *volitum*, *dilectum*, *obligatum*, *licitum*, and *illicitum*. Late medieval epistemic logic has been dealt with in I. Boh, *Epistemic Logic in the Later Middle Ages* (Routledge, London 1993). Knuuttila (1993) has argued that in the Middle Ages certain basic ideas of deontic logic were developed as an extension of modal logic as has happened in this century. Instead of repeating the results of these studies, we shall offer an English translation of some passages from a treatise by Roger Roseth which is one of the most interesting 14th century texts dealing with questions of deontic logic.

In the fourteenth century discussions of the norms the following equivalences analogous to those between modal concepts were used:

$$(3) \neg O \neg p \equiv Pp$$

$$(4) \neg P \neg p \equiv Op$$

$$(5) \neg Op \equiv P \neg p$$

$$(6) \neg Pp \equiv O \neg p$$

$$(7) Op \equiv F \neg p$$

$$(8) Fp \equiv O \neg p$$

O stands here for obligation (*obligatum*), *P* for permission (*licitum*), and *F* for prohibition (*illicitum*). One can find some of these equivalences used earlier and there were some twelfth century writers who anticipated the later habit of treating deontic concepts as a kind of modal concepts. According to one definition of modal terms, sometimes used by Peter Abelard, necessity is identified with what nature demands, possibility with what nature allows, and impossibility with what nature forbids. (See Knuuttila 1993, 90-1.) At the beginning of his *Ethics*, Abelard says that if the antecedent is permitted or obligatory while the consequent is forbidden, the obligations and permissions in question are irrational. (Peter Abelard, *Ethics*, ed. with transl. and notes by D.E. Luscombe, Clarendon Press, Oxford 1971, 20.1-11). Later he discusses the following case. A judge knows that an innocent person is accused by his enemies and he cannot rebut false witnesses with convincing reasons. If the man is punished on the testimony of the witnesses, an innocent man is punished. Abelard says that because the judge is obliged to do as the antecedent says, i.e., to punish on the testimony of the witnesses, 'thus he ought to punish him who ought not

to be punished'. 'Through the compulsion of the law' the judge must behave against his conscience. (*Ibid.* 38.22-40.5, 40.15-16.)

Abelard's argument, which was often criticized later, is the first known discussion of deontic consequences. He also formulated the question of whether willing the antecedent of a good consequence which is known to be such implies willing the consequent. In his *Ethics* Abelard deals with examples which could be formulated as follows: if p implies q and S wills that p , does it follow that S wills that q ? (16.11-18.) Abelard's treatment of the question remains ambiguous, however, because his term 'will' seems to refer to wish rather than to efficient will in this connection. Nobody would be inclined to believe that this logical principle would hold of wishing. After Abelard, however, there were other twelfth century masters who asked the same question and applied it to the concept of efficient will, as Peter of Poitiers mentions in his *Sententiae* written c. 1170. (For medieval discussions of the logic of will, see S. Knuuttila and Taina Holopainen, 'Conditional Will and Conditional Norms in Medieval Thought', *Synthese* 96 (1993), 115-132.)

Some twelfth century authors noticed that even though willing an end effectively implies that a necessary means to it is also willed, (1) cannot be applied without restriction to efficient will in the form that if S wills the antecedent of a valid consequence, S also wills the consequent. The principle holds about the end-means relationship, but the necessary means are not the only consequents of what is willed. Peter of Poitiers formulated a counter-example as follows: if S repents of a sin, S is guilty of a sin, and S wills to repent of a sin, but S does not will to be guilty of a sin. Stephen Langton's counter-example was of the same type: if a man visits his sick father, the father is sick. This man wills to visit his sick father, but it does not follow that he wills the father to be sick.

When it was realized that one cannot apply (1) to effective will without qualification, medieval authors found it interesting to ask in what cases a rational agent does not will the consequent of what he or she wills. (i) The twelfth century examples just mentioned specify the case in which to will something in certain circumstances implies that those circumstances prevail though this is something which the agent does not will. This case was found philosophically interesting and it was also used in later medieval deontic logic. Contrary to what Abelard thought, it was realized that (1) and (2) cannot be applied without qualification to the notions of obligation and permission. The reasons were similar to those which demanded the qualification of (1) with respect to the notion of will. (ii) Another relevant but more problematic idea was that a separately unwanted side-effect of what is willed is willed more indirectly than a separately unwanted means to an end. This line of thought forms the background to Thomas Aquinas's distinctions between directly and indirectly voluntary acts and between states

of affairs willed *per se* and *per accidens* (See, e.g., *Summa theologiae* II.2.64.7-8, *De malo* 2.1.)

One can follow the discussion of the question of how (1) should be qualified with respect to will by tracing the comments on the example of a man who 'wills to be in the mud and have 100 marks' (*in luto esse cum 100 marchis*). The example was considered ambiguous, and it was possible to interpret it (i) as a case of reluctantly willing to become dirty as a means of getting 100 marks, (ii) as a case of willing to become dirty as a side effect or (iii) willing something in a situation in which one would become dirty in any case. The third alternative was particularly relevant to later discussions of conditional obligations.

2. Roger Roseth's Theory of the Rationality of Obligations

In the early fourteenth century many authors were interested in the question of whether (1) and (2) could be applied to deontic concepts. The most extensive systematic discussion of the logical properties of deontic concepts is to be found in the first question of Roger Roseth's *Lecture on the Sentences*. Roseth finished his book ca. 1335. It was copied several times during the second half of the fourteenth century and it is preserved to us in eight manuscripts, only three containing the complete work. The first article of the book aroused interest as an independent study of natural philosophy and was circulated in several copies. It was printed, together with the second article of the first question, as the first question of *Determinationes magistri Roberti Holcot* at Lyon in 1518. The printed version is abridged and unreliable. The translations in this paper are based on a transcription of the following manuscripts: Vaticana, Chigi B. V 66, 15v-20r, Oxford, Oriel College 15, 249rb-252ra, Bruxelles, Bibl. Royale 151, 17rb-24rb, and Padua, Bibl. Antoniana 238, 6va-10va.

The opening question of Roseth's *Lecture on the Sentences* is devoted to the problem of whether somebody can be obliged to do something against his or her conscience. The first article contains a detailed analysis of the properties of the terms *maximum* and *minimum* used in the discussions of the limits to different kinds of capacities. This text, which was also circulated as a separate tractate called *De maximo et minimo*, belongs to the fourteenth century trend of applying the rules of logical analysis to questions of natural philosophy and creating 'conceptual algorithms' for basic theoretical terms. As John Murdoch has shown, these analytical languages were interdisciplinary - for example, many authors applied the new conceptual tools of natural philosophy to theological questions (J.E. Murdoch, 'From Social to Intellectual Factors: An Aspect of the Unitary Character of Medieval Learning' in J.E. Murdoch and E.D. Sylla, eds., *The Cultural*

Context of Medieval Learning, Reidel, Dordrecht 1975, 271-339). Even though Roseth mainly concentrates on the properties of the terms *maximum* and *minimum* in natural philosophy, he also wanted to give an extensive answer to the ethical problem of whether there are, as regards intensity, maximal or minimal performances of the act prescribed which would conform to the prescript. We will forgo comment on this discussion and make some remarks on the second article.

Roseth assumes that the actual divine law (*lex statuta Dei*) is rational and that God is a sovereign moral authority who can introduce new precepts or change the old ones. He first formulates five general principles or rules which define the rationality of new norms, and the rest of the article consists of a discussion of various objections to the rules of rationality. In the next section we shall translate this introductory part of the second article and some parts of the discussion of the first rule.

In rules (i) and (ii) Roseth defines the formal rationality of a system of norms. Describing behaviour in accordance to the norms must not yield contradictions, i.e., a person should not violate a norm in a system by fulfilling a norm in the system. New obligations can be added to a system as rational norms without further changes only if they refer to omissions and commissions which one is permitted to will. Roseth pays particular attention to this point because he is interested in the fact that there are omissions or commissions which are permitted, although it is not permitted to will them; as they cannot be legitimately willed, they cannot be prescribed as such in a rational system of norms. These are the basic principles of Roseth's conception of the formal rationality of a system of norms. His conception of deontic rationality is not merely formal, however. He adds to the first rule that what is prescribed must be in the power of the agent in such a way that fulfilling the obligation does not result in a great disaster, e.g. death. Roseth refers here to the dictates of right reason, apparently thinking that any rational system of norms should serve human good in some understandable way. Rules (iii) and (iv) are connected with the Catholic doctrine of the salvation of the soul. Rule (v) refers to the doctrine of God's absolute power through which an act which is legal *de se* but cannot be legitimately willed can be changed into an act which can be legitimately willed.

3. Translation of Roger Roseth's Rules for the Rationality of New Norms

"The second article of this question deals with the question of whether anything which is permitted and not against the salvation of the soul can be rationally commanded by God. In this article I shall proceed as follows. First a distinction must be made pertaining to the term 'permitted', se-

condly, certain conclusions must be drawn from this distinction, and thirdly, some problems must be discussed and resolved.

Now, the distinction concerning the term 'permitted' is that something is permitted according to the declared divine law in such a way that a human being is permitted to will it according to it and something is permitted according to the declared divine law in such a way that a human being is not permitted to will it according to it. An example of the first case: to give alms for the sake of God's glory is permitted and to will it is permitted as well. Similarly to go to church is permitted according to the declared divine law and to will to go to church is also permitted according to the ordained law. An example of the second case: to be damned for a mortal sin is permitted, because otherwise God would act unlawfully in damning a human being for a mortal sin, but no one is permitted to will to be damned for a sin. Similarly it is permitted not to give alms to somebody who is in extreme need when, say, one does not have anything to give, but it is not permitted to will not to give anything in this case. Similarly one's father can be killed for an extreme transgression in a permitted way, but no-one is permitted to will it on his father according to the declared law. There are many other things which are permitted as such but which one is not permitted to will according to the declared law.

Certain conclusions may be adduced from this distinction. [1] The first conclusion is that any such order is rational according to the declared law which imposes upon me something that is permitted and in my power and that I am permitted to will according to the declared law without that order and, furthermore, that I can fulfil without extreme loss. By 'extreme loss' I refer to what results in death or in other great misfortunes or other things which everybody should avoid according to the dictates of right reason.

This conclusion is proved. Every order which imposes upon me something that I can will without sin both after that order is given and before it is given is a rational order. But every order which imposes upon me something that I am permitted to will according to the declared law without that order is an order which imposes upon me something that I can will without sin both after the order is given and before it is given. Therefore every order which imposes upon me something that I am permitted to will according to the declared law without that order is a rational order. The major premise is proved because no sin follows from an order of this kind and therefore it seems to be rational. The minor premise is also clearly true because whatever I can will without sin before an order is given I can similarly will after it is given, if it is not explicitly or implicitly prohibited. But when I am obligated to something that I can do without sin according to the declared law, I am not prohibited by this order from willing it but rather obliged to will it. So all such things I can will without sin and in a permit-

ted way after the order is given just as before it was given and consequently all such orders are rational, which was to be proved.

Furthermore, any order is rational to which I am permitted to conform by willing what is ordered. But every order which prescribes for me something that I am permitted to will according to the declared law is of this kind. Therefore all such orders are rational. The major premise is proved: the reason for calling an order rational is that a human being is permitted to conform to it. The minor is proved: one can conform to an order only by willing that to which one is obliged. Therefore, if one is permitted to will that to which one is obliged, one is also permitted to conform to that order.

Furthermore, I can become rationally obliged to anything that I am permitted to will before and after an order is given. But whatever I am permitted to will according to the declared law is something that I am permitted to will without sin both without an order and after an order is given. Therefore all things of this kind can be rationally imposed upon me. The major premise seems to be clear, because it follows that an order is rational from the fact that I am permitted to will what is ordered when it is ordered as well as before it is ordered and that I am obliged to will it as far as I can when it is ordered. The minor premise is also obvious, for I ask what could cause it that I am not permitted to will something after an order is given in the same way as before it was given. It cannot be anything but that the order is given. But then it could be said about anything permitted according to the law that I can not will it when it is ordered. It would follow that when I am permitted to help somebody in need without an order and it is imposed upon me that I should help that person, I am not permitted to will it after the order is given, which is absurd. It would follow that there is a rational order to which I am not permitted to conform, because the order to help someone in need is rational, but I am not permitted to conform to this order by willing to help, because it is not permitted as a result of the order.

[2] The second conclusion is that no such order which prescribes something which is permitted and which I am not permitted to will according to the declared law without its being prescribed is rational according to the declared law. This conclusion is proved because the order to which I am not permitted to conform according to the declared law is not a permitted order according to the declared law. But an order which imposes upon me something that I am not permitted to will according to the declared law without being ordered to do so is an order to which I am not permitted to conform according to the declared law. Therefore no such precept is rational for me. The major premise is obvious and the minor premise is true because I am not permitted by the declared law to will such permitted things and therefore I am not permitted by the declared law to conform to the order by which I am obliged to such a permitted thing, because I can conform to this order only by willing that permitted thing to which I am obliged.

Consequently I am not permitted by the declared law to will that permitted thing. It follows that I cannot conform in a way permitted by the declared law to an order by which I am obliged to such a permitted thing and consequently such an order is not rational according to the declared law. Similarly no reason is found why one thing which I am not permitted to will according to the declared law without its being ordered could be rationally imposed upon me according to the declared law rather than another thing which I am not permitted to will according to the declared law without its being ordered. Therefore if one such thing could be ordered, any such thing could be ordered according to the declared law and so your hating God could be ordered according to the declared law which you are not permitted to will, namely to hate God, according to the declared law except that it is ordered.

[3] The third conclusion is that not everything that is not against the salvation of the soul can be ordered according to the declared law. This is proved because there is something that is not against the salvation of the soul and that I am not permitted to will according to the declared law without its being imposed upon me. Consequently such matters cannot be ordered according to the declared law. An example of this is that it is not against the salvation of a virgin that she be violated against her will as is clear from the blessed Lucia who said to a judge when he wanted to send her to a brothel: 'If you do this' she said, 'and let me be violated, my chastity will duplicate my crown of glory.' And it is stated in question 32 of chapter 1 [of Gratian's *Decretals*] that to be violated against one's will is not against the salvation of the soul and the reason for this is that chastity will duplicate the crown of glory. But no virgin is permitted to will to be violated against her will according to the declared law. It is in fact impossible to will to be violated against one's will, for no one can will to be violated except by a free choice of the will, and therefore it is impossible that someone could will that she be violated against her will. If it were permitted to will being violated according to the declared law and it is not possible to will being violated against one's will except by willing to be violated, it would follow that one could will to be violated in a permitted way according to the declared law, which is clearly false, and therefore this cannot be prescribed for her according to the declared law.

[4] The fourth conclusion is that not everything that promotes the salvation of the soul can be rationally ordered according to the declared law, because to be a victim of violation does promote the salvation of a virgin, but this can not be rationally prescribed for her according to the declared law. It is obvious that such a violation promotes the salvation of a virgin because in this way her crown of glory is duplicated and so it promotes the salvation of the soul of a virgin. In the same manner Augustine says in *De civitate Dei* [14.13] that there are many who fall into heinous sin and in this way

become conscious of their weakness and improve their behaviour, which they would never do or not do as quickly if they had not first fallen. Therefore to fall into heinous sin promotes the salvation of their souls. But one cannot be rationally obliged to fall in this way according to the declared law. It follows that not everything that can be meritoriously brought about can be rationally prescribed according to the declared law, as is obvious from the violation example.

[5] The fifth conclusion is that through God's absolute power I can be permitted to will anything that is permitted in the second sense, taking the expression 'to be permitted to will' to mean that I can will something without sin and the punishment associated with it. This can be proved, for through his absolute power God can decide that I can will whatever is permitted in the second sense without deserving punishment but rather an eternal reward according to God's free acceptance of those he accepts and free discarding of those he discards. Through God's absolute power then nothing is permitted in the second sense of the term so that I could not be permitted to will it without deserving punishment and consequently without sinning, because to sin is nothing other than to do or to omit something the commission or the omission of which makes me worthy of punishment."

4. *Defining Conditional Obligations*

After these general rules Roseth discusses various possible objections and develops some philosophical and logical ideas pertaining to norms. The first objection to the first rule runs as follows. If you are at your devotions and your prelate orders you to do something permitted but not meritorious, the order is irrational, for your first activity is meritorious with respect to your eternal life and the new norm would prevent you from acting in such a highly meritorious way. It is assumed that spiritual contemplation is the basic duty of the religious and the more they concentrate on it the more merit derives from it. Roseth's answer is based on the idea that the value of *prima facie* meritorious acts must not be thought to be greater than that of fulfilling actual duties. The merit one could earn from contemplation does not then compensate the demerit ascribed to the omission of an actual obligation. Otherwise one could avoid fulfilling actual duties by allegedly meritorious acts. Roseth's discussion of the first objection is sketchy, but it includes references to many different philosophical problems about norms.

The second objection runs as follows. It is permitted to will to behave in a way which is not meritorious though the order that one should will to behave in a non-meritorious way is not rational. It is not rational because it could be violated only in a meritorious way. The first part is proved as follows. If you are sleeping, you do not behave in a meritorious way.

Furthermore, you know that this is a good consequence: since you are permitted to will the antecedent, you are permitted to will the consequent.

The question of whether a system on norms might include the norm that norms must not be fulfilled was first discussed by William Ockham in question 14 of his *Quodlibet* III. Roseth treats this question in the same way later when dealing with the fifth conclusion. Here he discusses the idea that mentions another possible reading. If a system of norms includes a norm which says that no act should conform to a norm, all behaviour could be taken to conform to norms. But acts would then be automatically meritorious which shows that they are not real merits.

The main point of Roseth's answer to the second objection is that there is a formal mistake in the counter-argument. The possibility of the problematic norm is introduced incorrectly, because it is mistakenly assumed that if one is permitted to will the antecedent of a good consequence, one is also permitted to will the consequent:

I accept the following consequence: you are sleeping; therefore you do not benefit from an elicited act. But I deny this consequence: this consequence is good and you know that it is good; therefore if you are permitted to will the antecedent, you are permitted to will the consequent. This is because there are consequences which are good and which I know to be good the antecedent of which I am permitted to will without being permitted to will the consequent. For example, this consequence is good and known to be good: I repent of my sin; therefore I am in sin. I am permitted to will the antecedent but I am not permitted to will the consequent, because I am permitted to repent of my sins, but I am not permitted to will to be in sin. Therefore the consequence is not valid.

The same point is repeated in the discussion of the third counterexample, which is a variant of the second one. Examples of this kind show that there are obligations which can be rationally fulfilled only in cases in which some norms have already been violated. Rules (1) and (2) could be applied to the notions of obligations and permissions only if there were no conditional norms by which one's conduct, after having violated certain norms, is regulated. Roseth noticed that conditional norms of this kind, called contrary-to-duty imperatives in contemporary literature, prevent one from accepting the rules of inference of modal logic in deontic logic without qualification.

These are not the only problematic cases according to Roseth. There is a second class of conditional obligations and permissions regulating conduct in those situations in which the moral agent has not violated any rules but which he or she cannot will without violating some rules. This group of

obligations and permissions could serve as Roseth's answer to the so-called paradox of the Good Samaritan. Roseth's example is that one may accept that one's father will be killed because of a serious transgression; a more simple case would have been a variant of Stephen Langton's example of conditional will; one should will to visit one's sick father, but one is not permitted to will that there be such a situation.

In his answer to the fourth objection to the first rule Roseth discusses the question of how the conditional obligation should be formulated. He thinks that a reasonable *prima facie* formulation is

$$(9) \quad p \leftrightarrow Oq$$

where p is forbidden or something permitted such that it is not permitted to will it. Roseth thought, however, that (9) was not a sufficient form. The first addition to (9) is formulated in his discussion of the fourth argument against the first rule. The objection runs as follows:

It is permitted not to repent of one's sins according to the declared law except when one is obliged to repent, because one is never obliged to repent except when one is in sin. Consequently one is never obliged to will to repent according to the declared law except when one is in sin and consequently one is never obliged to will to repent except when one is obliged to repent. Therefore one could be ordered not to will to repent according to your position. Let us suppose that Socrates is ordered to not to will to repent of his sin except when he is obligated to repent, i.e. when he should repent. I assume that Socrates is in a state of grace and not in a sinful state when this order is given to him. I ask then whether Socrates can will to repent when this order is given to him or not. If it is said that he cannot will it, one can answer that he can repent as freely after this order as before it, because this order does not constrain his will. Since he could will to repent before the order, he can do so after the order is given. But if this is assumed to take place, a contradiction follows. I prove this by asking whether repenting in this way he should repent or not. If he should and he wills, he wills to repent when he should repent. It is assumed that he has not committed any other sin, and therefore he is obliged to repent only because he wills to repent when he should and consequently he should repent because he fulfils the order. This conclusion is false. If he should not repent and he wills to do so, he wills to repent when he should not. Therefore the order is violated and he should repent, and it follows that if he should not repent he should.

If the conditional obligation is formulated so that it is obligatory and allowable to will to repent if and only if one is guilty of a sin, one could ask whether Socrates, who wills to repent without having committed any sin, should repent or not. If he should, he is doing what he ought to do, but then he should not repent. If he should not, he violates a rule and he ought to see that he repents. So if he should not repent, he should repent and *vice versa*.

According to Roseth, the intention of the rule-giver is that Socrates ought to will to repent of his sins only when he is guilty of sin and that the prescribed act of repentance is different from the act of willing to repent when one has not sinned before repenting. So Socrates, while willing to repent in this way, violates the intention of the rule-giver, although he seems to fulfil his obligation. In order to avoid difficulties of this kind, one apparently should add to formula (9) the qualification that fulfilling the condition of a conditional obligation does not fulfil the obligation:

$$(10) \quad (p \leftrightarrow Oq) \ \& \ \neg L(p \rightarrow q)$$

This form is similar to that which von Wright suggests in order to solve difficulties in defining conditional obligation (G.H. von Wright, 'Deontic Logic and the Theory of Conditions' in R. Hilpinen, ed., *Deontic Logic: Introductory and Systematic Readings*, Reidel, Dordrecht 1971, 169.)

The form (10) had certain antecedents in medieval logic. Conditional norms were also discussed in treatises *De obligationibus* which dealt with the logic of disputation and which as such had nothing particular to do with morality or ethics. Medieval obligations logic contains rules for disputations between an opponent and a respondent and discussions of various problems connected with them. Some general tenets of this branch of logic can be illustrated by having a look at the disputation called *positio*. The opponent puts forward an initial proposition (*positum*) which is usually contingent and false. The respondent is obliged to treat the *positum* as he treats propositions he knows to be true. After the *positum* the opponent puts forward new propositions and the respondent must react by saying: 'I grant it', 'I deny it', or 'I doubt it'. The opponent tries to trap the respondent into conceding something contradictory to the *positum*, to propositions which are correctly granted or which are opposites of propositions correctly denied, or to propositions which follow from these. The respondent's task is to answer in a logically consistent way while the opponent tries to break this consistency. One example of the interest in normative notions in obligations treatises is the discussion of disputations where the expression 'must be granted' is included in the initial *positum*. It was realized that a *positum* of the type 'That you are in Rome must be granted' can be read prescriptively as a norm or descriptively as a proposition expressing the existence of an obligation. The initial proposition including 'must be grant-

ed' is read descriptively in a *positio* disputation, but it is read normatively in the species of disputations called *petitio*. In his *De obligationibus* (1302), Walter Burley discusses some problems of formulating conditional norms in connection with the disputations called *positio dependens*, *positio cadens*, and *positio renascens*. What they have in common is that a proposition begins or ceases to be the *positum* when a condition is fulfilled. The condition is a disputational act. Burley's remarks on how the condition should be formulated show similarities with Roseth's treatment of conditional obligations. (See Knuuttila 1993, 189-90.)

In order to show (10) is not sufficient, Roseth deals with a variant of a well-known medieval sophism. Let us assume that those and only those who say something true will cross a bridge and that Socrates says: 'I shall not cross the bridge.' It is then asked whether this is true or false. According to Roseth, one should not accept the assumed case. Correspondingly, fulfilling the condition of a conditional obligation must not make it impossible that the obligation is fulfilled. When this restriction is added to (10), the resulting form is as follows:

$$(11) \quad (p \leftrightarrow Oq) \ \& \ \neg L(p \rightarrow q) \ \& \ M(p \rightarrow q)$$

Roseth presents other similar problems among the arguments against the second rule. In this part of the treatise the scope of interest is moved to the question of how to solve semantic paradoxes.

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