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Medieval *obligationes* as a regimentation of 'the game of giving and asking for reasons'

Catarina Dutilh Novaes^{*}

1 Introduction

Medieval *obligationes* disputations were a highly regimented form of oral disputation opposing two participants, respondent and opponent, and where inferential relations between sentences took precedence over their truth or falsity. In (Dutilh Novaes, 2005), (Dutilh Novaes, 2006) and (Dutilh Novaes, 2007, Ch. 3) I presented an interpretation of *obligationes* as logical games of consistency maintenance; this interpretation had many advantages, in particular that of capturing the goal-oriented, rule-governed nature of this kind of disputation by means of the game analogy. It also explained several of its features that remained otherwise mysterious in alternative interpretations, such as the role of impertinent sentences and why, while there is always a winning strategy for respondent, the game remains hard to play. However, the logical game interpretation did not provide a full account of the deontic aspect of *obligationes* — of what being *obliged* to a certain statement really consists in — beyond the general (and superficial) commitment towards playing (and winning) a game. After all, the very name invokes normativity, so an interpretation of *obligationes* that does not fully account for the deontic component seems to be missing a crucial aspect of the general spirit of the enterprise. In order to amend this shortcoming in my previous analysis I here present an extension of the game-interpretation based on the notion of 'the game of giving and asking for reasons' — henceforth, $GOGAR^1$ presented in Chapter 3 of R. Brandom's Making it Explicit (Brandom, 1994) as constituting the ultimate basis for social linguistic practices. The basic

^{*}Thanks to Edgar Andrade-Lotero and Ole Thomassen Hjortland for comments on an earlier draft of the paper.

¹ Following J. MacFarlane's terminology, cf. http://johnmacfarlane.net/gogar.html

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idea is that *obligationes* can be seen as a regimentation of some of the core aspects of GOGAR.

What is to be gained from a comparison between *obligationes* and GOGAR? From the point of view of the latter, the comparison can shed light on its general logical structure: if *obligationes* really are a regimentation of GOGAR, then they can certainly contribute to making its structure explicit (which is of course another crucial element of Brandom's general enterprise). Indeed, an *obligatio* is something of a *Sprachspiel* for GOGAR, a simplified model whereby some of GOGAR's properties can be made manifest. As for *obligationes*, what can be gained from the comparison, besides the emphasis on its fundamentally deontic nature, is a better understanding of its general purpose. At first sight, this highly regimented form of disputation, where truth does not seem to have any major role to play, may seem like sterile scholastic logical gymnastics. But if it is put in the context of GOGAR — which (presumably) captures the essence of our social, linguistic and rational behaviors — then its significance would appear to go well beyond the (mere) development of the ability to recognize inferential relations and to maintain consistency.

2 GOGAR

A crucial element of the philosophical system presented by Brandom in *Making it Explicit* (and further expanded in several of his subsequent writings) is the model of language use that he refers to as 'the game of giving and asking for reasons'. Brandom insists that language use and language meaningfulness can only be understood in the context of social practices articulating information exchange and actions — linguistic speech-acts (typically, the making of a claim) as well as non-linguistic actions.

In fact, GOGAR should account for what makes us social, linguistic and rational animals. As Brandom construes it, GOGAR is fundamentally a normative game in that the *propriety* of the moves to be undertaken by the participants is at the central stage. It is, however, not a transcendental kind of normativity, requiring an almighty judge outside the game to keep track of the correctness of the moves undertaken; rather, the participants themselves are in charge of evaluating whether the moves undertaken are appropriate. It is a "deontic scorekeeping model of discursive practice". In GOGAR, we are all players (speakers) *and* scorekeepers concomitantly; we undertake moves and keep track of everybody's moves (including our own) at the same time. The focus on (giving and asking for) reasons is an important aspect of how the model captures the concept of rationality: we are responsible for the claims we make, and thus must be prepared to

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provide $reasons^2$ for them when challenged. Underlying this fact is the idea of a logical articulation of contents such that some contents count as appropriate reasons for other contents.

In principle, as a general model of language use, GOGAR should encompass all different kinds of speech-acts: assertions, questions, but also promises, orders, expressions of doubt etc. However, for Brandom there is one fundamental kind of speech-act in the game, namely that of making an assertion.³ An assertion is both something that can count as a reason (a justification) for another assertion and something that may constitute a challenge — typically, when a speaker S makes an assertion incompatible with something previously said by T — and thus provoke the need for further reasons (T must defend the original assertion): hence, giving and asking for reasons.

The need to defend one's assertions threatened by challenges through further reasons indicates that one is somehow responsible for one's assertions. This is indeed the case according to the GOGAR model, and this fact is accounted for by the absolutely crucial concept of doxastic *commitment*. Just as a promise creates the commitment to fulfill what has been promised, the making of an assertion creates the commitment to defend it, i.e. to have had good reasons to make it. This is because one often relies on the information conveyed by an assertion made by another person in order to assess a particular situation and then act upon the assessment; but if false information is transmitted, then the assessment will probably be mistaken, and the action in question will probably not have the desired outcome; it may even have deleterious consequences for the agent. In such cases, it is fair to say that the person having conveyed the incorrect information is responsible for the infelicitous outcome, just as a reckless driver is responsible for the accidents he/she (directly or indirectly) causes. If somebody shouts 'fire!' as a prank in a completely full stadium, for example, this will probably cause considerable mayhem, and the infelicitous joker will be held accountable for all the damage caused. So given the potential *practical consequences* of an assertion, it is not surprising at all that liability should be involved in the making of an assertion.

For Brandom, the commitment to the content⁴ of an assertion in fact goes beyond the assertion itself: one is also committed to everything that follows from the original assertion, i.e. everything that can be inferred from it. The

² Etymologically, rationality comes from *ratio*, 'reason' in Latin.

 $^{^3}$ "The fundamental sort of move in the game of giving and asking for reasons is making a *claim* — producing a performance that is propositionally contentful in that it can be the offering of a reason, and reasons can be demanded for it." (Brandom, 1994, p. 141).

⁴ It is not entirely clear to me though whether Brandom sees commitments as having contents or sentences or claims as their objects, but it seems to me that contents would be the most appropriate objects of commitments.

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inferential relations between assertions are a primitive element of Brandom's system (codified in terms of *material* inferences, not formal ones); as he sometimes says, they are "unexplained explainers" (Brandom, 1994, p. 133). Material inferences are painstakingly discussed in (Brandom, 1994, Ch. 2), but for our purposes what is important is to realize that commitment to a content transfers over to other contents by means of inferential relations.

But besides being committed to contents, there is another primitive deontic status that a speaker may or may not enjoy with respect to contents: entitlement. From the point of view of a scorekeeper⁵, for a speaker S to be entitled to asserting a given content amounts to S being in the position to offer grounds that justify belief in the content, and thus the making of the corresponding assertion; this deontic status is attributed when the speaker has good (enough) reasons to believe the content to be the case. Brandom remarks that "commitment and entitlement correspond to the traditional deontic primitives of obligation and permission" (Brandom, 1994, p. 160); he rejects this terminology because he wishes to avoid the stigmata of norms associated with hierarchy and commands (as noted above, the scorekeeping is done horizontally by all participants). But ultimately, a commitment is indeed an obligation, and an entitlement is indeed a permission, and thus being committed to a content amounts to being *obliged* to it in exactly the same sense of being obliged during an *obligatio* disputation (as we shall see): one has a duty towards a certain content, which transfers over to all the contents that follow from it.

From the two primitive concepts of commitment and entitlement, Brandom derives the equally important concept of incompatibility: content pbeing incompatible with content q amounts to commitment to p precluding entitlement to q. It is not so much that it is factually impossible for one to be committed to p while believing oneself to be entitled to q; this can occur, just as one can make conflicting promises and hold inconsistent beliefs. But again, this is a matter of deontic scorekeeping: from the point of view of the scorekeepers, if a speaker is committed to p there is a whole series of contents q, t, etc. to which the speaker in question is simply not entitled as long as he maintains his commitment to p. But if he nevertheless insists in being committed to p and entitled to q at the same time, then he is simply making a bad move within GOGAR.

Brandom correctly notices that incompatibility, as much as entailment, is essentially a relation between sets of contents, not between contents them-

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⁵ The deontic statuses of commitment and entitlement are always perspectival, i.e. defined by the deontic attitudes of (self-)attributing commitments and entitlements of each scorekeeper. "Such statuses are creatures of the practical attitudes of the members of a linguistic community — they are instituted by practices governing the taking and treating of individuals *as* committed." (Brandom, 1994, p. 142).

selves.⁶ Take a set of three contents, e.g., those expressed by the sentences 'Every man is running', 'Socrates is a man' and 'Socrates is not running'. Commitment to either one of the two first contents alone does nor preclude entitlement to the third content, but commitment to both of them does preclude entitlement to the third, just as commitment to the first two contents simultaneously entails commitment to the content 'Socrates is running'. This aspect will be significant for the comparison with *obligationes* later on, as it hints at the fundamentally dynamic nature of the GOGAR model: every new assertion made requires the recalibration of everybody's deontic statuses by the scorekeepers — of the asserter, in particular, but in fact of everybody else as well, as GOGAR also accounts for inter-personal transmission of entitlement by testimony. In other words, a speaker's deontic status — her commitments and entitlements — is modified every time an assertion is made, more saliently but not exclusively by the speaker herself.

Indeed, there seem to be four main sources of entitlement according to the GOGAR model.

- 1. Interpersonal, intracontent deferential entitlement: Speaker 1 is entitled to (asserting) content p because speaker 2, a reliable source, asserted p.
- 2. Intrapersonal, intercontent inferential entitlement: Speaker 1 is entitled to (asserting) q because she is entitled to (asserting) p and p entails q.
- 3. Perception: Speaker 1 is entitled to (asserting) p because she has had a (reliable) perceptual experience corresponding to p.
- 4. Default entitlement: 'free moves', the contents entitlement to which is shared by all speakers insofar as these contents constitute common knowledge — everybody knows it, and everybody knows that everybody knows it.

A final point I wish to address in my brief presentation of GOGAR is the notion of inference, more specifically material inference. Brandom criticizes the formalist view of inference, according to which every valid inference is an instance of a formally valid schema; rather, the inferential relations that are the primitive elements of his inferential semantics are of a conceptual nature, while also firmly embedded in practices: "Inferring is a kind of doing." (Brandom, 1994, p. 91) The focus on the notion of material inference also echoes important features of *obligationes*, as in the latter

 $^{^{6}}$ (Brandom, 2008, Lect. 5). The cases of relations involving single contents can be seen as limit-cases, relating singleton sets.

framework the relation of 'following' (sequitur) in question is not restricted to formally valid schemata.⁷

3 Medieval obligationes

The following presentation is based on Walter Burley's treatment of *positio* in (Burley, 1988); although there is considerable variation among the different formulations of *obligationes*, Burley's can be taken to represent the 'standard' formulation.⁸

An obligatio disputation has two participants, Opponent and Respondent. In the case of *positio*, the most common and widely discussed form of *obligationes*, the game starts with Opponent putting forward a sentence, usually called the *positum*, which Respondent must accept for the sake of the disputation, unless it is contradictory in itself. Opponent then puts forward other sentences (the *proposita*), one at a time, which Respondent must either grant, deny or doubt on the basis of inferential relations with the previously accepted or denied sentences — or, in case there are none (and these are called impertinent⁹ sentences) on the basis of the common knowledge shared by those who are present. In other words, if Respondent fails to recognize inferential relations or if he does not respond to an impertinent sentence according to its truth-value within common knowledge, then he responds badly. Respondent 'loses the game' if he concedes a contradictory set of propositions. The disputation ends if and when Respondent grants a contradiction, or else when Opponent says 'cedat tempus', 'time is up'. Opponent and possibly a larger panel of masters present at the disputation are in charge of keeping track of Respondent's replies and of evaluating them once the disputation is over.

An *obligatio* disputation can be represented by the following tuple:

$$Ob = \langle K_C, \Phi, \Gamma, R(\phi_n) \rangle$$

 K_C is the state of common knowledge of those present at the disputation. Φ is an ordered set of sentences, namely the very sentences put forward during the disputation. Γ is an ordered set of sets of sentences, which are formed by Respondent's responses to the various ϕ_n . Finally, $R(\phi_n)$ is a

T in sorry. I have no reason to remove this foothote-text under line as a foonote

⁷ Indeed, the terminology of formal vs. material consequences, from which the terminology used by Brandom (directly borrowed from Sellars) ultimately derives, was consolidated in the 14th century; see (Dutilh Novaes, 2008).

⁹ Throughout the text, I will use the terms 'pertinent' and 'impertinent', the literal translations of the Latin terms '*pertinens*' and '*impertinens*'. But notice that they are often translated as 'relevant' and 'irrelevant', for example in the translation of Burley's treatise (Burley, 1988).

function from sentences to the values 1, 0, and ?, corresponding to the rules Respondent must apply to reply to each ϕ_n .

The rules for the *positum* are

- $R(\phi_0) = 0$ iff $\phi_0 \Vdash \bot$,
- $R(\phi_0) = 1$ iff $\phi_0 \nvDash \bot$.

The rules for the *proposita* are

- Pertinent propositions: $\Gamma_{n-1} \Vdash \phi_n$ or $\Gamma_{n-1} \Vdash \neg \phi_n$;
 - If $\Gamma_{n-1} \Vdash \phi_n$ then $R(\phi_n) = 1$;
 - If $\Gamma_{n-1} \Vdash \neg \phi_n$ then $R(\phi_n) = 0$;
- Impertinent propositions: $\Gamma_{n-1} \nvDash \phi_n$ and $\Gamma_{n-1} \nvDash \neg \phi_n$;
 - If $K_C \Vdash \phi_n$ then $R(\phi_n) = 1$;
 - If $K_C \Vdash \neg \phi_n$ then $R(\phi_n) = 0$;
 - If $K_C \nvDash \phi_n$ and $K_C \nvDash \neg \phi_n$ then $R(\phi_n) = ?$.

As the disputation progresses, different sets of sentences are formed at each round, namely the set formed by the sentences that Respondent has granted and the contradictories of the sentences he has denied. These sets Γ_n can be seen as models of the successive stages of deontic statuses of Respondent with respect to the commitments undertaken by him at each reply. The sets Γ_n are defined as follows:

- If $R(\phi_n) = 1$ then $\Gamma_n = \Gamma_{n-1} \cup \{\phi_n\};$
- If $R(\phi_n) = 0$ then $\Gamma_n = \Gamma_{n-1} \cup \{\neg \phi_n\};$
- If $R(\phi_n) = ?$ then $\Gamma_n = \Gamma_{n-1}$.

For reasons of space, I shall keep my presentation of *obligationes* very brief. The interested reader is urged to consult the vast primary and secondary literature on the topic,¹⁰ but further aspects of the framework will be discussed in the next comparative sections as well.

¹⁰ My own previous work (Dutilh Novaes, 2005), (Dutilh Novaes, 2006), (Dutilh Novaes, 2007) can serve as a starting point.

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4 Comparison

In this section I undertake a systematic comparison of the two frameworks. The emphasis will be laid on similarities, but I will also mention some important dissimilarities. Essentially, what is at stake during an *obligatio* disputation is the ability to appreciate the (logical and practical) consequences of the commitments undertaken by Respondent. Responded is committed (i.e. obligated) to the sentences he grants as well as to the contradictories of the sentences he denies. The deontic status of entitlement plays a less prominent role within *obligationes*, as the point really is to explore what one is obligated to once one obligates oneself to the *positum*. Besides this general and fundamental point of similarity, there are several specific similarities between GOGAR's and obligational concepts:¹¹

The key role of inferential relations In both models, (intra-personal, inter-content) transfer of commitment takes place through inferential relations, not restricted to formally valid inferences. By means of the transfer of commitment, Respondent is obligated to everything that follows from what he has granted/denied so far, as well as to the contradictories of what is incompatible (*repugnans*) with what he has granted/denied so far. Indeed, the notion of 'repugnant' sentences corresponds precisely to Brandom's notion of incompatibility.

The relation of inference relates sets of sentences/contents Both frameworks correctly treat the relation of inference (and the corresponding transfer of commitment) as relating sets of sentences to sets of sentences (although usually the consequent set is a singleton). Indeed, within rational discursive practices, what counts are not so much the inferential relations between individual sentences/contents; as a matter of fact, we are usually committed to a wide range of sentences/contents. It is the interaction between these different commitments that counts to define our further commitments: what very often happens is that commitment to p alone or to q alone does not commit the speaker to t, but joint commitment to p and to q does. In the obligational framework, every *propositum* that is granted or denied modifies Respondent's commitments.

The dynamic nature of both models A corollary of the previous point is that both models are dynamic, i.e. temporality is an important factor. In (Dutilh Novaes, 2005), I have explored in detail the dynamic nature of

¹¹ For reasons of space, I here treat only the most salient points of similarity. Notice though that there are others, for example the role played by pragmatic elements in both cases.

obligationes, and GOGAR is dynamic in very much the same way. Both models deal with phenomena that take place in successive steps, and each step is to some extent determined by the previous steps (a feature that is accurately captured by the game metaphor). In both cases, the order of occurrence of these steps is crucial. For example, if the *positum* of an *obligatio* is 'Every man is running', and the next step is 'You are running', this *propositum* must be denied as impertinent and false (since nothing has been said about Respondent being a man so far). However, if after the same *positum* 'You are a man' is proposed and accepted (as impertinent and true), and afterward 'You are running' is proposed, then the latter should be accepted as following from what has been granted so far, contrary to the first scenario.

Impertinent propositions and default entitlement Even though *obligationes* deal essentially with commitments and less so with entitlements, one specific kind of entitlement is nevertheless present in the framework. While Respondent's replies to pertinent sentences are fully determined by his previous commitments, there are no commitments concerning impertinent sentences (as this is exactly what they are: thus far uncommitted-to contents). What must determine his replies to impertinent sentences are exactly the uncontroversial entitlements shared by all those who are present at the disputation. These include circumstantial information (such as being in Paris or being in Rome), as well as very general common knowledge, for example that the Pope is a man. In other words, Respondent is entitled to accepting, denying or doubting a sentence on the basis of his factual knowledge concerning them; these are Brandom's 'free moves', with the same social dimension insofar as it concerns common knowledge.

Scorekeeping Within GOGAR, scorekeeping is something of a metaphor rather than a reality — nobody explicitly writes down the commitments and entitlements of other speakers. Scorekeeping is rather something done tacitly, and usually one is not even really aware of doing it. But within *obligationes*, scorekeeping is for real. This is exactly what I mean when I say that the latter is a regimented model of the former: some implicit, tacit elements of GOGAR are made explicit and tangible within *obligationes*. Indeed, those present at the disputation (in particular Opponent) explicitly keep score of Respondent's successive deontic statuses of commitments during a disputation; when he then fails to recognize a previously taken commitment, he responds badly and loses the game. Moreover, once the disputation is over, Respondent's performance is explicitly evaluated by a panel of Masters present at the occasion.

Caveats While the resemblance between the two frameworks is overwhelming, there are of course important points of dissimilarity. More specifically, and as noted before, *obligationes* is a less encompassing model, treating only a subclass of the phenomena captured by GOGAR.

- *Obligationes* only account for the commitments and entitlements of one speaker, namely Respondent.
- Asking for reasons is not part of an *obligatio*: Opponent cannot challenge Respondent, except by saying '*cedat tempus*' if Respondent grants a contradiction.
- *Obligationes* offer no extensive treatment of the different kinds of entitlements and of the mechanisms of transfer of entitlement.
- GOGAR is meant to be a model of the very meaningfulness of language — i.e., the relations of commitment-preserving entailment and entitlement-preserving entailment define the meaning of utterances whereas *obligationes* operate with a language that is meaningful from the start.

For these reasons, an *obligatio* is best seen as a simplified model of how a speaker must behave towards assertions. This simplification may on the one hand entail loss of generality, but on the other hand it may offer a viewpoint from which some properties of our social discursive practices are made manifest and can thus more easily be studied.

5 What is gained through the comparison?

5.1 For obligationes

The deontic nature of obligationes Ever since scholars of medieval philosophy became interested in *obligationes* halfway the 20th century, the very name of this form of disputation was a source of puzzlement. In what sense exactly did such a disputation consist in an obligation? *Who* was obliged, and *what* was he obliged to? Although some modern analyses did emphasize its deontic nature (see (Knuuttila & Yrjonsuuri, 1988)), it is fair to say that the deontic component was essentially overlooked in most of them (including my own game interpretation). On a personal note, I can say that I only fully understood how thoroughly deontic the *obligationes* framework really was against the background of GOGAR, and in particular by means of the concept of commitment.

Recall that I have accounted for the notion of commitment to a statement/content in terms of the *practical consequences* that the reliance on its

truth can have for other people's lives, insofar as they assume the statement to be true unless they have good reasons not to (Brandom's 'default entitlement' and Lewis' 'convention of truthfulness and trust') and insofar as they make practical decisions on the basis on their reliance on its truth. Of course, given the somewhat 'artificial' setting of an *obligatio* disputation, no practical consequences are to be expected. Nevertheless, the basic idea seems to be that commitment — obligation — transfers over by means of inferential relations: if respondent is committed to ϕ_n and ϕ_n implies ϕ_m , then respondent is also committed to ϕ_m . Now, since respondent is always committed to at least one statement, the *positum*, this first commitment sets the whole wheel of commitments in motion. So an *obligatio* is not only about logical relations between sentences and consistency maintenance; more importantly, it is about the deontic statuses of commitments and entitlements and the (intrapersonal, inter-content) mechanisms of inheritance of these statuses.

The general purpose of obligationes More pervasive and significant than the puzzlement caused by the term *obligationes* itself is the still widespread perplexity of scholars concerning the very purpose of such disputations: after all, what's the point? What are obligationes about? They are not about truth, as more straightforward forms of disputation are, given that the *positum* is generally, and conspicuously, a possible but *false* sentence. Many of the modern interpretations have sought to establish a rationale for obligationes — a logic of conditionals, a framework for belief revision – but the shortcomings of each of these interpretations only contributed to the growing frustration related to the apparent elusiveness of the 'point' of *obligationes*. It couldn't possibly be a mere form of testing a student's skills, i.e., "schoolboy's exercise", as suggested in the early secondary literature of the 1960's. If there is no real purpose to it beyond the intricate logical structure of the framework, then it might be merely sterile scholastic logical gymnastics after all, just as most of the techniques of scholasticism according to the standard post-scholastic (i.e. Renaissance) criticism.

But when put in the context of GOGAR, *obligationes* seem to provide a model of what it means to act and talk rationally, i.e. to take part in (mainly, but not exclusively) *discursive* social practices. Thus viewed, *obligationes* could also most certainly fulfill an important pedagogical task, namely that of teaching a student how to argue *rationally* — i.e., how to argue mindful of one's entitlements and commitments, of the reasons (grounds) for endorsing or rejecting statements, and of the need to defend one's own commitments — but its importance clearly goes beyond merely pedagogical purposes. Interestingly, throughout the later Middle Ages the format of *obligationes* was extensively adopted for scientific investigations, precisely

because it provides a good model for rational argumentation. In a wide variety of contexts (ranging from logic to theology, from ethics to physics), one encounters extensive use of the *obligationes* vocabulary and concepts in the presentation of arguments. Thus seen, the framework is far from being a futile logical exercise: rather, it presents a regimentation of some crucial aspects of what it is to argue and act rationally, of which GOGAR is also a (more encompassing) model.

5.2 For the game of giving and asking for reasons

Underlying logical structure While in terms of the 'bigger picture', it is mostly *obligationes* that can benefit from the comparison, on the level of (logical) detail GOGAR has much to learn from *obligationes*. Ever since the publication of (Brandom, 1994), Brandom has been refining the logical structure underlying GOGAR in particular and his inferentialist semantics in general, especially through the development of what he calls 'incompatibility semantics'. Nevertheless, and despite the powerfulness of the modern logical techniques often employed by Brandom and his collaborators, these fairly recent developments are still somewhat overshadowed by the centuries of research (involving a very large number of logicians) on the logic of *obligationes*.¹² Indeed, the (primary and secondary) literature on the topic contains sophisticated analyses of the logical and pragmatic properties of the framework, which are (presumably) applicable to GOGAR so that the comparison can contribute to making GOGAR's logical structure explicit.

For example, I have proved elsewhere (Dutilh Novaes, 2005) that the class of models satisfying Γ_n becomes smaller in the next step of the game only if ϕ_{n+1} is impertinent; if ϕ_{n+1} is pertinent, then the class of models satisfying Γ_n is the same as the class of models satisfying Γ_{n+1} , even though Γ_n and Γ_{n+1} are not the same.¹³ This result can be interpreted in terms of GOGAR in the following manner: when a speaker makes an assertion p which actually follows from any sentence or set of sentences previously asserted by him, then his set of commitments is thereby *not* augmented. In other words, his deontic status remains the same, as he was *de facto* already committed to p. Mixing the two vocabularies, one can say that a speaker's deontic status is modified only if he asserts an *impertinent sentence*; assertions of *pertinent* sentences have no effect whatsoever in this sense. Now, this is just one example of how, given that the *obligationes* framework is a more regimented form of the rational, discursive practices also modeled by GOGAR, such

 $^{^{12}}$ Obligationes were one of the main topics of investigation in the late medieval Latin tradition, as attested by the very large number of surviving texts ranging from the 12^{th} to the 15^{th} Century.

¹³ Assuming, of course, that Respondent has replied according to the rules.

logical properties are more easily investigated against the background of the former rather than the latter.

Strategic perspective When speaking of 'the *qame* of giving and asking for reasons', Brandom seems to be taking seriously the analogy between the rational discursive practices presumably captured by GOGAR and actual games. It is undoubtedly also a reference to Wittgenstein's language-games, but the question immediately arises: how much of a *qame* is GOGAR, actually? To the best of my knowledge, Brandom does not further explore the comparison to games, just as he does not discuss specific game-theoretic properties of GOGAR; this seems to me, however, to be a promising line of investigation. Two important game-theoretical properties that come to mind are the goal(s) to be attained within a certain game, i.e. the expected outcome, and the possible strategies to play the game (usually, one is interested in maximizing the payoff, i.e. in the ratio of best possible outcome vs. the most economical strategy). Based on these two concepts, it would seem that GOGAR is in fact a family of games, not a single game, as each particular game of the GOGAR family has its own goals. Most of them are cooperative games, where participants have a common goal rather than that of beating the opponent, e.g., dialogues where people exchange information and coordinate their actions. Nevertheless, there are of course numerous situations of discursive practices where the point really is to beat the opponent, such as, e.g. in a court of law. In each case, different strategies must be employed: in the case of cooperative games, Gricean maxims may be seen a good account of strategies to maximize understanding between the parties; in the case of competitive games, however, a completely different strategy must be used, one where deceit, for instance, may even have some role to play.

Obligationes is obviously a competitive game: if Respondent grants a contradiction, he loses the game; but if he is able to maintain consistency, he beats Opponent. And even though the medieval authors themselves did not account for *obligationes* in terms of games (nor did they have knowledge of the specific game-theoretical concepts just discussed), medieval treatises on *obligationes* are filled with strategic advice for Respondent on how to perform well during an *obligatio*. These treatises present not only rules defining the legitimate moves within the disputation but also practical, strategic advice.¹⁴ Some of the strategic rules presented in Burley's treatise are: "One must pay particular attention to the order [of the propositions]" (Burley, 1988, p. 385); "When a possible proposition has been posited, it is not absurd to grant something impossible *per accidens*" (Burley, 1988, p. 389);

¹⁴ "It is important to know that there are some rules that constitute the practice of this art and others that pertain to its being practiced well." (Burley, 1988, p. 379)

"When a false contingent proposition is posited, one can prove any false proposition that is compossible with it" (Burley, 1988, p. 391).

The point here is that the strategic perspective present in these *obligationes* treatises can very likely be transposed to the GOGAR framework to produce interesting results. In the case of GOGAR games where the different speakers are truly opposed to one another and the point is really to beat the opponent, then the strategic tips from the *obligationes* treatises can be used straightforwardly. But even in the case of cooperative games of GOGAR, the obligational strategies may still be quite helpful, as they essentially describe procedures that may enable one to maintain consistency — certainly a desirable outcome in the context of rational discursive practices. The heart of the matter is that GOGAR does not emphasize the player-perspective: rather, Brandom's description of GOGAR is that of the theorist standing outside the game and offering a model to explain the use(s) and meaningfulness of language. In this sense, the player-perspective offered by *obligationes* may come as an interesting complement.

The role of doubting Brandom presents GOGAR as having only one quintessential kind of move, i.e. making a claim. We have seen that challenging is also an important move, but a challenge is made by means of the assertion of an incompatible content. In contrast, obligationes feature three main kinds of moves for Respondent: granting, denying and doubting. Granting obviously corresponds to asserting, and in a sense, denying is also a kind of assertion within the *obligationes* framework, namely the assertion of the contradictory of the denied sentence. I have also pointed out that challenging is not a legitimate move for either Respondent or Opponent, a fact that is related to the regimented and simplified nature of *obligationes* as a model of rational discursive practices. But GOGAR claims to be much more encompassing than *obligationes* does, so while it seems reasonable for obligationes to leave some important elements out, the same does not hold of GOGAR. Now, GOGAR has no resources to deal with the phenomenon of not being sure, of recognizing that one does not dispose of sufficient grounds to assert a content or its contradictory (knowing that you don't know), whereas this seems to be a very important element of our rational discursive practices. In contrast, by having doubting as one of the legitimate moves for Respondent, the obligational framework fares batter in this respect.

It might be argued that doubting is not relevant for GOGAR insofar as it has no impact on a speaker's deontic status, as it is simply the lack of commitment or entitlement; not so. A particular rule presented in Kilvington's treatment of *obligationes* in his *Sophismata* (Kilvington, 1990, sophism 48) shows that doubting can indeed alter a speaker's deontic status. The rule

is the following: if 'p implies q' is a good consequence, and if Respondent has doubted p, then he must not deny q, i.e., he is not entitled to $\neg q$. This is because, in a valid consequence, if the consequent is (known to be) false, then the antecedent will also be (known to be) false, so if Respondent has doubted the antecedent, he must either doubt or grant the consequent. This is just an example of the intricacies of the logic of doubting and of how doubting can indeed have an impact on one's deontic status. The obligational literature is filled with many more of such examples, in particular in the treatments of dubitatio¹⁵, one of the forms of an obligational disputation along with positio (which is in some sense the 'standard' form of obligationes, and the one discussed in this text so far). Thus, I suggest that GOGAR should pay more attention to speech-acts other than assertions as also having an impact on a speaker's deontic status — doubting in particular, as shown within the obligational framework.

6 Conclusion

In this brief comparative analysis of GOGAR and medieval *obligationes* I hope to have indicated how fruitful a systematic comparison between the two frameworks can be. For reasons of space I have here merely sketched such a comparison, and a more thorough analysis shall remain a topic for future work.

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References

Brandom, R. (1994). *Making it Explicit*. Cambridge, MA: Harvard University Press.

Brandom, R. (2008). *Between saying and doing*. Oxford: Oxford University Press.

Burley, W. (1988). Obligations (selection). In N. Kretzmann & E. Stump (Eds.), The Cambridge Translations of Medieval Philosophical Texts: Logic and the Philosophy of Language (pp. 369–412). Cambridge: Cambridge University Press.

¹⁵ In a *dubitatio*, the first sentence (the *obligatum*) is not a *positum*, it is a *dubium*, a sentence which Respondent must doubt for the sake of the disputation just as he accepts the *positum* in a *positio*; he must then see what follows (in terms of his commitments and entitlements) from having doubted the first sentence.

Dutilh Novaes, C. (2005). Medieval *obligationes* as logical games of consistency maintenance. *Synthese*, 145(3), 371–395.

Dutilh Novaes, C. (2006). Roger Swyneshed's *obligationes*: A logical game of inference recognition? *Synthese*, 151(1), 125–153.

Dutilh Novaes, C. (2007). Formalizing medieval logical theories. Berlin: Springer.

Dutilh Novaes, C. (2008). Logic in the 14th Century after Ockham. In D. Gabbay & J. Woods (Eds.), *Handbook of the history of logic* (Vol. 2: Mediaeval and Renaissance Logic, pp. 433–504). Amsterdam: Elsevier.

Kilvington, R. (1990). *Sophismata*. Cambridge: Cambridge University Press. (English translation, historical introduction and philosophical commentary by N. Kretzmann and B. E. Kretzmann)

Knuuttila, S., & Yrjonsuuri, M. (1988). Norms and actions in obligational disputations. In O. Pluta (Ed.), *Die Philosophie im 14. und 15. Jahrhundert* (pp. 191–202). Amsterdam: B.R. Güner.