Medieval Theories of Truth* Catarina Dutilh Novaes

Abstract

This entry surveys five influential medieval theories of truth, paying particular attention to the bearers of truth within each theory as well as to their emphasis, whether metaphysical or semantic. (1) Anselm's notion of truth is characterized by the concept of rectitude: something is true if it is/does what it ought to be/do, that is, if it conforms to God's design for it (2) Abelard's theory of truth revolves around the notion of the *dicta* of propositions, i.e. what is said by propositions. *Dicta* are the actual truth-bearers for Abelard. (3) Thomas Aquinas defends an approach to truth based on the notion of adequation of intellect and object. The fit can occur in both directions: an object can conform to the concept of it in its creator's intellect, and a concept can conform to the object insofar as it represents it accurately in the knower's intellect. (4) Theories of truth based on the concept of supposition provide recursive definitions of the truth of propositions based on the supposition of their terms, and reject any metaphysical import concerning the notion of truth. (5) Theories of truth emerging from 14th century treatises on *insolubilia* start out with a fundamentally Aristotelian definition of a true proposition as a proposition signifying as things are, which is then modified so as to introduce quantification over the signification of a proposition.

As in the philosophy of the past decades, the notion of truth was of crucial importance for medieval philosophers, as could be expected given their keen interest in logic and semantics, on the one hand, and in metaphysics and philosophical theology¹ on the other hand. But to attain an accurate understanding of medieval theories of truth, it is important to realize that the class of such theories is more heterogeneous than the class formed by modern theories of truth. For example, we philosophers of the early 21st century (in particular those working within the analytic tradition) are accustomed to viewing truth essentially as an attribute of complex linguistic entities. Now, when examining medieval theories of truth, the modern philosopher may be surprised by the wide variety of entities that can receive the attribute 'true' – truth-bearers for short: propositions², as to be expected, but also objects, mental judgements, actions, and even God.

A general characteristic of these theories (in fact, of medieval logical theories in general) is the influential position occupied by the Aristotelian corpus, in particular discussions from the *Categories* and *De Interpretatione* (in first instance) and the *Metaphysics*.³ Also influential was the neoplatonic-Augustinian conception of truth which equated truth to being: "The true is that which is".⁴ These two radically different sources of inspiration may explain the heterogeneity of medieval theories of truth, which will be illustrated by the analyses of five representative medieval approaches to truth below.

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¹ John 14: 6: "Jesus saith unto him, I am the way, the truth, and the life: no man cometh unto the Father, but by me." Naturally, there is a strong medieval tradition dealing with a biblical notion of truth. Here, however, we will focus on philosophically inclined theories of truth, even though the line between theology and philosophy is a very thin one in the medieval context.

² In what follows, I use the term 'proposition' in the Latin sense of '*propositio*', i.e. roughly equivalent to what is now known as a declarative sentence, a statement. Also following medieval usage, propositions can be either spoken, written or mental constructions (see entry on mental language in this volume).

³ Aristotle's *Metaphysics* only became widely read by the middle of the thirteenth century (Dod, 1982). Moreover, notice that the discussions on future contingents, closely related to the issue of the truth of propositions (but treated elsewhere in this volume), were also prompted by *De Interpretatione* (Chapter 9).

⁴ Augustine, *Soliloquia* II, 5, quoted in (Aertsen, 1992; 160).

To help us understand the different theories in their diversity, a few distinctions may come in handy. First, among the different medieval theories, one encounters two basic kinds of entities to which truth is attributed – two kinds of truth-bearers: linguistic and mental entities,⁵ and objects in extra-mental reality. Indeed, the attribution of truth to objects is one of the distinctive features of some medieval theories of truth.⁶ But all medieval theories recognize spoken, written and mental propositions and judgements as bearers of truth⁷.

Secondly, let us distinguish between metaphysical and semantic approaches to truth, a distinction pertaining to **emphasis**. The metaphysical approach is characterized by the focus upon the properties and states of things that make truth-bearers true. By contrast, the semantic approach is characterized by minimal or no focus on what must obtain in reality for an entity to be deemed true; rather, semantic theories of truth concentrate on properties of the linguistic entity in question, in particular its signification or the supposition of its terms, in order to determine its truth-value. In other words, what makes a proposition true within the semantic approach are primarily properties of the proposition itself, and not the state of things in reality.

Notice that one should not conflate the metaphysical approach with correspondence theories of truth, which are characterized by the idea that truth is a relational property involving a relation (often of likeness) of a given entity to some portion of reality. Indeed, there are semantic theories of truth that are also fundamentally based on correspondence. To illustrate the difference between metaphysical and semantic approaches, consider two correspondentist definitions of the truth of propositions:

- 1) A proposition is true iff thing are as it signifies them to be.
- 2) A proposition is true iff it signifies things to be as they are.

In 1), the truth of a proposition depends on properties of things, and its signification is, as it were, taken for granted (it is not under scrutiny); therefore, 1) characterizes a metaphysical approach to truth. By contrast, in 2) the truth of a proposition depends on a feature of the proposition itself, its signification, and the state of things is in turn taken for granted; 2) is thus a semantic definition of truth.

But to be sure, not all medieval theories of truth are based on correspondence; those articulated around the notion of supposition, for example, are not. In the latter case, truth is not a relational property but rather the monadic property of truth-bearers.

Notice also that, with respect to the first distinction, a semantic theory of truth will only have linguistic entities as its truth-bearers. A metaphysical theory of truth may recognize non-linguistic as well as linguistic entities as its truth-bearers; but a theory of truth whose truth-bearers are exclusively propositions, but which focuses on what must obtain in

⁵ Notice that, given the mental language hypothesis, thoughts (i.e. mental propositions) are also linguistic entities.

⁶ Known as objectual (Künne, 2003, 3.1.2) or ontological (Wippel, 1989; 295) truth in the literature.

⁷ Known as propositional (Künne, 2003, 3.1.2) or logical (Wippel, 1989; 295) truth in the literature.

reality for propositions to be true and not on their semantic properties is also, according to this distinction, a metaphysical theory of truth.⁸ It is not the nature of truth-bearers that makes a theory semantic or metaphysical, but rather the nature of their causes of truth, i.e. whether semantic or metaphysical facts.

2. Anselm of Canterbury

Anselm's theory of truth, presented chiefly in his *De Veritate*, illustrates remarkably well the heterogeneity of medieval theories of truth. Anselm analyzes the notion of truth under several different facets, as applying to different kinds of entities; but ultimately, only God is the real Truth for Anselm, and all other truths emanate from Him. As such, his theory is representative of the neoplatonic-Augustinian approach, which emphasizes the truth existing in things but ultimately emanating from God.⁹

The core of his conception of truth is the notion of rectitude (see Visser et al., 2004); something is true if it does what it ought to do, that is, if it conforms to God's design for it. As such, it can apply to literally all of God's creation: a friend is a true friend if she does what a friend is expected to do (to be supportive, loyal etc.); an action is a true action if it fulfils its purpose as intended by God; and so forth. Anselm's notion can be schematically formulated as follows: an entity A is true iff it corresponds to God's concept of A. Notice that truth is a relational property for Anselm, but the second *relatum* is not a portion of reality as in standard correspondence theories of truth; rather, it is a divine concept, while the first *relatum* (the truth-bearer) is any object of God's creation, linguistic as well as non-linguistic entities.

In *De Veritate*, which is written in the form of a dialogue between Teacher and Student, Anselm starts by examining the truth of propositions, as this is (he recognizes) the most commonsensical use of the notion of truth (Chapter 2). He presents what we could call a correspondence notion of truth for propositions: they are true if they state that what-is is and that what-is-not is not;¹⁰ but for Anselm this position is not a primary thesis. It is derived from the notion of truth as rectitude applied to a fundamental aspect of propositions: their purpose is to state that what-is is and that what-is-not is not, and therefore if they fulfill this purpose (if they do their job), then they are true. The same holds with respect to thoughts: "for the power of thinking that something is or is not was given to us in order that we might think that what-is is and what-is-not is not." (*De Ver*. 3). Similarly, truth with respect to will (*De Ver*. 4) and actions (*De Ver*. 5) is defined as rectitude, as willing and doing what one ought to.

As for the truth in the being of things (*De Ver.* 7), Anselm's conception of truth is clearly teleological. Every entity in God's creation has a purpose according to His design, and if it fulfills this purpose, then it is true. But given God's omnipotence, all things are (presumably) as He intends them to be, and thus "whatever is, is right" (Visser et al.,

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⁸ In what follows, I do not approach such theories, but one could find examples thereof among 14th century realists such as Walter Burley and John Wycliff; see (Cesalli, 2007).

⁹ See (Hopkins, 2003; 148) for the influence of Augustine over Anselm's notion of truth.

¹⁰ I borrow this terminology from (Visser et al., 2004).

2004; 211). Here it becomes patent that, according to Anselm (following Augustine), truth equals to being.

And thus, just as much as God is the cause of all being, all truth comes from God and He is the supreme Truth. However, rectitude does not apply to Him in the same way as it applies to His creation, since He "owes nothing to anything". In other words (and this is something of a paradox, which Anselm deals with in *De Ver.* 13), truth properly speaking pertains only to God, even though truth in God does not correspond to rectitude, as it does in His creation.

One of the upshots of Anselm's conception of truth is that he is able to account, in a unified way, for uses of the predicate 'true' that are often neglected by more restrictive theories of truth, such as in 'true friend', 'true world' etc. This also reveals the essentially metaphysical character of Anselm's theory: what makes something true are properties and states of things (the very things which are said to be true, insofar as they conform to God's design for them), and not semantic properties of linguistic entities (even when propositions are truth-bearers).

3. Peter Abelard

Contrasting with Anselm's patently metaphysical approach to truth, Abelard's is resolutely semantic: he focuses on a semantic property of propositions, namely the content they express. His approach is representative of approaches to truth inspired by the *logica vetus* material; he develops it in different parts of his *Logica "Ingredientibus"*, in particular in the parts corresponding to his commentaries on Aristotle's *De Interpretatione* and on Boethius's *De topicis differentiis*. Abelard's discussions of the concept of truth are embedded in his general analysis of the semantics of propositions. Indeed, one of the most debated but still mysterious aspects of Abelard's semantics, the famous *dicta* (the contents of propositions), is at the heart of the issue of truth.

Abelard's very criterion of what is to count as a proposition (following Boethius and Aristotle) is based on the concept(s) of truth (and falsity): a proposition is what signifies the true or the false (*significare verum vel falsum*) (*LI De in.* 3.01.100). Notice that, according to this definition, a proposition is not true or false, but it **signifies** the true or the false. This implies that, for Abelard, propositions are not the primary truth-bearers, but rather that they signify something which in turn is a truth-bearer properly speaking. What would that be? Abelard states that truth and falsity can be understood in three ways: as applying to statements (propositions); as applying to the understanding provoked by a statement; and as applying to what is said to be the case by a statement, its *dictum* (*LI Top.* 225, 22-29). He then goes on to argue that understandings cannot be truth-bearers

¹¹ Abelard will of course often use the term 'the truth' in his theological writings as well, but in these cases one cannot speak of a full-fledged theory of truth.

¹² About the *Logica Vetus* vs. *Logica Modernorum* distinction, see entry on Logic in this volume.

¹³ In fact, it would be more accurate to say that Abelard's considerations on truth are scattered throughout his writings; he did not produce a systematic presentation of a theory of truth such as Anselm or Aquinas.

properly speaking because incomplete expressions may have the same understandings as complete statements (for example, 'A man runs' and 'A running man' share the same understanding), but incomplete expressions cannot signify the true or the false, since they are not propositions (see Jacobi et al., 1996, 32).

That this is so also transpires from Abelard's analysis of what differentiates propositions from other (complete) speech-acts such as questions, orders, wishes etc. These different expressions can have the same intelligible content, but only propositions signify the true or the false, because only they consist in an evaluative judgement concerning truth and falsity (LI De in. 3.01.100). Indeed, according to Abelard, a proposition P corresponds to the assertion that P is true (cf. Jacobi, 2004, 146); in other words, he may be seen as maintaining the schema 'P \(\Limin \) It is true that P'. 14 In Latin, such impersonal propositions (the right-hand side of the schema) are formulated with the 'accusative-infinitive' nominalized form of the embedded proposition (for example, Verum est Socratem currere). The nominalized form asserts precisely the content of the proposition, that is, its dictum. A dictum is "that which is said by the proposition" (LI De in. 3.04.26), that is, its content plus the assertion that what it signifies does obtain in reality. Therefore, for Abelard, dicta are the ultimate bearers of truth and falsity, since it is to them that the terms 'true' and 'false' are related by means of such propositions of the form 'It is true that P'. Propositions are true or false derivatively, insofar as they state true or false dicta (cf. Nuchelmans 1973, 9.4.3). Abelard's notion of truth is thus essentially semantic: it is a semantic property of propositions, i.e. the *dictum*/content that it expresses, that makes it true or false.

Notice that this view implies a deflationist notion of truth: to assert the truth of a proposition is equivalent to simply asserting the proposition itself. From the truth of a proposition one cannot draw major metaphysical conclusions; if 'a man is white' is true, one can merely conclude that there is a thing which is a man and is also white (LI *Cat.* 59-60) (see also (King, 2004; 4.)). But Abelard can also be seen as holding a correspondence theory of truth when he glosses the sentence 'It is true that Socrates is a man and not a stone' as 'It is the case in reality (*in re*) that [Socrates] is a man and not a stone' (*LI De in.* 3.04.26) (see also *LI De in.* 3.01.100).

In short, the distinguishing characteristic of Abelard's theory of truth is the crucial role played by *dicta*. But *dicta* are neither linguistic entities nor real things in reality, and thus Abelard's truth-bearers seem to fit neither of the two main kinds of truth-bearers mentioned above. Some (e.g. Nuchelmans 1973, 9.4.2) view Abelard's *dicta* as states of affairs; others (e.g. King 2004, 4.) take literally his claim that *dicta* are nothing at all. They stand to propositions in the same relation as things to their names, and yet they are not actual things. But the fact that their ontological status is debatable must not overshadow their central role in Abelard's theory of truth and his semantics in general.

4. Thomas Aquinas

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¹⁴ Provided that the significations of the two occurrences of 'P' remain stable.

Aguinas' main discussions of the notion of truth are to be found in his commentary to Peter Lombard's Sentences, in his Quaestiones disputatae de veritate and in his Summa Theologiae (ST) I^a, question 16.¹⁵ His concept of truth can be seen as reconciling two important trends, 16 the neoplatonic-Augustinian conception attributing truth to things, and the Aristotelian conception that attributes truth to the intellect and emphasizes truth as likeness. 17

Aquinas' notion of truth is based on the concept of adequatio: truth is adequation of intellect and object. The etymology of adequation is related to that of equal, and indeed the idea here is that of quasi-equality between intellect and object. Adequation in this sense corresponds to identity of forms: truth occurs when the object and the concept in question share the same form. 18 Truth is thus again viewed as a relational property, as in modern correspondence theories of truth, but this time it involves concepts and objects instead of propositions and facts as its relata. Aguinas does discuss the truth of propositions as well (in ST I^a q. 16 a. 8 ad 3), but their truth is derivative from truth in the intellect.

This relation of adequation is established by an act of the intellect, and can be established in two directions: an object is true if it conforms to the relevant concept, whereas a concept is true if it conforms to the relevant object (see Künne, 2003, 104). 19 Aquinas maintains that "truth resides primarily in the intellect, and secondarily in things according as they are related to the intellect as their principle" (ST I^a q. 16 a. 1 co.), so concepts are in fact the primary bearers of truth for him. An object can be said to be true by analogy, insofar as it is related to a true concept (i.e. one that conforms to the object); but an object is also true if it conforms to the design of the intellect behind its creation. Natural things are true insofar as they conform to the forms they have in the divine intellect. Similarly, artifacts are true if conformity occurs with the form they have (the original concept) in a human intellect (such as the relation of the plan of a house made by an architect and the house actually built). In both directions, properties of things define the truth of an entity (be it a concept or an object); Aquinas' notion of truth is thus fundamentally metaphysical. Moreover, Aquinas develops his notion of truth against the background of his doctrine of transcendentals²⁰: truth and being are ultimately convertible (Aertsen, 1992, (6)).

¹⁵ For the sake of coherence, here we shall focus on this latter text. For the different stages of development of Aquinas' notion of truth, see (Wippel 1989).

¹⁶ Cf. (Wippel, 1989; 295) and (Aertsen, 1992).

¹⁷ In other words, the Aristotelian influence in Aquinas' theory of truth is very different from that found in Abelard. In the latter, the influence came through Aristotle's logical writings, while in the former it comes essentially from the Metaphysics.

¹⁸ But notice that there is a normative element in the notion of adequation as well, which echoes Anselm's truth as rectitude.

¹⁹ Notice that, in Anselm, only the direction of adequation from object to (divine) concept characterizes the notion of truth. These two directions are exactly what Aquinas needs to reconcile the two radically different approaches to truth that he takes as his starting point, namely truth of the intellect and truth of a thing – see (Aertsen, 1992; 163/4). ²⁰ See entry on transcendentals in this volume.

There are two kinds of truths, the immutable truth of God and the finite truth of humans (ST cf. I^a q. 16 a. 8 co.). In the case of the finite truth of humans, the truth of concepts insofar as they represent objects corresponds to the direction of adequation from concepts to objects. By means of an act of predication (composition, in case of an affirmation, or division, in the case of a negation), a certain property is attributed to an object by the intellect; if the object is indeed such-and-such, then the concept representing it can be said to be true: "the being of the thing, not its truth, is the cause of truth in the intellect" (ST I^a q. 16 a. 1 ad 3). This kind of truth is referred to by Aquinas as accidental truth (per accidens), which is the truth pertaining to the knower who knows an object but upon whom the object does not depend. It is opposed to the essential truth (per se) of the divine intellect that designs and represents all natural things (since God is their creator) and of the human intellect with respect to artifacts (cf. ST I^a q. 16 a. 1 co.). Obviously, given God's perfection, adequation of concepts in the divine intellect to things in an accidental way simply does not occur. Only essential truth pertains to the divine intellect, and accidental truth is proper to finite human knowers.

Indeed, God is ultimately Truth itself for Aquinas (I^a q. 16 a. 5 co.): truth is adequation of intellect and being, and in God this adequation occurs "to the greatest degree". In God there is total coincidence of intellect and being, since the forms present in the divine intellect are the very causes of the forms present in each object of His creation. "His being is not only conformed to His intellect, but it is the very act of His intellect; and His act of understanding is the measure and cause of every other being and of every other intellect".

5. Theories of truth based on the notion of supposition

Contrasting with Aquinas' metaphysical approach to truth and stemming from an entirely different source, the 13th century witnessed, within the terminist tradition²², the emergence of a new and subsequently very influential approach to truth founded on the notion of supposition. It is perhaps the best example in the history of philosophy of a theory of truth that is genuinely not based on correspondence.

The notion of supposition was developed within the general framework of medieval properties of terms.²³ In the 13th century supposition was one among other equally important properties of terms, but in the 14th century it came to occupy a privileged position. It particular, it was used for the analysis of the truth-conditions of the basic types of categorical propositions (the A, E, I and O Aristotelian logical forms). This approach had among its proponents Ockham (in the first chapters of the second part of his *Summa Logicae*) and Buridan (in the first chapters of his *Treatise on Consequences* - TC).²⁴ Its main idea is that an affirmative proposition is true iff there is identity between

²² Represented by Peter of Spain, William of Sherwood etc.

²¹ See (Aertsen, 1992; 162).

²³ See (Read, 2006) and the entry on supposition in this Encyclopedia.

²⁴ Notice that, in his treatise on consequences, Buridan also uses the formula 'qualitercumque significat', to be discussed in the next section, to define the truth and the modality of propositions. However, he adds that this is just a way of speaking (TC, 21), a shorthand way to refer to the different truth-conditions of propositions on the basis of the supposition of their terms, which he had discussed earlier in the text.

the *supposita*²⁵ of the subject and of the predicate, while a negative proposition is true if this does not occur. But this general principle must be refined by means of truth-conditional clauses for propositions of different logical categories:

- 'Every A is B' is true iff "the predicate supposits for all those things that the subject supposits for, so that it is truly predicated of them." (Ockham 1998, 96)
- 'No A is B' is true if the predicate supposits for none of the things that the subject supposits for, or if the subject does not supposit for anything.
- 'Some A is B' is true iff "the subject and predicate supposit for some same thing". (Ockham 1998, 92)
- 'Some A is not B' is true if "the subject supposits for something that the predicate does not supposit for" (Ockham 1998, 92), or if the subject does not supposit for anything.

Notice that negative propositions have two causes of truth, as Ockham puts it: either if there is no co-supposition of their terms in the appropriate case (universal or particular), or if the subject does not supposit for anything at all, then the proposition is true, since in the latter case the absence of co-supposition obtains trivially. Moreover, the same procedure can be applied *mutatis mutandis* to propositions whose verb is tensed or accompanied by a modality (see chapters 7, 9 and 10 of part II of Ockham's *Summa Logicae*).

These definitions can also be formulated as recursive definitions of truth-conditions on the basis of the truth of more fundamental propositions, namely singular propositions whose subject is a demonstrative and whose predicate is one of the terms of the proposition whose truth-conditions are being established. This is because for a term A to supposit for something amounts to the truth of a singular proposition 'This is A', where 'This' supposits for the thing in question, and so does A.

A problem for Ockham's account is the threat of circularity: while the truth of propositions, including singular propositions with demonstratives as their subjects, is defined in terms of the supposition of their terms in the first chapters of part II of the *Summa Logicae*, elsewhere the supposition of terms is in turn defined in terms of the truth of such singular propositions. It is clear that one of the two notions, either supposition or the truth of singular demonstrative propositions, must be taken as primitive if the theory is to avoid circularity.

Besides the technical aspect of formulating precise truth-conditions for different logical forms of propositions, Ockham's theory of truth is also a rejection of a metaphysical approach in favor of a semantic approach to truth (see (Perler, 1992; chs. 1 and 2) and (Moody, 1953; ch. III)). The fundamental cause of truth of propositions is a semantic property of their terms, namely their supposition, and not actual properties of the objects in question. Ockham stresses this fact in several passages, as for example:

²⁵ The *supposita* are the entities which a given term in a proposition supposits or stands for. The class of such entities is determined by the (pre-propositional) signification of the term plus elements of the proposition, in particular the tense and mode of its verb.

"Thus, for the truth of 'This is an angel' it is not required that the common term 'angel' be really identical with what is posited as the subject, or that it be really in that subject, or anything of this sort. Rather, it is sufficient and necessary that the subject and predicate supposit for the same thing." (Ockham 1998, 86).

Another significant aspect of Ockham's account of truth is that truth-bearers are the actually formed propositions of a language, be they spoken, written or mental; he (as well as Buridan) is what we could call an inscriptionalist with respect to truth-bearers. Truth is a monadic predicate attributed to them, and this attribution is formulated with the special dictum construction: a proposition whose subject is the nominalized form of the proposition to which truth is attributed (terms in the accusative case and verb in the infinitive mode) and the predicate is the term for true, 'verum' – for example, 'Socratem esse hominem est verum'. So truth is nothing more than a predicate of propositions, namely those that are true, and this in turn depends solely on the supposition of their terms.

In sum, theories of truth based on the concept of supposition, Ockham's in particular, have the distinctive trait of rejecting metaphysical foundations for truth; the burden here is to be borne exclusively by semantic properties. Moreover, in contrast with Anselm and Aquinas, truth is attributed exclusively to complex linguistic and, more importantly, mental entities. Indeed, the primary bearers of truth-value for Ockham as well as for Buridan are mental propositions; spoken and written propositions are only derivatively true, insofar as they are related to true mental propositions.

6. Semantic theories of truth in the 14th century – *Insolubilia*

Developing parallel to, and sometimes overlapping with, uses of the notion of supposition in accounts of truth, there is a very rich tradition of theories of truth in the 14th century to be found in treatises on *Insolubilia*, that is, treatises on paradoxes. They are semantic correspondence theories of truth, and thus illustrate that correspondence theories of truth need not be metaphysical (in the sense presented here).

A watershed is widely recognized to be Thomas Bradwardine's treatise, written in the first half of the 1320's. Until then, the most popular solutions to such paradoxes had little to offer as theories of truth: the *restringentes* approach, for example, consisted only in a ban or restriction to self-reference in general, and for propositions containing the predicate 'true' in particular. By contrast, the apparatus presented by Bradwardine in his *Insolubilia* is the germinal state of a full-fledged theory of truth. Bradwardine's starting point is the Aristotelian formula '*propositio vera est oratio significans sicut est*', that is, a correspondence view on truth with a semantic emphasis on the signification of the proposition – the second *relatum* of the relation of correspondence is minimally referred to as '*sicut est*' with no further elaboration on what must obtain in reality for a proposition to be true. The truth of a proposition depends primarily on its signification, not on how things are.

In order to prove that Liar propositions and other paradoxical propositions are false, Bradwardine modifies this formula and posits that "A true proposition is an utterance signifying only [tantum] as things are" (first definition in chapter 6, 6.2 in Read's edition and translation). He then goes on to prove that a Liar proposition says (at least) two things, namely that it is false and that it is true. Since both things cannot obtain, he concludes that a Liar proposition does not signify **only** as things are; it signifies partially as things are (that it is false), but since it also signifies something that does not obtain (that it is true), it is not a true proposition.²⁶

This definition of truth implies a few important assumptions: propositions may (in fact typically do) signify several things, and true propositions are only those whose total signification obtains, that is, if each and every thing that a proposition signifies is the case. It is thus what we could call a quantificational definition of truth, and truth is associated with universal quantification (see Dutilh Novaes, 2007). Accordingly, a proposition is false if it fails to comply with the peak of success associated with a true proposition, that is, if at least one of the things it says is false. Therefore, while truth is associated with universal quantification, falsity is associated with existential quantification.

A variation of this approach to truth can be found in Buridan's treatment of insolubles. While his main theory of truth is based on the concept of supposition, following the same lines of Ockham's theory, Buridan recognizes that, in the case of Liar propositions, the co-suppositional criterion is not sufficient to determine their truth-value (cf. *Sophismata* ch. 8, 7th sophism). In such cases, not only the proposition itself must satisfy the co-suppositional criterion to be true, but also all of its implications. But since Buridan thinks that all propositions virtually imply their own truth, Liar propositions imply that they are true and that they are not true, and thus cannot satisfy the criterion for truth and are simply false.²⁷

In Albert of Saxony, writing shortly after Buridan, one finds a hybrid of the quantificational and the supposition approaches to truth. Albert's first definition is a reformulation of Bradwardine's definition of truth: "A true proposition is one which, in whatever way [qualitercumque] it signifies, so it is." (in (Pozzi, 1978; 316)). It replaces the term 'tantum' in Bradwardine's definition by one which is even more explicit with respect to the universal quantification implied in the definition, 'qualitercumque' (also to be found in Buridan's TC). He then goes on to add a few theses equating the truth or falsity of propositions to the co-supposition (or lack thereof) of their terms. From these definitions and suppositions he then draws the conclusion (third thesis) that all propositions signify their own truth. So with Albert (as with Buridan) we have something of a forerunner of one of the directions of the Tarskian T-convention: here the relation between a proposition and the assertion of its truth is that of signification, while with Buridan it is a relation of (virtual) implication.

Conclusion

²⁶ See (Read, 2002).

²⁷ See (Read, 2002) and (Klima, 2004) for details.

At the end of the 14th century, Paul of Venice composed a treatise on the truth and falsity of propositions (*Tractatus de Veritate et Falsitate Propositionis*) that summarizes (by means of a long list of different definitions of truth) the two main approaches to truth in the 14th century, the one based on supposition and the one based on the signification of the proposition. It is significant that, while in the first half of the 14th century one does not find treatises explicitly on the truth of propositions (discussions on truth were then to be found in treatises on the properties of terms and on insolubles), towards the end of the century such treatises started to appear. Also significant is that in the 14th century one does not encounter the attribution of truth to non-linguistic objects, as with Anselm and Aquinas. Truth is then seen as an attribute exclusively of propositions (written, spoken or mental), and the titles of such treatises invariably feature the genitive 'propositionis' applied to 'De Veritate' (while both Anselm and Aquinas wrote treatises entitled 'De Veritate' tout court).

Primary sources – Edited works in Latin

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²⁸ Another interesting 14th century approach to truth can be found in the tradition of the theories of 'probationes terminorum', exemplified by Richard Billingham's Speculum Puerorum.

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