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SCOTUS ON THE MEANING OF CONTINGENT FUTURE PROPOSITIONS IN *QUAESTIONES IN DUOS LIBROS PERIHERMENIAS*

Abstract: In this study we conduct an analysis of a set of questions taken from John Duns Scotus's *Quaestiones in duos libros Perihermenias Aristotelis*. These questions – and here we have the topic to be explained in our article – concern particularly the way contingent future propositions relate to the existence of things and accordingly bear a specific truth value. The analysis of them shall reveal something important in Scotus's account of semantics and, above all, logic in the first period of his career, working as a background of ideas to his later disputes on future contingents in *Lectura* and *Ordinatio*.

Keywords: Meaning, contingency, contingent future propositions.

Authors: Aristotle, John Duns Scotus.

Resumo: Neste estudo, realiza-se uma análise de um conjunto de questões, tomadas das *Quaestiones in duos libros Perihermenias Aristotelis* de João Duns Scotus. Essas questões – e aqui temos o tópico a ser explanado neste artigo – dizem respeito, em particular, ao modo como proposições futuras contingentes se relacionam com a existência de coisas e, de acordo com isso, têm um valor de verdade específico. A análise delas revelará algo importante sobre a semântica e, sobretudo, sobre a lógica de Scotus no primeiro período de sua carreira, servindo como um pano de fundo de ideias para as suas posteriores disputas sobre os futuros contingente na *Lectura* e na *Ordinatio*.

Palavras-chave: Significado, contingência, proposições futuras contingentes.

Autores: Aristóteles, João Duns Scotus.

Introduction

In this study I would like to analyse a set of questions taken from what is known today as Duns Scotus's *Quaestiones in duos libros Perihermenias Aristotelis*. These questions

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concern the way contingent future propositions relate to the existence of things and accordingly bear a specific truth value. The analysis of them shall reveal something of Scotus's account of semantics and, above all, logic in the first period of his career. I assume that they are important to his late philosophy and theology, too¹. Actually, I do think that most of his positions in the *Quaestiones* are taken over again without explicit change of mind in his theological work, although – as already noted by the *Scotusforschung* – at least about two important subjects are not shared between such earlier doctrine and what was later developed by Duns Scotus in the *Ordinatio*: first, the doctrine of the first and adequate object of the intellect², and second, the doctrine – denied in the *Quaestiones* – of a univocal concept of being³. The *Quaestiones* survived in 7 manuscripts, most of them, as it is the case also concerning all other works on logic (today known to us) written by John Duns Scotus, stemming from the 15th century⁴.

More exactly, both Scotus's *Quaestiones in primum librum Perihermenias Aristotelis*

¹ See below footnotes 29-30 and 33-35 on the problem of future contingents in *Lectura* I d. 39 qq. 1-5 and parallel texts.

² Here (see Ioannes Duns Scotus, *Opera Philosophica II – Quaestiones in primum librum Perihermenias Aristotelis*, The Franciscan Institute – The Catholic University of America, St. Bonaventure – Washington D. C. 2004, q. 2, n. 38 et 49, pp. 55. 58) it is the «quod quid est rei materialis», the common or specific nature of individual substances. See SCHNEIDER, J.H.J., «Utrum haec sit vera: *Caesar est homo, Caesar est animal, Caesere non existente*. Zum Peri-Hermeneias-Kommentar des Johannes Duns Scotus», in HONNEFELDER, L. - DREYER, M. - WOOD, R. (eds.), *John Duns Scotus – Metaphysics and Ethics*, E. J. Brill, Leiden 1996, pp. 393-397. In the *Ordinatio* Duns Scotus will affirm that the first object of the intellect is «ens inquantum ens», a universal that is taken totally without determination, indifferent to the sensible and the non-sensible. See HONNEFELDER, Ludger, *Ens inquantum ens. Der Begriff des Seienden als solchen als Gegenstand der Metaphysik nach der Lehre des Johannes Duns Scotus*, Aschendorff, Münster 1989, pp. 268-395; HONNEFELDER, Ludger, *Duns Scotus*, C. H. Beck Verlag, München 2005, Chapter 3, divisions 3.1.2 and 3.2.

³ See Ioannes Duns Scotus, *Quaestiones in primum librum Perihermenias Aristotelis*, qq. 5-8, n. 86, p. 94. Later Duns Scotus would conceive a concept of this kind – the «ratio entis» –, for this is required in order to achieve a real unity of the first object of the intellect. In a sense, however, already in the *Quaestiones in libros Perihermeneias* the metaphysical thesis of the univocity of being was prepared by the semantical thesis of the univocity of simple terms; see SONDAG, Gérard, «Introduction», in JEAN DUNS SCOT, *Signification et vérité. Questions sur le Peri hermeneias d'Aristote*, Textes latins introduits, traduits et annotés par Gérard SONDAG, (Translation Philosophes Médiévales), Vrin, Paris 2009, pp. 7-10.

⁴ See ANDREWS, R. - ETZKORN, G. - GÁL, G. - GREEN, R. - NOONE, Th. - PLEVANO, R. - TRAVER, A. - WOOD, R., «Introduction», in B. Ioannes Duns Scotus, *Opera Philosophica II – Quaestiones in libros Perihermenias Aristotelis*, The Franciscan Institute – The Catholic University of America, St. Bonaventure – Washington D. C. 2004, p. 9. See also id. *ibid.*, p. 21. For the present investigation I am relying, as it should be expected, in Volume II of Scotus's *Opera philosophica*, edited by The Catholic University of America 2004, as well as in a recent edition and translation into French of a selection of questions done 2009 by G. SONDAG, namely JEAN DUNS SCOT, *Signification et vérité. Questions sur le Peri hermeneias d'Aristote*, Textes latins introduits, traduits et annotés par Gérard SONDAG, (Translation Philosophes Médiévales), Vrin, Paris 2009.

and Scotus's *Quaestiones in duos libros Perihermenias Aristotelis* are works that together with the questions on Porphyry's *Isagoge* and Aristotle's *Praedicamenta* and *Sophistici elenchi* have «withstand the test» of attribution scrutiny by the *Commissio Vaticana* since the 1930s.⁵ It is not an easy task to state the likely time of composition of John Duns Scotus's *Quaestiones super libros Perihermenias*. But at least his works on logic themselves provide some clues to the relative chronology involved, since the *Quaestiones in primum librum* make some cross-references to other works of him. A likely chronology for the logical *opera* is the second half of the 1290s, and the order of such writings could be the following one: *Quaestiones in librum Porphyrii*, *Quaestiones in librum Praedicamentorum*⁶, and *Quaestiones super librum Perihermenias Aristotelis* (*Quaestiones in librum Elenchorum* appears probably only after this series). There are no cross-references in the *Quaestiones in duos libros Perihermenias* which would «suggest that those questions may be earlier than the series of works just mentioned⁷».

The Latin version of Aristotle's *Perihermenias* used by Scotus is surely Boethius's translation. Apart from this, there is a general recognition that beyond Boethius the main sources of Scotus in the *Quaestiones* are standard texts for this gender of work in the years 1280s and 1290s: Albert the Great's commentary on the *Perihermenias*, Thomas Aquinas's *Expositio libri Perihermenias*, William of Sherwood's *Introductio in logicam*, and Roger Bacon's *Summulae dialecticae* figure among the works known and used by the Subtle Doctor. The scholars in charge of the critically edited volume, appearing in 2004, also noted the influence of Peter of Cornwall's *Sophismata*, Simon of Faversham's *Quaestiones super libros Perihermenias*, and also of certain passages by the Anonymi of Worcester, Cathedral Library MS Q. 13. Particularly in the *prooemium* of his *Quaestiones in duos libros Perihermenias Aristotelis*, which is the main source for the present study, John Duns Scotus makes extensive use of Thomas Aquinas's *Expositio libri Perihermenias* – to say it briefly, the Subtle Doctor indeed summarizes Aquinas's own general view of the nature of logic in which the *Perihermenias* fits⁸.

At Scotus's times it was usual to divide the *Perihermenias* in two different books – one from Chapter 1 to 9, and other from Chapter 10 to the end. The first chapters should concern categorical proposition, the last chapters should concern modal

⁵ See ANDREWS ET ALII, «Introduction», op. cit., p. 31. Martin Grabmann showed that the *Grammatica speculativa* was written by THOMAS OF ERFURT, the commentary on the *Analytica posteriora* (one sole manuscript survived) was written by John of Cornwall, and for the Questions on the *Analytica priora* (no manuscript survived) «no alternative author was proposed». See *ibid.*, pp. 32-33.

⁶ On Scotus teaching on *Categories*, see PINI, Giorgio, *Categories and Logic in Duns Scotus*, Brill, Leiden – Boston – Köln 2002.

⁷ See ANDREWS ET ALII, «Introduction», op. cit., p. 34. Our *Quaestiones* were probably composed at any rates around 1295; see also WILLIAMS, Th., «Introduction: The Life and Works of John Duns the Scot», in WILLIAMS, Th. (ed.), *The Cambridge Companion to Duns Scotus*, Cambridge University Press, Cambridge 2003, p. 7.

⁸ See ANDREWS ET ALII, «Introduction», op. cit., p. 35.

proposition⁹. The questions that I will analyse comprise discussions on a particular form of categorical proposition. As already said, the *Quaestiones* formulated by Scotus came to us in two different works – *Quaestiones in primum librum* and *Quaestiones in duos libros Perihermenias*. They were composed for the purpose of teaching, not of being published, having been originally planned for oral teaching and were delivered in this form at least twice. They are also, strictly speaking, not a commentary: its gender is the *quaestio*. Their structure is well known: the arguments *pro* and *contra*, consisting, in some cases, of an exposition of opinions that develop the initial arguments, the solution of the question proposed by the teacher, and the answers to each of the initial contrary arguments. Aristotle's text is sometimes followed in order to promote the discussion, but often it is just an occasion for a particular question not connected to his own text. This could more generally correspond to the interests that reflect the intellectual atmosphere of the schools at those times – for example, as it was finely pointed out by Gérard Sondag, *Quaestiones in primum librum* q. 2, «Whether a name signifies a thing or the species of the thing in the soul», gives expression to a problematic addressed by Scotus in his *Ordinatio* as a *magna altercatio* of his times¹⁰.

In a very basic sense, the teaching of the *Quaestiones in libros Perihermenias* concerns logic. The *Perihermenias* is for Scotus a work about the expressed word that signifies through itself, about the expressed word that is enunciated with the intention of signifying. «Words» or *voces* are grammatical parts of the discourse. More strictly yet, Scotus defines the subject-matter of the treatise after reminding us that the intellect is fundamentally capable of three different operations: apprehension, judgment, and reasoning. In *Quaestiones in primum librum* q. 1 he then establishes that the object of *Perihermenias* is the proposition, the mediate operation of the intellect, that is, the formation of simple enunciations¹¹.

⁹ In fact, although Scotus's divides his Questions in two books, the thematic division just mentioned does not fit well with what he actually discusses regarding the «second» book. Looking at the Aristotelian work as such, irrespective of its reception by late ancient and medieval authors, the discussion on the thematic or on a systematic division of the 14 Chapters is far more complicated; see for example ZEKL, H.G., «Einleitungen – Hermeneutik (De interpretatione) oder vom sprachlichen Ausdruck», in ARISTOTELES, *Kategorien und Hermeneutik oder vom sprachlichen Ausdruck*, übersetzt von H.G. ZEKL, Felix Meiner Verlag, Hamburg 1998, pp. XXIX – LII. The same point comes forth by reading the footnotes introductory to each chapter by ACKRILL, J.L., «*De interpretatione* – Notes», in ARISTOTLE, *Aristotle's Categories and De interpretatione*, Translated with Notes and Glossary by J.L. ACKRILL, Oxford University Press, Oxford 1963, pp. 113-155. A revered work on the reception of Aristotle's *De interpretatione* in the Middle Ages is BRAAKHUIS, H.A.G. - KNEEPKENS, C.H. (eds.), *Aristotle's Peri hermeneias in the Latin Middle Ages. Essays on the Commentary Tradition*, Ingenium Publishers, Nijmegen 2003.

¹⁰ See SONDAG, «Introduction», op. cit., pp. 7-10.

¹¹ See Ioannes Duns Scotus, *Opera Philosophica II – Quaestiones in primum librum Perihermenias*, ed. R. ANDREWS ET ALII, The Franciscan Institute – The Catholic University of America: St. Bonaventure, N. Y. – Washington, D. C. 2004, q. 1, n. 1, pp 43-44: «Sed si ratio interpretationis sit haec «vox articulata, prolata cum imaginatione significandi», nunc interpretatio dicitur de complexis

He considers them first of all as long as they are understood or known as they are in the mind¹². After all, truth and falsity¹³ as properties of propositions are only in the mind. Respective to its truth or falsity any proposition depends on the conception of a mind – and it is precisely this aspect that puts *Perihermenias* into the logical level, for logic is concerned with truth and falsity¹⁴ – i.e. logic, being concerned in terms of *its object* with syllogism, has to be concerned also with a doctrine of terms and *a rigorous account of truth conditions of propositions*.

But Scotus's Questions on *Perihermenias* do not have to do with logics alone, they also have to do with semantics. So, for example, Scotus investigates simple notions as well, which do not concern truth or falsity, where a «simple term» is an expression that is either immediately understood (distinctly or not) or it is just not understood¹⁵ after being heard. More importantly, where proposition are concerned the Subtle Doctor distinguishes *signification* from *truth value*. What words and propositions «signify» does not depend on the existence or non-existence of things¹⁶. The signification that they

et incomplexis, et non est proprium subiectum huius libri. Cum liber iste medium ordinem teneat inter librum *Praedicamentorum* et librum *Priorum*, quorum alter est de his quae pertinent ad primam operationem intellectus, alter de his quae pertinent ad tertiam, iste liber ergo erit de his quae pertinent ad mediam operationem intellectus. Sive autem ratio praedicta sit ratio interpretationis, sive secundum alios illa specialior, scilicet 'vox articulata, prolata cum imaginatione significandi aliquid esse vel non esse', non erit 'interpretatio' his subiectum, cum nulla pars logicae sit de voce ut de subiecto, sicut dictum est in principio *Praedicamentorum* quaestione prima, quia omnes passionis subiectorum in logica eis aequaliter inessent, nulla voce existente». See also CESALLI, L., *Le réalisme propositionnel. Sémantique et ontologie des propositions chez Jean Duns Scot, Gauthier Burley, Richard Brinkley et Jean Wyclif*, Vrin, Paris 2007, pp. 122sqq.

¹² See Ioannes Duns Scotus, *Quaestiones in primum librum Perihermenias*, q. 1, n. 2, p. 44: «Ergo enuntiatio potest hic convenienter poni subiectum, et hoc 'enuntiatio in mente', quia illa causatur ex secunda operatione intellectus. Quia quae hic determinantur, propter ipsam determinantur, puta primo de partibus eius integralibus, ut puta de nomine et verbo; secundo de eius genere, quod est oratio; deinde quid est ipsa, et de divisione eius in suas primas species, et consequenter de eius proprietatibus, oppositione scilicet, habitudine, et ceteris huiusmodi. Si autem istae proprietates insint enuntiationi in voce, hoc non est per se primo, sed in quantum illa est signum enuntiationis in mente».

¹³ SCOTUS follows Boethius in this: «falsity» is not in the fact that the thing happens, but in the *modus praedicationis*.

¹⁴ See SONDAG, «Introduction», op. cit., pp. 11-14.

¹⁵ See SONDAG, «Introduction», op. cit., pp. 14-15. Surely it is possible to find simple terms, like transcendental notions, which have not definition at all.

¹⁶ See Ioannes Duns Scotus, *Opera Philosophica II – Quaestiones in duos libros Perihermenias*, ed. R. ANDREWS ET ALII, The Franciscan Institute – The Catholic University of America: St. Bonaventure, N. Y. – Washington, D. C. 2004, I qq. 7-9, n. 16, p. 183: «Tertio intelligendum est quod propositio de futuro ex suo significato vel modo significandi aequaliter designat determinate esse de quolibet, quia esse rerum non mutat significationem sermonis, quia dictio et oratio idem significant re existente et non-existente». On this topic, focusing on *Quaestiones in primum librum Perihermenias Aristotelis* qq. 6-7, and thus on the meaning of the copula, the doctrine of common nature, and the essential

have depends only of the *res ut concepta* (the thing considered insofar as it is cognized by the mind). The signification of a proposition is, as it were, stable, because of the stable signification of the terms combined in the proposition. The signification of a proposition is, thus, previous by nature and logically to its own particular truth value. But truth or falsity depends on the *res extra*, i.e. the very fact that something is the case or not¹⁷.

The truth of a proposition depends on the truth or the falsity of the combined conceptions in the mind as expressing what exists in a general sense, that is, that the mind is in the truth when it affirms or denies anything of anything. We could engage ourselves in the important issue for Scotus which consists in explaining what are the relations between a proposition as far as it is expressed and the same proposition as far as it is in the mind¹⁸. «To signify» is the function of a sign, and it has as an effect «to make the intellect understand something», or even to have something represented to it. «Spoken words» are therefore imposed to the effect of being a sign for a corresponding mental passion such as «man» (*homo*), so that if someone understands the word and knows the language in which it is imposed he or she shall think of the thing for which the word is a sign¹⁹. Every sign refers to a thing conceived in the mind at least – this should show us that intellection is for Duns Scotus always previous to signification. Signs refer to what is known or conceived or to things as known or conceived. Accordingly, the signification of an enunciation depends on that to which the signs are ordered towards, namely, the things signified, although the «things signified» are basically «things» as known by the one who makes use of the corresponding linguistic signs. In a situation of communication it is to «things signified» in this way that the one who «perceives» the enunciation turns his attention, as opposed to *signs* themselves or to the (linguistic and the mental) *act* through which one expresses what he or she conceives²⁰.

aptness to existence, see also SONDAG, G., «Universel et *natura communis* dans l'*Ordinatio* et dans les *Questions sur le Perihermeneias* (une brève comparaison)», in HONNEFELDER, L. - DREYER, M. - WOOD, R. (eds.), *John Duns Scotus – Metaphysics and Ethics*, E. J. Brill, Leiden 1996, pp. 388-391 (pp. 385-391); SCHNEIDER, «Utrum haec sit vera: *Caesar est homo, Caesar est animal, Caesere non existente*. Zum *Peri-Hermeneias*-Kommentar des Johannes Duns Scotus», op. cit., pp. 397sq. See also PINI, G., «Signification of Names in Duns Scotus and Some of His Contemporaries», *Vivarium* 39 (2001) 20sq. (20-51); CESALLI, *Le réalisme propositionnel*, op. cit., pp. 132sq.

¹⁷ The *Quaestiones* relates in a good measure to a science different than logics – which would be semantics, although Scotus does not make use of this expression: the science of the signification of terms and propositions (see SONDAG, «Introduction», op. cit., pp. 15-17), as well as the science of the modes of signifying of expressions either as simple terms or as elements of propositions. See also SONDAG, Gérard, *Duns Scot – La métaphysique de la singularité*, Vrin, Paris 2005, pp. 64-66.

¹⁸ For this and the next paragraph I am relying basically on SONDAG, «Introduction», op. cit., pp. 17sq.

¹⁹ See SONDAG, «Introduction», op. cit., pp. 18-19.

²⁰ See SONDAG, «Introduction», op. cit., pp. 19-20. I shall not deal here with the problem of the «chain of signification» in Scotus between words, concepts or mental intelligible affections, and things. Surely, however, Scotus wants to make all significative use of linguistic items as depending of

It may be correct to affirm that the verb «to signify» allows for two different uses and meanings known by the author of the *Quaestiones* under analysis: «to communicate» or «the intention of communicating» and «to be apt in itself to represent something to the mind». In fact, Scotus in the *Quaestiones* – loyal to Aristotle’s purpose in *Perihermenias* – has basically in view that «signification» or «to signify», that is, the act proper to the sign as a simple (spoken or written) term or as a (spoken or written) proposition, must be investigated according to the second aspect, not in terms of the communication of thoughts²¹. The weight put on signification should help in understanding why in the *Quaestiones in libros Perihermenias* Scotus – as already remarked above – puts a clear emphasis on the question whether a linguistic item keeps the same signification when the thing signified exists in reality and when it does not. The reason why the answer is positive is that the actual existence of the *res extra* does not explain the *signification* of enunciations. A word or a proposition has signification through itself. As G. Sondag puts it, what constitutes a sign is solely the identity – i.e. formal identity – of things signified as long as they are signified by the mind. This identity poses a different issue than the inquiry about things signified as long as they exist in act or not²². In these works of the first phase of his career John Duns Scotus therefore builds the groundings of a semantics of terms and elementary propositions that is theoretically a different approach in comparison to strict logical matters concerning truth value and existence or non-existence. Semantics differs from logic indeed²³ or, at least, we should assume a quite distinct approach within the field of semantics *lato sensu*, i.e. an approach that divides semantics into matters of signification and matters of propositional meaning²⁴.

the role of concepts or species as representing – as first intentions – things or putting things before the mind, making it to think of things in terms of their common intelligible aspects; see PERLER, D., «Duns Scotus’s Philosophy of Language», in Th. WILLIAMS (ed.), *The Cambridge Companion to Duns Scotus*, Cambridge University Press, Cambridge 2004, pp. 172-174; see also ASHWORTH, E. J., *Studies in Post-Medieval Semantics*, Variorum Reprints, London 1985, VII, p. 319; PASNAU, R., «Cognition», in Th. WILLIAMS (ed.), *The Cambridge Companion to Duns Scotus*, Cambridge University Press, Cambridge 2003, pp. 287-290. In a sense Scotus says good-bye to the classical «chains of signification», where signs either directly signify things in the external world or signify things in the external world only indirectly, because their immediate *significata* are concepts or species. If I am right, this is something that Vos, Antonie, *The Philosophy of John Duns Scotus*, Edinburgh University Press, Edinburgh 2006, pp. 163sq., would see defended by Scotus in *Ordinatio* I d. 27, but that was not clear yet in his *Quaestiones in primum* or *in duos libros Perihermeneias*.

²¹ See SONDAG, «Introduction», op. cit., p. 20.

²² It is the identity of things known or conceived by and in the mind (originally because of real things or real common aspects of things themselves). See SONDAG, «Introduction», op. cit., pp. 20-21. See also BIARD, J., *Logique et théorie du signe au XIV^e siècle*, Librairie Philosophique J. Vrin, Paris 1989, pp. 49-50.

²³ See SONDAG, «Introduction», op. cit., p. 21.

²⁴ Clearly, in a well established and developed terministic logic such as the one by Ockham, semantics is a field that studies signs and *significata* in terms of signification of terms, supposition of terms, and meaning of propositions; see for example PANNACCIO, C., *Les mots, les concepts et les choses*.

1. Tense and Meaning

What has been said so far helps to see why Scotus's discussion of future propositions in *Quaestiones in duos libros Perihermenias* is interesting. There is a large class of propositions that are formed by proper names, nouns or pronouns and by predicates that demand a particular consideration of their interpretation depending on the temporal signification of verbs. So, for example, «Brutus is nervous» may not be true now, but it is certainly true for the (past) time in which Brutus was taken as or called a «human being» that exists and experienced mixed feelings regarding the possibly dangerous and impactful action of murdering Cesar. Gérard Sondag claims that the analysis of present-tensed propositions with accidental or essential predicates, demanding an analysis of truth conditions respective to the actual existence of things, was originally developed in the theory of *appellatio* by Peter of Spain, in his *Summulae logicales*²⁵. The theory was insufficient to deal with propositions expressing the nature or quiddity of something or someone as far as it is known by the mind, but it was surely relevant to analyse truth conditions of propositions with «real» – not merely «intentional» – predicates. In this sense, the theory of signification would actually imply that «Brutus is a human being» is true because «human being» applies to «Brutus» still today, it is indifferent to any particular time of Brutus' actual existence. But «Brutus is nervous» is not always true, for such a predicate cannot be truly attributed to a subject if the subject is not an actually existing subject. This is the case of a given proposition whose condition of truth must include the analysis of the temporal co-signification of the verb, for the verb must co-signify a particular time in order to the meaning of the proposition to be possibly identified. As it can be noted by any careful reader, some Questions of Scotus' *Quaestiones in duos libros Perihermenias* have precisely propositions of this kind as their subject-matter – including the Questions that deal with contingent future propositions²⁶.

As a last previous remark, it should be noted that the analysis of future propositions to be done in these Questions is unique in Scotus' *opera*. There is nothing similar to this in his famous treatises on contingency or more precisely God's knowledge of contingent future events and propositions. In *Quaestiones in duos libros Perihermenias* I qq. 7-9 Scotus does not explicitly consider «probability». He does distinguish a categorical proposition («You will be white in *A*») and a modal proposition («It is possible that you will be white in *A*»). But Scotus *reflects* only about the signification and meaning of categorical

La sémantique de Guillaume d'Occam et le nominalisme d'aujourd'hui, Bellarmin – Vrin, Montreal – Paris 1991, pp. 25sq. On Scotus's views on the supposition of terms, see PICH, R.H., «Scotus sobre a suposição», in E. STEIN (ed.), *A cidade de Deus e a cidade dos homens. De Agostinho a Vico, Festschrift para Luis Alberto De Boni*, Edipucrs, Porto Alegre 2004, pp. 697-739.

²⁵ See SONDAG, «Introduction», op. cit., pp. 41-42. Sondag refers to PETRUS HISPANUS, *Tractatus (called afterwards Summule logicales)*, in L.-M. DE RIJK (ed.), *Peter of Spain (Petrus Hispanus Portugalensis) Tractatus (called afterwards Summule logicales)*, Van Gorcum & Comp. B. V., Assen 1972, *Tractatus X (De appellationibus)*.

²⁶ See SONDAG, «Introduction», op. cit., p. 42.

propositions. He does not make any clear use of the analysis of contingent propositions according to synchronic contingency – which would imply that contingent propositions should be analysed in terms of a simultaneous combination of a categorical with a modal proposition, such as «You will be white in *A* and you will be able not to be white in *A*». In fact, in our Questions Scotus is not essentially interested in analysing contingency, but rather, how contingent future propositions, through the analysis of the signification of the future-tensed verb, have a determinate meaning or not²⁷.

In *Lectura* I d. 39 qq. 1-5, as well as in parallel versions of the treatise on contingency²⁸, John Duns Scotus also deals – although briefly – with the question about *the meaning* of contingent future propositions. The context there is theological indeed, and not purely logical. He asks first whether God has a determinate knowledge of things according to every condition of existence, such as future existence²⁹. For Question 1 several arguments are presented to the negative opinion. The most interesting remark

²⁷ See Ioannes Duns Scotus, *Quaestiones in duos libros Peribhermenias*, qq. 7-9, nn. 6-7. 27, pp. 180-181. 186-187: «n. 6: Item, propositio singularis de futuro enuntiat rem fore eo modo quo adveniet, nam enuntiat rem fore pro determinato tempore sic quod posset non esse; sed nunc se habet res sic ad esse cras quod posset non esse; ergo etc. n. 7: Dicitur quod propositio de futuro significat nunc quod determinate ita est in re quod nunc erit; ideo non stant simul quod ipsa nunc sit determinate vera et quod posset res non fore cras. n. 27: Ad aliud dico quod non stant simul quod haec nunc sit determinate vera 'hoc erit' et quod 'hoc potest non fore'; quia si haec nunc sit determinate vera 'tu eris albus cras' – sicut nunc non stant simul quod 'tu es albus nunc' et 'tu potes nunc non esse albus' –, sic non stant simul quod nunc sit verum quod 'tu eris albus cras' et quod 'tu possis non esse albus cras'. Ista tamen stant simul, quod haec determinate nunc sit vera 'tu eris albus cras' et quod 'cras possis non esse albus'; quia non oportet, cum fueris albus, quod non possis fore non-albus. Sed quia haec 'tu eris albus cras' non impedit quin cras possis esse non-albus, ideo stant simul quod 'tu eris albus cras' et quod 'possis esse non-albus cras'».

²⁸ On the concept of contingency in that treatise, see KNUUTTILA, S., «Time and Modality in Scholasticism», in S. KNUUTTILA (ed.), *Reforging the Great Chain of Being. Studies of the History of Modal Theories*, D. Reidel Publishing Company, Dordrecht 1981, pp. 163-257; KNUUTTILA, S., «Duns Scotus' Criticism of the "Statistical" Interpretation of Modality», in W. KLUXEN (Hrsg.), *Miscellanea Mediaevalia 13/1 – Sprache und Erkenntnis im Mittelalter*, Walter de Gruyter, Berlin 1981, pp. 441-450; KNUUTTILA, S., «Modal Logic», in N. KRETZMANN – A. KENNY – J. PINBORG (eds.), *The Cambridge History of Later Medieval Philosophy*, Cambridge University Press, Cambridge 1982, pp. 342-357. See also VOS, A. ET ALII, *John Duns Scotus Contingency and Freedom - Lectura I 39*, Introduction, Translation and Commentary, Kluwer Academic Publishers, Dordrecht – Boston – London 1994; PICH, R.H., «Vontade livre e contingência: sobre a análise scotista do ato volitivo», in M.R.N. COSTA - L.A. DE BONI (orgs.), *A ética medieval face aos desafios da contemporaneidade*, Edipucrs, Porto Alegre 2004, pp. 407-451; PICH, R.H., «Duns Scotus: instante de tempo e instante de natureza», in J.A. DE C.R. DE SOUZA (org.), *Idade Média: tempo do mundo, tempo dos homens, tempo de Deus*, EST Edições, Porto Alegre 2006, pp. 129-140; PICH, R. H., «Contingência e liberdade», in JOÃO DUNS SCOTUS, *Textos sobre poder, conhecimento e contingência*, Edipucrs – Edusf, Porto Alegre – Bragança Paulista 2008, pp. 23-83.

²⁹ See Ioannes Duns Scotus, *Opera omnia XVII – Lectura in librum primum sententiarum: a distinctione octava ad quadagesimam quintam*, Typis Polyglottis Vaticanis, Civitas Vaticana 1966, I d. 39, qq. 1-5, n. 1.

to our present concern appears right in the first argument *contra*, where it is affirmed that according to Aristotle (*De interpretatione* I [6] 9, 18a28-19b5) contingent future propositions have no determinate truth, and knowability demands determinate truth. Of those propositions there cannot be, therefore, any knowledge³⁰. In his answer, Scotus recognizes that according to Aristotle there is no determinate truth in contingent future propositions, as there is no determinate truth in contingent propositions about the past and the present – where «determinate» contrasts clearly with, say, «indeterminate» or «alternative» at the same time of its realization³¹. Making systematic use of synchronic contingency³² for analysing propositions expressing states of affairs at different times, Scotus is able to say that in propositions about the past one «part» of them – one possible determination such as «it is the case» or «it is not the case», its possible «affirmation» or its possible «negation» – is realized and necessary or immutable, so that is cannot be false now, although it could have been false then (at the past instant of its realization). In propositions about the present, one «part» is determinately realized and the other contrary «part» is possible at the same time, but, in propositions about the future there is no actual determination yet³³. Taking the future proposition as such, the only determination that there is in it is a matter of *inevitable knowledge* – given the «necessity of immutability» of God's (essence, existence, and) perfect knowledge³⁴ – under the application of synchronic

³⁰ See Ioannes Duns Scotus, *Lectura* I d. 39, qq. 1-5, n. 1. See also Ioannes Duns Scotus, *Opera omnia* VI. *Ordinatio – Liber primus: a distinctione vigesima sexta ad quadragesimam octavam*, Typis Polyglottis Vaticanis, Civitas Vaticana 1963, I dd. 38-39, qq. 1-5, nn. [1]-[2]. See also Ioannes Duns Scotus, *Pariser Vorlesungen über Wissen und Kontingenz – Reportatio parisiensis examinata I 38-44*, ed. J.R. SÖDER, Verlag Herder, Freiburg 2005, I d. 38, qq. 1-2, n. 1, p. 34. Scotus mentions another Aristotelian reason for denying determinate truth of contingent future propositions, namely that, in case there were determinate truth in future contingents, there would be no need of negotiating and deliberating. See Ioannes Duns Scotus, *Lectura* I d. 39, qq. 1-5, n. 2; Ioannes Duns Scotus, *Reportatio parisiensis examinata* I d. 38, qq. 1-2, n. 2, p. 34. Admitting the merely contingent determination of a future contingent as the part actualized – in the future – of a given contradiction, Scotus rejects the argument by Aristotle; see Ioannes Duns Scotus, *Reportatio parisiensis examinata*, I d. 38, q. 1-2, n. 46: «Ad secundum, quando dicitur quod non oporteret consiliari, etc., hoc est argumentum rusticorum. Unde dico quod si neutrum futurum esset, nec una pars contradictionis contingentis nec altera, non oportet tunc consiliari; similiter si ambo evenirent, non oporteret habere consilium. Ergo alterum tantum esse futurum non excludit consilium sicut ambo vel neutrum futurum, sed includit. Tunc tamen argumentum Philosophi contra hoc non concludit, quia dicit si necessario eveniret, id est si veritas esset determinata necessario, tunc esset necessarium et tunc non oportet habere consilium. Si autem sit determinata non necessario ita quod potest non evenire, tunc necessarium est consilium».

³¹ Of course, in the treatises on contingency, the notion of synchronic contingency allows for a new understanding of «determination» or actual existence and realization, namely the conjunction of a really possible alternate possibility at the same instant of a given actual event or state of affairs.

³² See the literature indicated in footnote 28 above.

³³ See Ioannes Duns Scotus, *Lectura* I d. 39, qq. 1-5, n. 69.

³⁴ See Ioannes Duns Scotus, *Lectura* I d. 39, qq. 1-5, n. 77; Ioannes Duns Scotus, *Ordinatio* I dd. 38-39, qq. 1-5, nn. [5], [24], [31]; Ioannes Duns Scotus, *Reportatio parisiensis examinata*, I d. 38, q. 1,

contingency. Although God *knows* determinately that A will be at some future instant of time, in the same instant of eternity God also knows that at the same future instant of time it is possible that A will not be, not only concerning the proximate cause, but also in what respects to God's will or volition. This does not amount to the conclusion that God wants «successively»; the presupposition is rather that for the same act in which God *wills* that A shall be in the instant of eternity, in that same instant of eternity God *can will* that A shall not be³⁵.

Back to our *Quaestiones in duos libros*, it is first of all important to realize that, in order to understand the very nature and the truth or meaning conditions of future propositions, we should specify what a verb in a particular tense does or can do in the proposition. In *Quaestiones in duos libros* q. 6 it is asked «Whether a verb in the present unites the [determinate] now that is exemplified or unites indifferently whatever present³⁶». The tensed verb is a part of the discourse apt to signify or co-signify time. After all in a proposition the verb puts – beyond signification – a temporal difference, that is, present, past, and future. If one can say that «to run» signifies the action of running, then when one says «Socrates runs» a temporal difference is co-signified, and it is respective to *the action of running*, namely, *the present action*. The thing signified by the verb, i.e. *the action of running*, is «contracted» to present time through the verb in discrete present³⁷.

«Socrates runs» always has the same signification, but it does not always have the same truth value. In order for a present proposition to be true, it is necessary that what is enunciated is the case in the co-signified time. Co-signification becomes particularly

n. 45. See also SÖDER, J.R., *Kontingenz und Wissen. Die Lehre von den futura contingentia bei Johannes Duns Scotus*, Aschendorff, Münster 1999, pp. 183-198; PICH, R.H., *Der Begriff der wissenschaftlichen Erkenntnis nach Johannes Duns Scotus*, Rheinische Friedrich-Wilhelms-Universität Bonn, Bonn 2001, Chapter 6, division 6.4.3.

³⁵ This amounts to the point that Scotus conceives contingency in future propositions as a case of synchronic contingency, already known in realization by the divine intellect; this implies indetermination in causation and potency, and allows determination of knowledge. Determination of knowledge – or determinate knowledge of truth values of all propositions, given immutability of knowledge – does not prevent metaphysical contingency and corresponding alethic contingency. See Ioannes Duns Scotus, *Reportatio parisiensis examinata*, I d. 38, qq. 1-2, n. 51, p. 60: «Ad illud pro opinione Thomae quando dicit causa indeterminata est respectu futuri contingentis, dico quod impossibile est Deum habere aliquid pro effectu nisi prius illud habeatur sub ratione obiecti voliti. Et sic determinata est voluntas divina quantum ad volitum, sed indeterminata quantum ad effectum; nec sequitur 'ergo indeterminate cognoscitur' quia determinatio notitiae stat cum indeterminatione potentiae». See also Ioannes Duns Scotus, *Lectura* I d. 39, qq. 1-5, nn. 54. 69; Ioannes Duns Scotus, *Ordinatio* I dd. 38-39, qq. 1-5, n. [26].

³⁶ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I q. 6, p. 167: «Iuxta hoc quaeritur utrum verbum de praesenti copulet nunc quod instat vel indifferenter quodlibet praesens».

³⁷ See SONDAG, «Introduction», op. cit., pp. 46-47. See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I q. 6, n. 36, p. 175: «Ad secundum quaesitum dicendum quod verbum copulat sub tempore de praesenti discreto».

important in propositions that do not contain only common terms, for in them the temporal difference *must necessarily* be indicated. A verb unites the extreme terms of a proposition, subject and predicate, under the same temporal difference. Accordingly in «Socrates runs» both subject and predicate are taken together «under the reason of the present³⁸». More exactly, the composition of subject and predicate under the same temporal difference by a present-tensed verb shows that, for Scotus, «present» itself is known above all as a co-presence. What is the present co-signified in a present-tensed proposition? It is the duration measured by the duration of an action³⁹, or, more broadly, as we could add, by the duration of an action, a state or a natural condition. In fact, this can amount to the condition of identifying total actions that can themselves be divided in several parts comparable as prior and posterior items in a given continuity; however, in this and any other similar case it will happen that the fundamental distinction of time will be done according to present discrete parts that correspond to parts of a total action, such as the one expressed in the proposition «Someone builds a house in seven weeks⁴⁰». Accordingly, a verb in the present tense basically unites «in the way of the instant» an extreme term of a proposition with the other extreme term, irrespective of what sense of present time is co-signified, as long as the thing *is actually present* or expresses *an actuality* either just discretely, continuously or always⁴¹. This explains why a verb in the present

³⁸ See SONDAG, «Introduction», op. cit., p. 47.

³⁹ See SONDAG, «Introduction», op. cit., pp. 48, 50.

⁴⁰ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I q. 6, n. 43, p. 178: «Ad aliud dico quod totum tempus, quod intelligitur ut distinctum a praeterito (scilicet ratione praeteriti) et a futuro in ratione futuri, dicitur tempus praesens. Unde quantitas temporis praesentis accipitur secundum comparationem ad actionem, sicut dicimus quod in septimana facit aliquis domum, intelligendo quod in illo toto tempore agit tantam actionem, et non quod immediate agit vel immediate egit. Et comparando partem temporis ad partem actionis, distinguimus idem tempus per praesens et futurum, quia respectu totius facti intelligitur praesens. [...]. Est enim tempus accommodatum verbo, ut mensuret actum eius».

⁴¹ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I q. 6, n. 37, pp. 175-176: «Ad quod sciendum primo quod verbum praesens per se acceptum significat praesens. Significat autem verbum de praesenti rem suam non prout aliquid est habens esse in praeterito vel futuro, sed sub modo essendi praesentis rem suam denotat. Quia praeteriti nulla pars instat nec futuri, sed praesens instat; et verbum praesentis temporis rem suam significat per modum instantis. Et est quodammodo simile de nomine respectu suorum suppositorum, et de verbo praesenti. Quia 'homo' significat formam hominis vel hominem in actu, non hominem in potentia nec hominem qui fuit sub illis rationibus vel nominibus, sed hominem secundum actum suum; et quodlibet, cum intelligitur ut actum habens hominis, intelligitur homo. Sic verbum de praesenti denotat rem suam prout actum praesentis habet; et quodlibet tempus, cum intelligitur ut actum praesentem habens, consignificatur per verbum de praesenti. Differentia tamen est in hoc quod – quia terminus communis significat sine tempore – nihil prohibet ipsum intelligi simul convenire pluribus, quorum quodlibet intelligitur habere actum eius. Sed de temporibus praesentibus, quae multa sunt secundum ordinem et successionem, non potest intelligi quod multa sunt simul quibus conveniat praesens in actu; propter quod dissimile est de nomine ad supposita et de verbo praesentis temporis».

tense has to be taken, at least primarily, not as an indifferent or «confuse» present (not expressing just an indifferent time or an indifferent measuring of realization of something), but, particularly for the purpose of expressing a contingent or changeable state of affairs, as a determinate or discrete present instant⁴².

As rightly noted by G. Sondag, it would be interesting to further pursue the similarities between Scotus's and Simon of Faversham's account of co-signification of time in his *Perihermenias* q. 11. Faversham also affirms that a present-tense verb in contingent propositions is taken for the time that is actual, as long as the present action takes place, that is, as long as the present is⁴³. Thus the discussion would have to include an account of time as such⁴⁴. For Faversham «present time» can be viewed as a form common to successive present items. Scotus rejects this view, showing that if there is a similitude between a form («man») in its relation to suppositis and «present time» in its relation to present items – that they apparently work logically in the same way in a *dictum de omni* –, there is a decisive difference, which makes impossible to deal with «present» as a common form⁴⁵. Nothing prevents that we conceive a common form such as «man» as convenient to a plurality of suppositis at the same time; we can think of plural present items too in the sense of parts of continuities such as when we think of total actions, states or natural conditions and its partial moments of realization, but then it is clear that we conceive of those respective plural present items according to *an order of succession*, so that while a present item is *another present item is not*. In this respect, we cannot conceive that there are several present items at the same time, to which the present time in act (as a common) form would apply⁴⁶. If this were otherwise, a future-tensed proposition such as «You will

⁴² See SONDAG, «Introduction», op. cit., p. 48. See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I q. 6, n. 38, pp. 176-177: «Sciendum secundo quod verbum de praesenti pro eodem tempore copulat extremum extremo quod consignificat. Unde sicut consignificat tempus praesens discretum, ut distinguitur a praeterito et futuro, sic sub tali tempore copulat. Unde non potest intelligi quod copulet pro hoc nunc significato, quia tunc, transacto hoc nunc non significaret verbum praesentis temporis, ut praecogitum est. Nec copulat praesens commune ad praesens quod fuit et ad praesens quod erit, prout nomen commune significat; nam tunc ista 'tu eris albus' posset istam verificare 'tu es albus'; copulat igitur pro quolibet tempore praesenti, cum fuerit actu praesens».

⁴³ See SONDAG, «Introduction», op. cit., p. 48.

⁴⁴ On Scotus's account of time, see CROSS, R., *The Physics of Duns Scotus. The Scientific Context of a Theological Vision*, Clarendon Press, Oxford 1998, Chapters 12-13, pp. 214-256; LEWIS, N., «Space and Time», in Th. WILLIAMS (ed.), *The Cambridge Companion to Duns Scotus*, Cambridge University Press, Cambridge 2003, pp. 83-93; PICH, R.H., «Scotus sobre o estatuto ontológico do tempo», *Mediaevalia – Textos e Estudos* 26 (2007) 3-67.

⁴⁵ See SONDAG, «Introduction», op. cit., p. 49. See again Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 5-6, n. 37, pp. 175-176 (footnote 41, above).

⁴⁶ See also Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 5-6, n. 41, pp. 177-178: «Ad aliud dico quod 'praesens' ex sua significatione significat praesens quod instat, quia alioquin non esset praesens. Nam praesens quod erit vel quod fuit, non est praesens, ideoque ex sua forma artat rem verbi, ut intelligatur sub praesenti quod instat. Sed licet ex eo quod nomen posset intelligi habere

be white» would verify a present-tensed proposition such as «You are white», that is, the latter would have the same truth value of the former⁴⁷.

2. Contingent Future Propositions

I think we now have all needed presuppositions for a correct reading of the main Questions respective to our main topic. I will take a «contingent future proposition» for every future-tensed proposition about a singular causally indeterminate event or state of affairs, such as «You will be white in *t*». I assume that Duns Scotus has no interest, in Questions 7-9, in analysing contingency and knowledge respective to events or states of affairs depending on or existing as a result of human decisions or human volitive acts. If there is furthermore the question whether someone can know in advance whether the contingent future event will take place or not, the answer should be clearly no, precisely because the first item in a given causal chain that originates an event or state of affairs is taken to be indeterminate. What we can previously know is only that a disjunction like the following one is true: «It will take place or it will not take place⁴⁸».

Scotus presupposes three kinds of future events, which now do not exist in themselves, but only «in their cause»: (1) a future event that follows necessarily from its cause; (2) a future event that has inclination to be produced by its cause, although it may be hindered by something; (3) a future event that is indeterminate in its cause concerning existence and non-existence. Things relate in the future to existence, according to these three ways⁴⁹. It is only the third kind of future event that concerns us now. It is in order to understand how this third kind of future event relates to existence that Scotus formulates two very similar questions: in Question 7 he does not ask whether *a future* proposition is simply true or false, but whether a future proposition is true or false «determinately» (*determinate*)⁵⁰. A proposition that is determinately true is one that can be determined as

multa supposita simul, sicut hoc nomen 'homo', tamen praesens tempus, ratione formae rei quam significat sub propria ratione, non potest simul multa habere sub ratione praesentis. Ideo res verbi intellecta sub ratione praesentis non intelligitur sub indifferentia ad multa praesentia simul. Unde haec 'homo currit' non verificatur quia homo curret cras».

⁴⁷ See SONDAG, «Introduction», op. cit., pp. 49-50.

⁴⁸ For definitions assumed in this paragraph see the remarkable study by FLECK, F.P.A., *O problema dos futuros contingentes*, Edipucrs, Porto Alegre 1997, pp. 81-84.

⁴⁹ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 14, p. 183: «Ad primum quaesitum dicendum quod propositio singularis de futuro contingenti nec simpliciter est vera nec falsa, nec determinate vera nec determinate falsa. Ad quod sciendum quod 'verum' significat esse quod est, 'falsum' esse quod non est. Ex quo sequitur quod 'sicut res se habet ad esse, sic ad veritatem'. Quod autem est actualiter in praesenti, in se ipso habet quod sit verum, sicut habet esse per se. Quod autem futurum est, non est in se ipso, sed in causa; quod contingit tripliciter. Primo modo est aliquid in causa quod necessario sequitur ex illa; alio modo quod habet inclinationem ad causam ut producatur a causa, potest tamen impediri; tertio modo quod non magis se habet ad esse quam ad non-esse. Istitribus modis se habent res in futuro ad esse».

⁵⁰ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I q. 7, p. 179: «Quaeritur an propositio de futuro sit determinate vera vel falsa».

true, and so we have to take for granted that there is a way of knowing that it is true. This is exactly what happens when what the proposition enunciates «is the case» or «exists». If this does not apply, then it is true or false only indeterminately. In Question 8 Scotus asks whether a proposition such as «A will be» is determinately true *now*⁵¹.

Of course the main answer to the Questions can only be understood if we take for granted that Scotus, just like Aristotle before him, presently investigates the truth value and knowledge conditions of *contingent* future propositions, that is propositions expressing «things which are to both sides [*ad utrumlibet*]» of possible truth value or indeterminate⁵². As one would expect, Scotus follows Aristotle by stating that a singular proposition that is future and contingent is neither simply true nor simply false, neither determinately true nor determinately false. A singular contingent future proposition such as «Paul will be seated» is rather «indeterminately» (*indeterminate*) true or false⁵³.

We must bear in mind now *four* presuppositions for this answer. *First*, «true» means «to be what is»; «false» means «to be what is not». That means that «How a thing behaves concerning existence, so it behaves concerning truth⁵⁴». What is «present» is in act now and has in itself what makes it true: it has existence through itself. «Future» in three senses

⁵¹ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I q. 8, p. 180: «Supposito quod *a* eveniat postea, quaeritur an haec nunc sit determinate vera '*a* erit?».

⁵² See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 4, p. 180: «Ad oppositum est Aristoteles, qui dicit quod in his quae sunt ad utrumlibet, non magis est oratio vera vel falsa; igitur etc.».

⁵³ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 14, p. 182: «Ad primum quaesitum dicendum quod propositio singularis de futuro contingenti nec simpliciter est vera nec falsa, nec determinate vera nec determinate falsa. Ad quod sciendum quod 'verum' significat esse quod est, 'falsum' esse quod non est. Ex quo sequitur quod 'sicut res se habet ad esse, sic ad veritatem'. Quod autem est actualiter in praesenti, in se ipso habet quod sit verum, sicut habet esse per se». Although Scotus's conclusion on the meaning of contingent future propositions is arguably similar to Aristotle's conclusion, a rigorous comparison between Scotus's views on the matter in our *Quaestiones* and Aristotle in Chapter 9 of *Perihermenias* cannot be pursued here; in fact, Scotus's three questions formulate problems and make use of devices (see Concluding Remarks) other than Aristotle's essential concerns and reasonings about the truth value of «future singulars» in that chapter; see again ACKRILL, «*De interpretatione* – Notes», op. cit., pp. 132-142. The literature on contingency, determination, and the meaning of contingent future propositions in Aristotle's *Perihermenias* Chapter 9 is of course legion; see for example HINTIKKA, Jaakko, *Time and Necessity – Studies in Aristotle's Theory of Modality*, Clarendon Press, Oxford 1973; HINTIKKA, Jaakko (in collaboration with REMES, UNO and KNUUTTILA, Simo), «Aristotle on Modality and Determinism», *Acta Philosophica Fennica* 29 (1977) 7-124; SORABJI, Richard, *Necessity, Cause, and Blame: Perspectives on Aristotle's Theory*, The University of Chicago Press, Chicago 1980 (paperback edition 2006), pp. 91-140; WATERLOW, Sarah, *Passage and Possibility. A Study of Aristotle's Modal Concepts*, Clarendon Press, Oxford 1982, pp. 79-109.

⁵⁴ See footnote 57, below. On Scotus's theory of truth, see MARMO, C., «Ontology and Semantics in the Logic of Duns Scotus», in U. ECO - C. MARMO (eds.), *On the Medieval Theory of Signs*, John Benjamins Publishing Company, Amsterdam – Philadelphia 1989, pp. 143, 168-170 (pp. 143-193). In a working definition for the purposes of this essay, we say that a «truth» is a proposition which, because

(*tripliciter*) was already defined above⁵⁵. *Second*, Scotus assumes *here* a realistic correspondence theory of truth⁵⁶: «propositions are true as long as they relate to existence». A proposition that expresses the existence of a thing in the way the thing relates to existence, is true. If an *oratio* differently enunciates the existence of a thing it is false⁵⁷.

Third, departing from its signification or its mode of signifying, any future proposition designates in a way equally determinate the existence of anything, because the actual existence of things does not change the «signification of the discourse». This presupposition is explained in this form: the «enunciation» (*dictio*) and the «proposition» signify the same, no matter whether the thing exists or does not exist⁵⁸. *Fourth*, a future proposition can be taken as signifying in two different ways «something in the future»: it can (a) signify that it is true *now* that something will have true existence *in the future*. In this sense «You will be white in *a*» signifies that now such is the case in the thing that, in the moment *a*, it will be white; or it can (b) signify *now* that you will be white *then*, not being the case that it signifies to be the case *now* that «you» *have* to be white in *a*, but only that «you» will be white *then*. What is the difference? To signify that now it is the case that you will be white in *a* is more than to simply signify that you will be white in *a*⁵⁹. The first formulation expresses *determination* from now to the future; the second

of its total meaning or a meaning depending of its combined parts, being itself a non-contradictory composition of things insofar as they are conceived [*intelliguntur*] by the mind, corresponds to or agrees with reality, receiving then a truth value – i.e. «true» – or being, then, «verified». See also CESALLI, *Le réalisme propositionnel*, op. cit., pp. 138sq., 165sq.

⁵⁵ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 14, pp. 182-183: «Quod autem futurum est, non est in se ipso, sed in causa; quod contingit tripliciter. Primo modo est aliquid in causa quod necessario sequitur ex illa; alio modo quod habet inclinationem ad causam ut producatur a causa, potest tamen impediri; tertio modo quod non magis se habet ad esse quam ad non-esse. Istis tribus modis se habent res in futuro esse».

⁵⁶ See again MARMO, «Ontology and Semantics in the Logic of Duns Scotus», op. cit., pp. 143, 168-170. For a contemporary account of the «correspondence theory» of truth, see for example KIRKHAM, R.L., *Theories of Truth. A Critical Introduction*, MIT Press, Cambridge, 1997 (fourth printing), pp. 119sq. However, if we consider the several kinds of truth, such as necessary and contingent, *a priori* and *a posteriori*, we should certainly agree with Vos, *The Philosophy of John Duns Scotus*, p. 184, that the fundamental notion is «conformitas»: «The two decisive aspects of truth as *conformitas* are as follows. A proposition assented to is only *true* if it is guaranteed by itself or by external reality». See also CESALLI, *Le réalisme propositionnel*, op. cit., pp. 138sq.

⁵⁷ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 15, p. 183: «Secundo est intelligendum quod 'orationes sunt verae sicut res se habent ad esse'. Nam oratio enuntians esse de re, secundum quod se habet ad esse, vera est; aliter enuntians falsa est».

⁵⁸ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 16, p. 183: «Tertio intelligendum est quod propositio de futuro ex suo significato vel modo significandi aequaliter designat determinate esse de quolibet, quia esse rerum non mutat significationem sermonis, quia dictio et oratio idem significant re existente et non-existente». On Scotus uses and understanding of «modes of signifying» see PERLER, «Duns Scotus's Philosophy of Language», op. cit., pp. 172-174.

⁵⁹ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 17, p. 183:

expresses absence of determination from now to the future, and this is how Scotus views the contingent future proposition⁶⁰.

These presuppositions are conditions for determining truth value of all sorts of future-tensed propositions. They are all that we need to determine truth value of a contingent proposition such as «You will be white in *a*». If it is enunciated «absolutely», if it is expressed to signify that the thing has – in its existence in its cause, whatever it is – such relationship to existence that you *must* be white in *a*, then it is determinately false. What grounds such conclusion is the *second* presupposition: «Propositions are true as long as they relate to existence⁶¹». When «You will be white in *a*» is enunciated, it does not behave now in its cause so that it must have existence in *a* – otherwise the thing would be produced from necessity and be now determinately true⁶². But such thing does not determinately behave in its cause to future time: this we have read in the *first* presupposition.

Scotus also clearly insists in an aspect of the *fourth* presupposition, namely that a future proposition just signifies *now* that something will be the case *then*. If a future proposition only means that something future – the time in which it signifies in case it turns to be present then – will be the case, then it is correct to affirm that the future

«Quarto est intelligendum quod propositio de futuro potest intelligi dupliciter significare aliquid in futuro. Vel ita quod propositio de futuro significet nunc verum esse quod aliquid in futuro verum esse habebit; verbi gratia quod haec 'tu eris albus in *a*' significet nunc esse in re, ita quod tu in *a* tempore eris albus. Vel potest intelligi quod significet nunc quod tu eris albus tunc; non quod significet nunc ita esse quod tunc debeas esse albus, sed quod significet nunc quod tunc tu eris albus. Quia significare nunc esse quod tu in *a* eris albus, hoc est plus significare quam significare tu eris albus in *a*».

⁶⁰ See Vos, *The Philosophy of John Duns Scotus*, p. 176: «The term *contingens* hardly occurs in Duns' logical writings, but he still pays attention to what can be called a contingent proposition. Just as a necessary proposition, a contingent proposition is a true proposition. So a contingent proposition is in fact a contingent truth, for instance *Socrates is pale*. In such cases, the predicate expresses an accidental property, namely *being pale*, which is asserted of someone and obtains in reality. Contingent truths entail the existence of the involved individuals or substances».

⁶¹ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, nn. 1. 15. 18, pp. 179. 183; see n. 1, p. 179: «Quaeritur an propositio de futuro sit determinate vera vel falsa. Quod falsa, videtur: Quia aliter significat esse quam est in re; igitur etc. Consequentia patet, quia in eo quod res est praesens, sic orationes sunt vera. Et in littera dicitur quod 'orationes sunt verae sicut et res'. Antecedens patet, quia propositio de futuro significat nunc quod res habebit esse determinatum, quod esse est indeterminatum».

⁶² Here Scotus follows Aristotle strictly in *De interpretatione* I 9, 18a39-8b9, 18b9-16. See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 18, pp. 183-184: «Dico igitur quod haec 'tu eris albus in *a*', absolute enuntiata, si illa significet rem sic se habere ad esse ut tu in *a* debeas esse albus, haec propositio est determinate falsa, quia "orationes sunt verae", etc., per secundam praemissarum. Res autem talis enuntiata non sic se habet nunc in sua causa ut tunc debeat habere esse, quia si nunc se haberet res in sua causa ut tunc debeat habere esse, hoc iam foret ex necessitate et esset nunc determinate verum. Et sic procedunt duae primae rationes quas facit Aristoteles. Sub hoc enim intellectu significat propositio de futuro aliquid esse nunc determinate ad esse pro tempore de futuro quod non est determinatum».

proposition is *indeterminately true or false*. The reason is that a future proposition that enunciates in this way does not enunciate what now has existence or non-existence as something determinate, for the real existence that the thing has in its cause now is not enunciated: it is a *future* proposition. The co-signification of the verb is not present, but future time, this is the temporal difference that it places. This is why, even if the thing has now a determinate form of existence in its cause, its existence is enunciated to the future, and it cannot be declared now a true or false proposition. It is not enunciated that the existence of the thing is now determinate in such a way that it will be in some future. It is just enunciated that the thing will behave in that form. I think that precisely at this point we can see the very contents of the *third* presupposition explained above. It reminds us that because of its signification and its mode of signifying a future proposition always enunciates something determinately. Again, since the contingent thing is not in its cause more inclined to existence or non-existence, it is not affirmed that the thing is such a form that it *has* to exist under that form⁶³ – just like, for example, in the (necessary) proposition «A human being is a living being». It is therefore not possible to affirm in a definite way «This will be» or «This will not be»; as in the second way of signification in the *fourth* presupposition, contingent future propositions just say that something will be the case, and hence that now in their cause they are neither absolutely false nor absolutely true, determinately true or determinately false⁶⁴.

If we remember now that in Question 8 it is asked «Whether a proposition such as «A will be» is determinately true now», it is understandable that the answer is negative,

⁶³ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 19, p. 184: «Si autem propositio de futuro non significat nisi quodcumque futurum pro quo significat si fuerit praesens, quod tunc verum est dicere – quoniam illud est quod nunc enuntiat futurum – propositio de futuro est indeterminare vera vel falsa. Cuius ratio est quia propositio de futuro sic enuntians, non enuntiat de eo quod nunc est esse vel non esse ut aliquid determinatum, quia secundum istum intellectum non enuntiat esse quod habet res in sua causa, quia propositio est de futuro. Propter quod, licet res nunc habeat esse determinatum in sua causa et enuntietur esse de re pro aliquo futuro, non diceretur nunc propositio vera vel falsa. Quia non enuntiat nunc esse determinatum ut sit pro aliquo futuro, sed enuntiat nunc quod sic se habebit, et non enuntiat rem sic se habere ut tunc debeat esse».

⁶⁴ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 20, p. 184: «Ideo dicit Aristoteles quod in illis quae sunt ad utrumlibet, non magis est affirmatio vera quam negatio. Unde non contingit dividendum dicere definite hoc erit, neque definite hoc non erit; definite autem dicit hoc fore, quando enuntiat sic esse nunc ut aliquid habebit esse in futuro». In the answers to the initial arguments, Scotus explores the idea of the indetermination of future propositions enunciated now. If a proposition such as «You will be white in *a*» enunciates in a determinate way the existence of the thing for a future instant of time, then the proposition now is neither false nor true, for it is right now something indeterminate which one of the contradictories will have existence in that future time. See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 21, p. 185: «Ad primum argumentum dico quod propositio de futuro, si significet nunc esse ita quod res in futuro habebit esse tunc, significat esse aliter quam est, et est falsa – quamvis eveniat res quae enuntiat evenire – non propter eventum rei, sed propter modum enuntiandi; enuntiat enim aliter evenire quam evenit. Si intelligitur secundo modo, quod enuntiet determinate esse de re pro tempore determinato futuro,

that is, any contingent future proposition is not determinately true fundamentally because (i) the way the thing enunciated exists in its cause now is indeterminate and (ii) the time that is co-signified for the realization of the thing is the future⁶⁵. However, at the initial arguments Scotus had mentioned an opinion affirming that «A will be» is determinately true now. No proposition is judged true or false except by considering the time in which the predicate can inhere in the subject. This is the case, clearly, about *past* propositions, and this is the case, and so is the opinion, about *future* propositions as well: when one says «You will be white in *a*», the meaning is not that something is or is not true *now* about the thing [that you are white or not white *now*]. The meaning is that in *a* it will be true to say that «You are white». If the thing in *a* will behave in the way the proposition affirms now that it behaves in *a*, then this same proposition is determinately true now⁶⁶.

The answer to this argument is particularly important in order to realize how a contingent future proposition relates to existence. In what sense does a proposition relate

propositio nunc nec est vera nec falsa, quia nunc est indeterminatum quod contradictorium habebit esse pro illo tempore». When Scotus answers to an argument in n. 3, he reminds us that a proposition such as ««You will be white» is true» must be distinguished according to the *sensus compositionis* and the *sensus divisionis*. According to the sense of composition the proposition is false, for it means then that the truth will concern the *dictum* for the present. But ««You will be white» is true now» does not follow from ««You will be white» is true». According to the sense of division the proposition only means that «You will be white» is true, and that proposition is indeterminately true or false now, just like the first one. See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 23, p. 185: «Ad tertium dicitur quod haec ‘te fore album’ est verum’ est distinguendum secundum compositionem vel divisionem. In sensu compositionis est propositio falsa, et significat quod verum insit huic dicto pro praesenti ‘te fore album’; nec sic sequitur ex prima. Alio modo accipitur in sensu divisionis, et non significat nisi quod ‘te fore album’ verum est, et haec est indeterminate, sicut et prima». He also considers a different answer for ««You will be white» is true» in the sense of composition; see Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 24, pp. 185-186: «Aliter tamen dicendum quod ista propositio ‘te fore album’ est verum’ in sensu compositionis significat, non quod nunc res sic se habeat ut haec enuntiat ‘tu eris albus in *a*’ – tunc enim significaret determinate falsum –, sed verum enuntiatum de dicto intelligitur, sicut vera quaedam assertio rei quae importatur per dictum pro tempore pro quo denotantur extrema dicti uniri. Ideo etiam in sensu compositionis est propositio indeterminate vera, quia veritas eius enuntiata debet intelligi sicut quaedam assertio compositionis importatae per dictum pro tempore pro quo enuntiat praedicatum dici de subiecto».

⁶⁵ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 25, p. 186: «Ad secundum quaesitum dicendum quod propositio de futuro non est determinate vera, sicut patet ex dictis».

⁶⁶ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, nn. 4-5, p. 180: «n. 4: Supposito quod *a* eveniat postea, quaeritur an haec nunc sit determinate vera ‘*a* erit?’ n. 5: Quod sic, videtur: Nulla propositio iudicatur vera vel falsa nisi pro tempore pro quo praedicatum potest inesse subiecto, ut patet de praeteritis propositionibus, quae non iudicantur secundum dispositionem rei quam nunc habent, sed secundum illam quam habuerunt. Igitur similiter erit in illis de futuro. Sic autem dicendo ‘tu eris albus in *a*’, non significatur aliquid de re nunc esse vel non esse, sed significatur quod in *a* verum erit dicere quod ‘tu es albus’. Si igitur sic se habebit res in *a* sicut nunc enuntiat propositio rem se habere in *a*, haec nunc est determinate vera».

to the existence of something? A proposition about a future contingent does not enunciate now the existence of a thing in the sense that the thing has relationship with existence now. And a proposition about a future contingent does not enunciate now the non-existence of a thing other than how the thing is. But in spite of the «distance» respective to actual existence now, Scotus affirms that the proposition about a future contingent enunciates *for the present time* a determinate existence of the thing *for the future time* – after all, the enunciation is done in the present and it has therefore a determinate signification, although the affirmed thing is relative to the future in terms of its existence. This seems to imply that in a particular sense (iii) every contingent future proposition keeps a co-signification of the present time that reveals that it has a determinate signification and mode of signification⁶⁷, a signification that expresses determinately how the existence of things can apply. Of course every proposition of this sort has also a temporal difference to the future that implies that the existence signified is not actually determinately realized, but it is the case, as it were, only in its cause (potentially). Accordingly, since for the future time the proposition is not determined yet, the proposition that now enunciates – in terms of the sense of the realization of truth conditions – a determinate existence for that future time will neither be said to be now determinately true nor to be determinately false⁶⁸. That the sense of the contingent future proposition is determined means that for the co-signified present the proposition says *this* and not something else; however in the future it does not have a meaning yet⁶⁹.

3. Signification and Indetermination of Meaning

In Question 9, «Whether it is possible that neither part of a contradiction is true», the third question of our set of questions about future propositions, Scotus brings forth one opinion that argues that this is possible. It is affirmed that every proposition signifies that it is true. «You will be white tomorrow» signifies therefore that it is true. The first premise applies because for every proposition its *dictum* or its qualified (intended) judgement will be true – more exactly: it will be a truth claim, claiming either that something is true or that something is false. As a matter of fact, the argument focuses on the idea that in every future proposition one and the other side of the contradiction will have to signify that the proposition is determinately true. If one, then, traditionally says that one and the other part are not determinately true, it follows that both are false⁷⁰.

⁶⁷ See footnote 58.

⁶⁸ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 26, p. 186: «Ad primum argumentum dico quod propositio de futuro contingenti non enuntiat nunc esse sicut res se habet ad esse; nec enuntiat nunc non esse aliter quam res se habet. Sed dico quod pro isto tempore enuntiat determinatum esse rei pro futuro tempore. Propter quod, cum pro illo tempore (ut patet) non sit determinatum, propositio nunc enuntians determinatum esse pro illo tempore, dicetur nec nunc determinate vera nec determinate falsa».

⁶⁹ See the Scotist text in footnote 66.

⁷⁰ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, nn. 9-10, p. 181: «n. 9: Quaeritur an possibile sit neutram partem contradictionis esse veram. n 10: Quod sic, videtur:

In his answer to this challenge Scotus affirms that if a future proposition enunciates that it is *now determinate* that the thing enunciated will have existence in the future (or the contrary of this: that it will not have existence in the future), then one and the other part of the contradiction in future propositions are false. Why? Because then one part enunciates as something definite what will be, and the other part enunciates also as something definite what will not be. If a contingent future proposition affirms something determinately, then both parts of the contradiction are false, because this is not how a contingent future proposition has meaning according to the existence of the thing. If we keep in mind – reminding our presuppositions – that a future proposition enunciates actual existence or non-existence of the thing only for the future, without enunciating determinately anything about the existence it has now in its cause, we can only conclude that both parts of the contradiction are indeterminately true or false⁷¹.

When Scotus then answers the initial arguments, he says that the *dictum* «You will be white» is true» is not determinately true or false *now*. Through this proposition we understand that «will be white» is affirmed of «you» for a future time, not for the time which the actual now refers to. As a matter of fact, it is not indeterminate «that you will be white» *in the future*. But it is not signified that *now* «you» are white or not, and it is not signified either that the relationship of being so or so determined is in such a way determined in the cause that «you» will have indeed in the future this or that existence⁷². If «You will be white» would mean that it is now determinate what now is enunciated of the future and what in the future would have existence, the proposition would be rather determinately false, because it would mean now that what is contingent *is determined* to

Quaelibet propositio significat se esse veram, ergo ista 'tu eris albus cras' significat se esse veram. Antecedens patet, quia ad omnem propositionem veram sequitur suum dictum fore verum. Similiter contradictorium affirmativae ut ista 'tu non eris albus' infert hanc '«te non fore album» est verum'. Utrumque igitur contradictorium in illis de futuro significat se esse determinate veram. Cum igitur neutra sit vera, sequitur utramque esse falsam. – Hoc conceditur, quod utraque pars contradictionis simul sit falsa in futuris, ratione modi essendi qui in neutro contradictorium negatur».

⁷¹ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 28, p. 187: «Ad tertium quaesitum dico quod si propositio de futuro enuntiat nunc esse determinatum quod res enuntiata habeat esse in futuro, utraque pars contradictionis in illis de futuro falsa est; quia una pars enuntiat esse definitum quod erit, alia esse definitum quod non erit; et (ut patet) falsum est, cum neutrum sit determinatum sed utrumque indeterminatum. Et si propositio de futuro tantum enuntiat rem esse pro futuro, et non determinate aliquid de esse quod nunc habet res in sua causa, utraque pars est indeterminata vera vel falsa».

⁷² See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 29, p. 187: «Ad primum argumentum in contrarium dico quod haec propositio '«te fore album» est verum', non est nunc determinate vera vel falsa; quia per illam propositionem intelligitur 'fore album' affirmari de te pro aliquo tempore futuro, non pro tempore quod nunc instat. Unde licet non sit indeterminatum 'te fore album' in futuro – quia te fore album in sua causa est ad utrumlibet –, quia tamen non significatur te nunc esse album vel non esse nec significatur respectum esse determinatum in causa ut in futuro habeat hoc esse, ideo haec propositio 'tu eris albus' non est nunc determinate vera vel falsa».

one part of the contradiction or of the exclusive disjunction. And, granted that «You will be white» means that it is now determinate what now is enunciated of the future and what only in the future would have existence, then *both parts* of the contradiction – the affirmative part and the negative part – would be false⁷³.

All further aspects in these Questions on future propositions are variances of analysis. They are interesting because they introduce semantical devices for clarifying the signification of propositions, in turn making clear their truth conditions. John Duns Scotus considers a couple of deviced objections stating that a future proposition is true determinately. One objection has the form of this inference: (1) «The future is future; therefore, the future is⁷⁴». The other objection asserts that (2) a future proposition, which is said according to the «present» (such as «This is future»), does not affirm that something is now in a determinate way, but only enunciates that a thing will be, without determining that something is or is not. In the same manner a *contingent* proposition such as «Socrates is seated» is determinately true now, for the very reason that it expresses the happening of a thing in a determinate way, although it is not determinate that something is or is not now, in this way a future proposition will be true⁷⁵.

The first artificial objection is a *figura dictionis*. One changes what is a *quale* into what is a *quid*. In «Every future is future», what is predicated is «to-be-future». But when I say «The future will be» what is predicated is the existence under the mode of the future. Accordingly, «The future is future» is a present tense proposition, just like «A man is a man». But «The future will be» is not a present tense proposition. Even supposing that «The future will be» – a general proposition – is determinately true, it does not follow that any given singular and contingent future proposition is determinately true. Let us consider the following inference: «Every future will be»; «That you will be a bishop is future»; therefore «This [That you will be a bishop] will happen». Here we have a *figura dictionis*. In the major premise the common term («the future») is distributed over all suppositis (this future, that future, etc.), and this term is supposed to express the quiddity

⁷³ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 29, pp. 187-188: «Si tamen propositio significaret nunc esse determinatum quod nunc enuntiatur de futuro et in futuro haberet esse, propositio esset determinate falsa, quia significaret nunc quod est contingens esse determinatum ad alteram partem; et hoc dato, esset utraque pars contradictionis falsa, quia una pars significaret hoc esse determinatum ad esse, altera significaret hoc esse determinatum ad non-esse – et ipsum est contingens».

⁷⁴ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 30, p. 188: «Adhuc potest argui quod propositio de futuro sit determinate vera, quia sequitur 'futurum est futurum, igitur futurum est'. Antecedens est determinate verum; ergo et consequens».

⁷⁵ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 31, p. 188: «Item, propositio de futuro, secundum nunc dicta, non asserit aliquid determinate nunc esse, sed fore de re enuntiat, non determinando aliquid esse vel non esse. Igitur sicut propositio de contingenti est nunc determinate vera – quia enuntiat eventum rei determinate, nec tamen determinat nunc aliquid esse vel non esse – sic propositio de futuro erit vera».

of the suppositis. But in the minor premise «future» is predicated of a state of affairs expressing its quality. Because of this in that premise one changes or takes for a *quid* («the / a future») what is actually a *quale* («future⁷⁶»).

About the second artificial objection Scotus says that a future proposition such as «This will be» does not affirm *now* the existence or non-existence of something that is (*This is future*), but it affirms the existence or non-existence of something for the future (*This is future*). Hence, a future proposition is neither true nor false *now*. Surely a merely contingent proposition affirms *now* something determinately, for if I say «This occurs in a contingent manner» it means that the happening of this is contingent, and that it is the case or it is not the case determinately. Based on this – and having in mind, again, that Scotus in *In duos libros Perihermenias* does not show us any concern for his later theory of synchronic contingency, as already noted above –, one can even say that a contingent proposition is determinately true or false⁷⁷. But the temporal difference that is found in a contingent *future* proposition demands another analysis of its truth value.

Scotus considers a final or (3) third objection against his answer to Question 9. If someone says «This will be», this can be paraphrased as «This is future». Because this second proposition is determinately true or false, the first proposition is determinately true or false too⁷⁸. But the inference, so Scotus's reply, is clearly not valid. When one says «This will be», the predicate joint to the subject is understood as united to it for a future

⁷⁶ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 32, pp. 188-189: «Ad primum dicendum quod consequentia deficit penes figuram dictionis, quia commutatur quid in quale; quia sic dicendo 'omne futurum est futurum', hic praedicatur illud quod futurum est; sed hic 'futurum erit' praedicatur esse sub modo de futuro; ideo etc. Unde haec 'futurum est futurum' est de praesenti, sicut haec 'homo est homo'; haec non: 'futurum erit'. Si tamen supponitur quod haec sit vera determinate 'futurum erit', adhuc non sequitur propter hoc quod propositio de futuro contingenti singulari sit determinate vera. Nam si sic arguitur 'omne futurum erit; haec 'tu eris episcopus' est futurum; igitur hoc erit', hic est figura dictionis; quia in maiori fit distributio pro suppositis, quorum quiditatem dicit distributum; sed in minori praedicatur futurum de quodam, ut dicens eius qualitatem, propter quod commutatur quid in quale – sicut hic 'quod scriptum est, scripsit aliquis; falsum scriptum est; igitur falsum scripsit aliquis'. Si autem descendatur sic 'omne futurum erit; hoc est futurum 'tu eris' est futurum»; igitur hoc futurum erit', sequetur conclusio; sed minor implicat falsum». Surely one can make the following reasoning: «Every future will be; «You will be» is a future; therefore, this future will be». In what concerns the form, the conclusion follows. But the minor premise implies something false, for «You will be» is not a future, but rather a proposition about the future.

⁷⁷ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 33, p. 189: «Ad aliud dico quod propositio de futuro non asserit nunc aliquid esse vel non esse de eo quod est, sed pro tempore futuro; ideo nec nunc est determinate vera vel falsa. Sed propositio de contingenti nunc asserit aliquid determinate, quia cum dicitur 'hoc contingenter eveniet', significatur quod eventus eius est contingens, et ita determinate est vel non est; ideo illa de contingenti est determinate vera vel falsa».

⁷⁸ See Ioannes Duns Scotus, *Quaestiones in duos libros Perihermenias* I qq. 7-9, n. 34, p. 189: «Arguitur aliter ad principale: Si dicatur 'hoc erit', idem est dicere 'et hoc est futurum'. Sed secunda propositio est determinate vera vel falsa; igitur est prima».

time. The departure point for a future time is surely the present. This is the reason why when I paraphrase the proposition «This will be» into the proposition «This is future» I understand that the act (or the state of affairs) measured under the future time (This is *future*) is (indeterminately in respect to its existence or non-existence) united to the subject for the present time (This *is* future), which is the departure point of the future under analysis (and as such still unrealized). For this reason one can indeed affirm that «A man will be» and «A man is future» are just equivalent propositions⁷⁹.

But because now it is indeterminate if the future act (or the state of affairs) will have existence, since the time which measures up the act (or the state of affairs) is present, the proposition «This is future» is indeterminately true, and so is the proposition «This will be» too. When one objects that the paraphrase «This is future» is present, implying that it is, therefore, determinately true or false, John Duns Scotus can answer that the paraphrase should not be interpreted as a present tense proposition. In order to be present it would be necessary that the designated act (or the designated state of affairs) would be actually measured up by the present time, and it is not enough that the present time is co-signified as specifying that the act (or the state of affairs) now has a determinate meaning for the future alone. But it is exactly such a specifying co-signification what happens in the proposition «This will be», and precisely because of this the proposition «This is future» should not be understood as a present proposition⁸⁰.

Concluding Remarks

If I may now make the attempt of saying in a nutshell, just as concluding remarks, how a future proposition has existential import or relates semantically to existence, I think that what we learn from this simple analysis can be summarized in the following lines:

(1) Contingent future propositions *have existential import*. The existential import of contingent future propositions depends on the way the thing enunciated exists in its cause at the moment of the enunciation – in the case of contingent propositions, we have to affirm that they enunciate indeterminate existence and are simply indeterminate concerning their meaning or are not more inclined to one or the other side of a given contradiction such as «Peter will be seated and Peter will not be seated»; it is beyond any

⁷⁹ See Ioannes Duns Scotus, *Questiones in duos libros Perihermenias* I qq. 7-9, n. 35, p. 189: «Dico quod sic dicendo 'hoc erit', actus copulatus subiecto intelligitur copulari pro tempore futuro, cuius terminus initialis est praesens; et ideo cum resolvitur 'hoc erit' in 'hoc est futurum', intelligitur actus mensuratus sub tempore futuro copulari subiecto pro tempore praesenti, quod est terminus initialis eiusdem futuri; propter quod idem valent 'homo erit' et 'homo est futurus'».

⁸⁰ See Ioannes Duns Scotus, *Questiones in duos libros Perihermenias* I qq. 7-9, n. 35, pp. 189-190: «Sed quia nunc est indeterminatum an actus futurus esse habebit, cum tempus mensurans ipsum sit praesens, ideo haec 'hoc est futurum' est indeterminate vera, sicut haec 'hoc erit'. Et cum dicitur quod hoc est de praesenti, dico quod hoc non est de praesenti; quia ad hoc quod sit de praesenti, necesse est actum designatum tempore de praesenti mensurari, et non solum consignificative. Sic non accidit in proposito; ideo non est de praesenti».

doubt that there are future propositions that enunciate future existing things that exist differently in their causes – namely in an indeterminate or in a determinate way;

(2) Precisely because the meaning of the proposition is searched in the way things exist now and not indifferently to a given time, we can affirm that, although things exist now indeterminately, the existential import of the proposition has to be determined by the temporal difference that the tensed verb in the proposition is able to put – these two aspects of the semantical analysis of contingent future propositions enunciated «now» are important devices in order to disambiguate propositions with a future-tensed verb or corresponding forms (such as propositions with the predicate « is future »), thus avoiding both diverse ways of interpreting them in terms of determination of meaning *now* and indicating fallacies generated by mistaken accounts of signification. The future-tensed verb is a sign that makes the mind represent future time: future is co-signified as the temporal «dimension» of the determinate realization or the existence of the thing;

(3) Finally – and this is something particular to Scotus's solutions to Questions on Aristotle's *Perihermenias* –, since such propositions have *not only* truth conditions that after analysis reveal that they are indeterminately true or false, *but also* a signification independent of the existence of things enunciated, I think it is right to say that their existential import is preserved by their signification and mode of signifying. Every contingent future proposition keeps a co-signification of the future time that reveals that it has a determinate signification and mode of signification, a signification that expresses determinately that the existence of things applies *in this* and not *in other way*.