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Peter of Spain's Summulae logicales and the theory of supposition

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Keywords: supposition theory, terminist logic, Petrus Hispanus, medieval logic, properties of terms, *suppositio*, *proprietates terminorum*, contemporary interpretations, reference, quantification, inference, conceptual notation, hermeneutics, systematic analysis, historical-descriptive analysis, formalization, formal.

Summary

When we are put in front of the task of studying, explaining and rendering in a modern language an ancient or medieval philosophical doctrine, which enjoyed a long and varied tradition of interpretation, we are forced to address a series of questions and problems which concerns the very core of the history of philosophy. Questions regarding the methods we can use and the conceptual tools we can employ are all legitimate if not necessary. If we ask ourselves, how are we to travel the long distance between us and the object of our inquiry, the answer must not be an immediate one. The most appropriate reaction would be to reflect on the variety of methods and conceptual tools used by the scholarship to explore a particular theoretical object. The medieval theory of supposition makes no exception from this state of affair, but on the contrary, can be considered an illustrious example of the different ways a theory can be understood and rendered throughout the history. Our work entitled "Peter of Spain's Summulae logicales and the theory of supposition" invites to a reflection on the Petrinic supposition theory which tries to address its philosophical, logical and hermeneutical problems and limitations. In an effort to offer an overarching understanding of Peter's theoretical construct, our study proposes a survey on the historical phenomenality of the suppositio concept, that is, the way in which it was understood, conceived and articulated in different stages of its historical evolution. In this way, our work will confront the theory of supposition developed in Summulae logicales with: its distant and proximate source, with the 13th and 14th century tradition of terminist logic and with its post-Fregean interpretations. By doing so, our endeavor does not only offer an historical and descriptive exposition of supposition theory, but tries to make manifest both the doctrinal articulations and the formal mechanics which lay at the basis of supposition theory. This will allow us to open a direct discussion between the medieval theoretical construct of supposition and its modern or contemporary interpretations with the main goal of explaining the nature of Peter of Spain's theory. Our ultimate end is to bridge the gap between two different methodologies of dealing with medieval logical constructs that are present in the current scholarship.

Our main and *general investigation topic* will be some particular theories of supposition that were developed throughout the 13th and 14th century. Our *specific research topic* will be Peter of

Spain's theory of supposition developed throughout his logical work *Tractatus*, which was called afterwards *Summulae logicales*¹.

Regarding the *recent studies* on the theory of supposition, we can state that the field of medieval semantic and logical studies is a relatively new aria of inquiry that has been able to developed in the second part of 20th century with the emergence of new critical text editions. In Formalizing medieval logical theories² Catarina Dutilh Novaes makes a distinction between two types of approaches regarding the study of medieval logical theories. The first, is the historical one which deals with: establishing of critical editions, the paternity and sources of the text, the tradition to which a certain text belongs and the ideas that will be taken over by the those who will follow the author in question. We can say that this kind of approach belongs usually to the historian of medieval philosophy, which, according to the same author, is rather interested in the intellectual universe of the author since it evaluates the studied texts from within without a critical eye³. The second approach is the systematical one⁴, which considers that some theories and ideas developed by medieval authors can successfully be applied to some particular problems from contemporary philosophy of language and logic, or - we can add - some medieval theories or ideas could be successfully transposed through the conceptual tools of the contemporary philosophy of language and logic. Both cases of the systematic approach will deal with a critical assessment of the medieval theories and ideas, but which have to address the problem of anachronism⁵. The aforementioned distinction can successfully be applied both to the way in which the contemporary exegesis relates in general to the topic of supposition or to the 13th century logic, and to the specific topic of Peter of Spain's theory of supposition.

Consequently, regarding our specific topic of study, on one part, we can identify the historical approach. In 1944 Joseph Patrick Mullally⁶ offers a first, although uncomplete, modern edition and translation of *Summulae logicales* text based on some printed editions, thus on some late textual witnesses. This particular edition is considered by L. M. de Rijk an uncritical one, since

¹ In our work we will use the two names of Peter of Spain's work interchangeably or with an appropriate abbreviation *SL*. = DE RIJK (ed.), *Peter of Spain (Petrus Hispanus Portugalensis): Tractatus. Called afterwards Summule logicales. First critical edition from the manuscripts with an Introduction by L.M. de Rijk.*, (1972).

 $^{^2}$ DUTILH, Formalizing medieval logical theories (2007a), p. 9.

³ See DUTILH (2007a), p. 10.

⁴ See DUTILH (2007a), p. 9

⁵ See idem.

⁶ MULLALLY (ed., transl.), *The "Summulae Logicales" of Peter of Spain* (1945).

Peter's text is often interpolated with texts of different commentators⁷. In 1947 Józef Maria Bocheński publishes a complete edition of Peter's summaries of logic based on the codex Vatican Library, Reg. Lat. 1205. Even this edition is considered by De Rijk as impracticable inasmuch as is it abounds in errors⁸. In 1972 L. M. de Rijk finally offers the first critical edition of Peter of Spain's *Tractatus* or *Summulae logicales*. After the first critical edition, translations in modern languages like English, Spanish, Italian and German began to appear naturally⁹.

Besides the aspects related to critical editions, translations and expositive descriptions, in the historical approach we can find discursion on: de identity of Peter of Spain, the authorship and the date of composition of *Tractatus*, its sources and other related topics. For the first, we can mention the existence of three main theses regarding the authorship of *Tractatus* and Peter of Spain's identity, as discussed by L. M. de Rijk, Angel D'Ors, Simon Tugwell, José Meirinhos, Joke Spruyt and others¹⁰. The first is called the *Byzantine thesis* which has its origin in Elias Ehinger¹¹ who affirms that *Tractatus* is a translation from Greek into Latin of a treatises attributed to Michael

⁷ Cf. *SL.*, p. C.

⁸ Cf. SL., p. C; BOCHENSKI (ed.), Petri Hispani Summulae Logicales, quas a manu scripto Reg. Lat. 1205 edidit Iuri M. Bochenski (1947).

⁹ BEUCHOT (transl.), Pedro Hispano, (Petrus Hispanus Portugalensis), *Tractatus, llamados después Summule logicales, primera edición crítica basada en los manuscritos e introducción de L.M. de Rijk* (1986); DINNEN (transl.), *Peter of Spain, Language in Dispute. An English Translation of Peter of Spain's Tractatus Called Afterwards Summulae Logicales on the basis of the Critical Edition Established by L.M. De Rijk* (1990); PONZIO (transl.), *Pietro Ispano, Trattati di lógica. Summule logicales* (2004); DEGEN-PABST (übers.), *Summulae Logicales – Logische Abhandlungen*, Übersetzt und mit einer Einführung versehen, (2006); CNP.

¹⁰ DE RIJK, SL; "On the genuine text of Peter of Spain's Summule Logicales" in Vivarium vol. 6 (1968) p. 1-34; "On the Genuine Text of Peter of Spain's Summule logicales II Simon of Faversham (+ 1306) as a Commentator of the Tracts I-V of the Summule" in Vivarium vol. 6 (1968), p. 69-101; "On the Genuine Text of Peter of Spain's Summule logicales. III. Two Redactions of a Commentary upon the Summule by Robertus Anglicus" in Vivarium vol. 7 (1969); p. 8-61; "On the genuine text of Peter of Spain's Summule logicales IV", in Vivarium vol. 7 (1969) p. 120-162; D'ORS, "Petrus Hispanus O.P., auctor summularum" in Vivarium vol. 35 (1997), p. 21-71; "Petrus Hispanus O. P., Auctor Summularum (II): further documents and problems" in Vivarium vol. 39 (2001), p. 209-254; "Petrus Hispanus O.P., Auctor Summularum (III). "Petrus Alfonsi" or "Petrus Ferrandi"?" in Vivarium vol. 41 (2003), p. 249-303; TUGWELL, "Petrus Hispanus: comments on some proposed identifications" in Vivarium vol. 37 (1999), p. 103-113; "Auctor "Summularum", Petrus Hispanus OP Stellensis?" in Archivum Fratrum Praedicatorum vol. 76 (2006), p. 103-115; MEIRINHOS, "Pedro Hispano Portugalense? Elementos para una diferenciação de autores" in Revista española de filosofia medieval vol. 3 (1996) p. 51-76; "Giovanni XXI" in Enciclopedia dei papi (2021); "Pedro Hispano e a lógica Pedro" in Calafate (org.): História do pensamento filosófico português (2002), p. 331-375; Bibliotheca manuscripta Petri Hispani (2011), "Petrus Hispanus' Attributed Works: Searching for New Interpretations" in Enrahonar, Supplement Issue (2018), p. 355-363; SPRUYT, "Peter of Spain" in The Stanford Encyclopedia of Philosophy (Winter 2019 Edition), Edward N. Zalta (ed.), URL = <u>https://plato.stanford.edu/archives/win2019/entries/peter-spain/;</u> The introductory studies of: CNP, PONZIO (2010); DINNEEN (1990) and DEGEN-PABST (2006); LONGEWAY, "Peter of Spain (Petrus Hispanus) (circa 1205-1277)" in Medieval Philosophers (DLB) (1992), p. 315-325. ¹¹ Cf. *SL*, p. LXI.

Psellos. The second thesis, *the Papalist one,* is identifying Peter of Spain, the author of *Tractatus*, with Pope John XXI. The third thesis, the *Dominican* one, identifies Peter of Spain the author of *Tractatus* with a member of the Dominican order. This particular attribution is made with different degrees of precision leading to a threefold division of the Dominican thesis according to its generality. This debate surrounding the authorship of *Tractatus*, is supplement by a research directed towards the Petrine Corpus¹². On the basis of the different sets of works attributed to Peter of Spain, José Meirinhos established different personalities which bared this name¹³.

Regarding the discussion on the possible sources of supposition theory, De Rijk identifies two traditions, one of commentaries to Aristotle's *Sophistical refutations*, and the other of commentaries to the 6th century grammar of Priscian¹⁴. But to these two sources could be added a third, as Ebbesen suggests, the theological one which has its sources in Gilbertus of Poitiers¹⁵. As Luisa Valente and Alain de Libera¹⁶ suggest, a number of authors and texts from the Porretan school propose a program of studying divine predication with a similar conceptual framework as that found in the logical tradition after the second half of the 12th century.

Up to this point we made a short survey on what we could call the historical-descriptive approach. In what follows we will try to sketch the second approach that could be identified in the literature, namely the systematic one. A general characteristic of this particular line of thinking is that it identifies the property of supposition with a certain element or theory of contemporary philosophy of language or logic. As Catarina Dutilh Novaes shows us, Thomas Peter Gech in *Reference and Generality: An examination of Some Medieval and Modern Theories* was probably the first who initiated this tradition, by identifying the medieval property of supposition with the property of reference¹⁷. Since then, many researchers have subscribed, partially or not and

¹² MEIRINHOS (2011).

¹³ See for example MEIRINHOS (2018).

¹⁴ See DUTILH, "Supposition Theory" in *Encyclopedia of medieval philosophy. Philosophy between 500 and 1500* (2011b), p. 1231; RIJK, *Logica modernorum: A contribution to the history of early terminist logic. Bd. 1: On the 12th century theories of fallacy. Bd. 2: The origin and early development of the theory of supposition*, vol. I and II, (1962-1967).

¹⁵ Cf. DUTILH (2011b), p. 1231.

¹⁶ See EBBESEN (2013); see also VALENTE, Logique et théologie: les écoles parisiennes entre 1150 et 1220 (2008); "Supposition Theory and Porretan Theology: Summa Zwettlensis and Dialogus Ratii et Everardi" in Vivarium vol. 51 (2013), p. 119-144. JOLIVET, DE LIBERA (eds), Gilbert de Poitiers et ses contemporains: aux origines de la logica modernorum. Actes du Septième Symposium Europeen d'Histoire de la Logique et de la Semantique Medievales ; Centre d'Études Supérieures de Civilisatione Médiévale de Poitiers ; Poitiers 17 - 22 juin 1985 (1987)

¹⁷ see DUTILH (2007a), p. 11; GEACH, *Reference and generality. An examination of some medieval and modern theories* (1962), p 84.

explicitly or implicitly, to his, let's call it, "*reference*" thesis. Of those, we can list Paul Vincent Spade¹⁸, Peter King¹⁹, Claude Panaccio²⁰, Gyula Klima²¹ and many more. This interpretation has been contested on at least two levels. At the level of the theoretical content, Dutilh²² argues for an understanding of supposition as a theory of propositional meaning in the particular sense of a theory of computational hermeneutics, especially since supposition theory is put in direct connection with the tradition of commentaries on Aristotle's *Sophistical Refutations*. At the second level, the critique of the reference interpretation is made in respect to the etymology, signification and function of the terms used by Latins in the making of supposition theory. As Alain de Libera²³ points out, the *supposition*-terms cannot be equated with reference, denotation, signification or other post-Fregean terms. But the systematic approach does not limit itself to the identification of supposition theory with the theory of reference, although is one of the most widespread option endorsed by the contemporary exegetes. In fact, we can state that the theory of supposition was

¹⁸ See for example: SPADE, *Thoughts, Words and Things: An introduction to Late medieaeval logic and semantic theory* (2002), p. 245: "To a first (but pretty good) approximation, supposition in this first part of the theory is what nowadays we call 'reference."; "Ockham's rule of supposition: two conflicts in his theory" in *Vivarium* vol. 12 (1974), p. 63: "William of Sherwood enunciates the following principle 'Subjects are of such sorts as their predicates may have allowed'. That is, the kind of supposition or refence a term has in a given sentence depends at least in part on what kind of a term the predicate is."

¹⁹ For example, BURIDAN, *Jean Buridan's Logic. The Treatise on Supposition, The Treatise on Consequences. A Translation from the Latin with a Philosophical Introduction*, translation by Peter King (1985), p. 35: "The theory of supposition should not be assimilated to formal logic, but to the philosophy of logic; it is the mediaeval theory of reference", p. 36: "Supposition theory is a theory of reference. It is a unified theory, which has as its goal to specify what a term is used to talk about in a given sentence".

²⁰ See for example PANACCIO, PERINI, "Guillaume d'Ockham et la suppositio materialis" in *Vivarium* vol. 42 (2004), p. 202 : "La théorie de façon générale, essaie de thématiser dans un jeu complexe de distinct règles les variations de la fonction référentielle d'un terme pris en contexte, par rapport à ce que l'on appellerait aujourd'hui son extension, c'est-à-dire l'ensemble de toutes les choses présentes, passées, même seulement possibles auxquelles le terme s'applique."

²¹ For example, see KLIMA, "Existence and Reference in Medieval Logic" in HIEKE, MORSCHER (eds.), *New Essays in Free Logic* (2001), p. 197: "In this paper I am going to give a brief, primarily systematic (as opposed to primarily historical) account of how it was possible for medieval logicians to maintain Aristotle's theory of the four categoricals and to dispense with these existential assumptions in the framework of their theory of reference, the theory of supposition."

²² Cf. DUTILH (2007a), p. 30.

²³ Cf. DE LIBERA, "Supposition" in CASSIN (ed.), *Dictionary of Untranslatables. A Philosophical Lexicon* (2014), pp. 1097-1102. Almost the same point is argued by Bocheński, see BOCHEŃSKI, *A history of formal logic* (1961), on the basis of the differences in the language employed by the theory of supposition and the theory of reference.

considered to be²⁴: a theory of reference²⁵, a theory related to conceptual notation²⁶, a hermeneutical theory or a theory of propositional meaning²⁷, a theory of inference²⁸ and a theory of quantification²⁹. Thus, the answer offered by the scholarship for the question "what is the theory of supposition?" varies greatly and a response regarding any particular theory of supposition must critically take into account all the options available today. Our endeavor of analyzing Peter of Spain's theory of supposition in relation to those particular modern interpretations will be even more justified, since a great part of them are taking into account more mature theories of supposition as those of William Ockham and John Buridan, which are more prone to such treatments.

Regarding our own academic milieu, that is, the Romanian scholarship, we can state that there is only a small contribution to this domain of research, and even this contribution mostly belongs only to the historical approach. Although we do not have yet a translation of *Tractatus* in Romanian language – an objective that we will try to accomplish in the appendix – we can find in Anton Dumitriu's *History of logic*³⁰ a mere expositive description of Peter of Spain's theory of supposition. Also, in another handbook of history, but this time of philosophy of language, Eugen

²⁴ See ILE, "The Formality of Peter of Spain's Theory of Supposition" in *Studia Universitatis Babes-Bolyai-Philosophia* 63 (3), (2018), p. 12, for a similar list of interpretations.

²⁵ For the interpretation of the theory of supposition as a theory of reference, see for example: GEACH (1962), SPADE (2002), (1974); PANACCIO, PERINI (2004), KLIMA (2001).

²⁶ For the interpretation of the theory of supposition as a theory of conceptual notation, see: PERREIAH, "Approaches to supposition theory" in *The New Scholasticism*, XLV, 3 (1971), p. 381-408; "Supposition theory: A new approach" in *The New Scholasticism*, LX, 2 (1986), p. 213-231.

²⁷ For the specific interpretation of supposition theory as a theory of computational or algorithmic hermeneutics or a theory of propositional meaning, see: DUTILH (2007a); DUTILH, "Theory of Supposition vs. Theory of Fallacies in Ockham" in *Vivarium*, Vol. 45, No. 2/3 (2007), pp. 343-359. DUTILH, "Ockham's Supposition Theory as Formal Semantics" in KANN, LOEWE, RODE, UCKELMAN (eds.) *Modern views of medieval logic* (2018), p. 85-110.

²⁸ For the interpretation of the theory of supposition as a theory of inference, see for example: KARGER, "Modes of personal supposition: the purpose and usefulness of the doctrine within Ockham's logic" in *Franciscan Studies*, Vol. 44, *William of Ockham (1285-1347) Commemorative Issue* Part I (1984), pp. 87-106; "Consequences et inconsequences de la supposition vide dans la logique d'Ockham" in *Vivarium*, Vol. 16, No. 1 (1978), pp. 46-55; MATTHEWS, "A note on Ockham's theory of the modes of common personal supposition" in *Franciscan Studies*, Vol. 44, *William of Ockham (1285-1347) Commemorative Issue*, Part I (1984), pp. 81-86.

²⁹ For the interpretation of the theory of supposition a theory of quantification, see for example: BÖHNER, *Medieval logic. An Outline of its Development from 1250 to 1400* (1952); "Ockham's theory of supposition and the notion of truth" in *Franciscan Studies* Ser. NS, vol. 6 (1946), pp. 261-292; PRIEST, READ, "The formalization of Ockham's theory of supposition" in *Mind* vol. 86 (1977) pp. 109-113; PRIEST, READ, "Merely Confused Supposition: A Theoretical Advance or a Mere Confusion?" in *Franciscan Studies*, Volume 40, 1980, pp. 265-297; PARSONS, "Supposition as Quantification versus Supposition as Global Quantificational Effect" in *Topoi* 16 (1997), pp. 41–63. ³⁰ DUMITRIU, *History of Logic* (1977) translated in English from Dumitriu, *Istoria logicii* (1969).

Coşeriu³¹ offers an exposition of some general aspects of supposition theory from a linguistic point of view. Another worthy mention is Valeriu Streinu's article *Teoria supoziției*³², which delivers a general history of the supposition theory and an exposition of the way this particular property of terms works. A more recent intervention connected to our subject is that of Alexander Baumgarten. In *Le lexique philosophique roumain*. *L'exemple de la suppositio*³³ he puts into question the way in which the terms involved in the vocabulary of *suppositio* can be translated, by qualifying them in all the three registers of their origin: theology, logic and grammar. Opting for the triplet obtained from the linguistic calque: *supoziție, suponent* and *supozit*, the concept of *suppositio* receives a different translation from that given by Dumitriu, that is, of '*supleanță'*, term borrowed from Jacques Maritain's French term '*suppléance*'.

Seeing the rich scholarship that has developed in two different branches of reflecting upon the theory of supposition, our main objective will be to explore both of them in relation to Peter of Spain's logic, in order to clarify the status of his theory. For that main purpose we propose de following research objectives: (1.) to offer a general description of Peter of Spain logic by integrating it in the 13th century context; (2.) to analyze Peter of Spain's theory of supposition according to its own text and to make explicit its main points of articulation; (3.) to analyze Peter of Spain's logic as a whole and its particular relation with the theory of supposition; (4.) to establish differences and similarities with other 13th and 14th century supposition theories, in order to formulate a better image of the development of this theory in the medieval period; (5.) to answer the question "what is Peter of Spain supposition theory according to historical approach?"; (6.) to expose each type of contemporary interpretation on supposition theory; (7.) to critical asses every identified contemporary type of explanation in order to establish their legitimacy; (8.) to apply each particular type of contemporary interpretation to Peter of Spain's supposition theory; (9.) to answer to the question "what is Peter of Spain supposition theory according to the systematic approach?"; (10.) to offer an explanation for the general mechanics of contemporary interpretations on the theory of supposition.

Seeing that our research is mainly oriented towards a specific text – Peters of Spain's *Tractatus* – on a specific problem – the relation of supposition theory to: its sources, Peter of

³¹ COȘERIU, Istoria Filozofiei Limbajului (2011).

³² STREINU, "Teoria supoziției" in *Probleme de logică* vol 5 (1973), pp. 111-131.

³³ Cf. BAUMGARTEN, "Le lexique philosophique roumain. L'exemple de la suppositio" in CASSIN (ed.), *Philosopher en langues, Les intraduisibles en traduction* (2014), pp. 185-199.

Spain's logic, other 13th and 14th century supposition theories and their contemporary interpretations – we can state that the *character of our research* is an applied one. To the extend the theory can address some fundamental problems, like the way in which the language functions in relation with the world and the ontological consequences of this functioning model, our *research can be considered as fundamental*.

As any research, our endeavor is built on some *theoretical hypothesis* that will be confirmed or infirmed throughout our study. Our hypotheses are: (t1.) Peter of Spain develops in *Tractatus* an unitary and coherent consideration of supposition that allows us to qualify it as a theory, distinguishable from other 13th and 14th century supposition doctrines; (t2.) there is a fundamental difference between medieval logic and contemporary logic and language theories; (t3.) although there are principal differences between medieval and contemporary logic and language theories we can identify principle resemblances, (t4.) supposition theory is not a theory of: inference, reference, quantification, conceptual notation or hermeneutics/propositional meaning, but a specific theory that has many stages of development and that differs from its modern interpretations.

By taking into account both the contemporary studies and I. M. Bochenski's idea that between medieval and contemporary logic, that has been passed through a stage of mathematization, there is a fundamental difference, that is, the first expresses with a natural, common and intuitive language what the second expresses in a formal way, through the specialized signs of an artificial language³⁴, we can arrive at our main work hypothesis.

Our main work hypothesis is that a better understanding of Peter of Spain's theory of supposition can be attained by showing its differences in relation to other 13th and 14th century supposition theories and their contemporary interpretation. These differences will show that we cannot put an equivalence sign between (a.) the theories of supposition articulated by different medieval logicians and between (b.) specific theories of supposition and contemporary theories of language and logic according to which the formers are interpreted. Peter of Spain's theory of supposition is not a theory of signification, inference, reference, conceptual notation, hermeneutics

³⁴ See BOCHEŃSKI (1961), p. 173: "The most notable difference between the doctrine of supposition and the corresponding modern theories lies in the fact that while contemporary logic as far as possible has one sign for one function, e.g. a sign for a word, another for the word's name, one for the word in personal, another for it in simple supposition, the Scholastics took equiform signs and determine their functions by establishing their supposition. And this brings us back to the fundamental difference already remarked on between the two forms of formal logic; scholastic logic dealt with ordinary language, contemporary logic develops an artificial one."

or quantification, but a consideration upon a particular property of terms. This property must be understood, on the one way, in the proper dynamic of the Latin medieval language and on the other, in the fixed framework of medieval logic.

Thus, our thesis is that the answer to the question "what is Peter of Spain's theory of supposition?" will be acquired only if we take into account two different aspects:

- The medieval property of supposition and implicitly Peter of Spain's version is a theory that has developed through different stages, to the extent that we can speak about a tendency towards formalization, that is, a tendency of objectivization and terminological maturity or rigor of the logical discourse and tools. In this particular sense, Bocheński's thesis for a medieval logic expressed in a pure natural and commune language is partially infirmed.
- 2. The medieval supposition theory has a partial intuitive sense directly connected to the way in which *suppositio*-terms are functioning in medieval Latin on the basis of their original meaning. Consequently, in this particular sense Bocheński's thesis still remains.

Our *thesis*, the existence in Peter of Spain's *Tractatus* of a supposition theory that can be expressed and understood in its own terms, without being equated with its contemporary interpretations or with other medieval supposition-theory constructs, and which suffers a tendency of formalization through terminological development, but which presents in the same time an intuitive content, will be argued on the basis of a specific notion of *formality*. In our view, the concept of formality is the key notion that will help us to observe the way in which supposition theory has evolved from its beginning until our own time. Although our key concept remains to be qualified in our study, it will be responsible for showing the structural differences between Peter of Spain's theory of supposition and other 13th and 14th century theories and their modern interpretations. In this way, we will show that the degree of formalism involved in Peter of Spain's theory is much lower than that employed in other medieval and contemporary theoretical articulations regarding supposition.

At the basis of our research stands a *methodology* inspired in great part by Catarina Dutilh Novaes distinction between two approaches of dealing with medieval logical theories, that is, the historical approach and the systematic approach³⁵. Since the first one could be accused of not relating supposition theory to contemporary logic or language theories and thus not making it more up-to-date or relevant to our own problems, and the second could be accused of anachronism, in

³⁵ See DUTILH (2007a), p. 9

as much as its action of interpreting medieval supposition theory produces a change in the degree of formalism and thus a distortion of the original doctrine, we will try to overpass those two problems by taking a middle ground. Based on the synthesis between the two aforementioned approaches, by employing content and terminological analysis we will establish the status of Peter of Spain's supposition theory in relation to: its sources, the whole logic from *Tractatus* and the 13th and 14th century terminist doctrines. Through historical and comparative analysis with Peter's proximate precursors and posteriority we will be able to assess the evolution of supposition theory and its tendency towards formality. Through critical and comparative analysis, we will be able to show the difference in formality between Peter of Spain's doctrine of *suppositio* and the contemporary interpretations.

In order to address the problems that are insufficiently treated by the current scholarship, with the purpose of defending our main thesis according to the aforementioned methodology, we propose an argumentation unfolded in three main sections: *Section 1: The historical and doctrinal analysis*, *Section 2: The systematic analysis* and *Section 3: Assessment of Peter of Spain's theory of supposition*.

The first section of our work, as the names suggests, will make a historical and doctrinal analysis of theory of supposition. Its main purpose is to establish an understanding of the theory of supposition void of any contemporary theoretical presuppositions, or, in another words, to understand the theory of supposition within its own historical and contextual framework. To attain this goal, a fist chapter will deal with problems related to the author of *Tractatus*, to the corpus of texts attributed to him and his general context. A second chapter will make a doctrinal analysis of the twelve tracts comprised in *SL*. The third and final chapter of the first section will discuss the relation between medieval logic and the theory of supposition.

The first part of the first chapter will have as main topic the problem of authorship. On the basis of the scholarship, we will show how the author of *Tractatus* was identified first with a Byzantine scholar, then with Pope John XXI, and finally with a series of Dominican friars. The works of L. M. de Rijk, Angel D'Ors and Simon Tugwell bare witness for the history of those identifications.

In the second part of the first chapter, the works attributed to Peter of Spain will be discussed. In a first step, we will show José Meirinhos' contribution to the authorship debate, by his studies of the Petrine Corpus of texts, as reflected in his catalog *Bibliotheca Manuscripta Petri*

Hispani and other works. In a second step, a short discussion on the debate surrounding the place and date of composition of *Tractatus* will be made.

The third part of the first chapter puts *Tractatus* into perspective. In a first sub-section an analysis of the title, genre, structure, content and doctrinal character is made. The following two sub-sections try to explain the diffusion and reception of this work starting with the Middle Ages and arriving at the modern critical editions and translations.

The second chapter offers an explanatory exposition of the twelve tracts of logic contained by Peter's work. Each part of this chapter will deal with a specific tract while trying to show the unity of the entire work of logic and the central role the theory of supposition plays in it.

The third and final chapter of the first section will have as purpose the examination of the relation between the theory of supposition and Medieval logic, in an attempt to sketch the historical evolution of the *suppositio* conceptual framework. First, by taking an important number of studies into account, we will examine the debate regarding the origins of the supposition theory. The three already existing theses (logical, grammatical and theological) will be discussed. To those, a fourth one will be considered, usually neglected by the current scholarship, that places the origin of supposition in the proximity of the Roman law and the regimented version of the common Latin language that it uses. Secondly, in addition to Peter of Spain doctrine, the third chapter will analyze other four versions of supposition theory that pertain to the Oxford and Parisian traditions. The first two sub-parts are preoccupied with the theories of supposition developed by Lambertus of Lagny in *Logica* or *Summa Lamberti* and by William of Sherwood in *Introductiones in Logicam*, both being representative for the 13th century. The last two will examine two version of supposition from the 14th century within the nominalist tradition: Buridan's version from *Summulae de dialectica* and Ockham's version from *Summa logicae*.

The second section is dedicated to the systematic analysis of the supposition theory. It has a threefold purpose according to the three chapters it contains. The first tries to study the concept of 'formality' and to obtain the necessary tools for an assessment of the supposition theory according to the systematic line of thinking. The second is preoccupied with the generic formality of the medieval logic and Peter of Spain's theory of supposition. The third deals with the different interpretations of supposition theory traceable in the modern scholarship.

The first chapter of the second section will be focused on the notion of 'formality'. Resorting to the works of John Gordon MacFarlane, Sven Ove Hansson, Catarina Dutilh Novaes and others³⁶, in a first step, the origins of the notion of 'formality' will be discussed. Then, relying on the last two aforementioned authors, two functioning models of understanding how formalization works will be discussed. Finally, the last sub-chapter will show the different types of formality identified by Dutilh and MacFarlane and the way in which both can be reduced to a series of theoretical characteristics than can be more easily applied to our object of study.

The second chapter of the second section will be an inquiry of the formal elements that can be traced, at a generic level, in the medieval theories of supposition. In a first sub-chapter, we will discuss how the scholarship understands the relation between medieval and contemporary logic in terms of formality. Starting with Father Philotheus Boehner and ending with Laurent Cesalli and Terence Parsons³⁷, different positions will be taken into account, in order to argue for a double 'nature' of medieval logic that includes both formal and non-formal characteristics. The second sub-chapter is an attempt of putting Peter of Spain's theory of supposition into a new perspective, in order to highlight its formal elements. First, a syntactical formality will be argued on the basis of his *scientia sermocinalis* that enables him a certain type of language analysis. Secondly, the entire theory of supposition as proposed in *SL* will be analyzed and described as a series of semantical and syntactical conditions. This endeavor will enable us to evaluate its generic formality. In order to better understand the degree of formality implied by his theory, in the third sub-chapter a comparative analysis with William of Ockham's version will be done. By showing the way in which the supposition theory applies to the simple categorical propositional forms in these two cases, a better understanding of their formality will be obtained.

The third and final chapter of second section is dedicated to the contemporary interpretations of supposition theories. Each sub-chapter will be preoccupied with a specific type of interpretation and its corresponding theoretical problems. Thus, first, the interpretation of supposition as a theory of reference will be analyzed, according to the tradition initiated by Peter Geach. Secondly, we will discuss the debate surrounding the interpretation of supposition as a quantification theory, by appealing to a series of works written by Philotheus Boehner, Gareth B. Matthews, John J. Swiniarski and others. Thirdly, we will discuss Catarina Dutilh Novae's

³⁶ For example, MACFARLANE, *What does it mean to say that logic is formal?* (2000); DUTILH (2007a); (2007b); DUTILH, "The Different Ways in which Logic is (said to be) formal" in *History and Philosophy of Logic*, 32:4 (2011a); HANSSON, "Formalization in Philosophy" in *The Bulletin of Symbolic Logic*, Vol. 6, No. 2 (2000).

³⁷ BÖHNER (1952); CESALLI, "What is Medieval Logic After All? Towards a Scientific Use of Natural Language" in *Bulletin de Philosophie Médiévale* (2010); PARSONS, *Articulating medieval logic* (2014).

interpretation of supposition as a theory of propositional meaning or computational hermeneutics. In a fourth sub-chapter we will discuss the thesis according to which the theory of supposition is considered to be a theory of inference, as has been proposed by Elizabeth Karger. The last subchapter will analyze the interpretation of the theory of supposition as a theory of conceptual notation, position prosed and defended by Alan R. Perreiah.

The *third and final section* of our work tries to combine the previous two sections in an applied assessment of Peter of Spain's theory of supposition. The purpose of this section is to offer a better understanding of the nature, purpose and status of Peter's theoretical construct. This will be done, one the one hand, with the aid of doctrinal knowledge obtained from the historical and doctrinal analysis and, on the other, with the aid of the formal tools and contemporary interpretative devices explored in the systematic analysis.

In a first chapter, a new analysis of the Peter's account on supposition will be made. As a first step, we will try to address the problem of the multiplicity of meaning of the *suppositio*-terms in *SL*, in relation with their use in both the old and the terminist logic. As a second step, our work will try to understand what supposition theory really is, by connecting it with three different portions of Peter's logic: the theory of signification, the theory of fallacies and the theory of places. By doing this, we will see to what extent the problems already identified in Peter's supposition theory can be solved.

The second chapter of the third section tries to address the problem of Peter's ontological commitment. In this short part we will discuss the doctrinal elements which will allow us to establish a certain doctrinal orientation towards realism or conceptualism.

The third and last chapter of our work will be concerned with the specific formality of Peter of Spain's supposition theory and the possibility of understanding it in the conceptual frameworks developed by the contemporary scholarship. The first sub-chapter will try to determine the differences in formality within the cluster formed by the 13th century authors, though a comparative analysis of the supposition theories articulated by Peter of Spain, Lambert and Sherwood. The second sub-chapter will argue for a specific formality of Peter's theory. It will try to established the degree in which the types of formality identified in the second section can be applied to Peter of Spain's supposition theory; this step will help us in the final endeavor of our work. In the last sub-chapter we will assess how the contemporary solutions regarding the understanding of supposition theory can be applied to Peter's case. Thus, we will test if Peter's supposition theory

can be understood as a theory of reference, quantification, computational hermeneutics, inference and conceptual notation, as the scholarship suggests.

During the three sections of our work, we tried to offer a new understanding of Peter of Spain's theory of supposition, if not of supposition in general, by employing a methodology which had as purpose the bridging of the gap between the two traditions of relating to Medieval logic doctrines: the historical and systematical one. The necessity of our study was founded on status of the contemporary scholarship. In general, *suppositio* was considered either a self-explanatory concept able to be grasped through the understanding of the medieval logical doctrines and their historical framework, or was considered to be similar to a specific theory traceable in the post-Fregean philosophy of language and logic: reference, quantification, inference, computational hermeneutics/theory of propositional meaning or conceptual notation. The variety of sources for supposition theory in the Middle Ages, the authorial and doctrinal particularities of the terminist logicians, the particularity of Peter of Spain's doctrine and the lack of extensive studies on it, the variety of answers offered by the modern literature regarding the nature of supposition and the general disagreement in the scholarship regarding its status, made us reconsider both, the solutions offered thus far and the methodologies of approaching this subject.

Our main task was to clarify the concept of supposition by exploring the already existing explanations. During this endeavor, we tried to propose possible answers to our main research question related to the nature and status of supposition theory, that is "what really is the theory of supposition?", both in the Middle Ages and in the specific case of Peter of Spain's *Summaries of logic*. Often enough, we were able to offer negative answers and thus to show what the theory of supposition is not. However, the thesis that we tried to demonstrate during the whole process was that Peter of Spain's supposition theory can be better understood in its own terms, without being equated with its contemporary interpretations or with other medieval theoretical constructs; any such equation will generate a series of doctrinal inadvertencies that can be highlighted through the notion of *formality*. Such an approach was possible due to the fact that we have subscribed to an intermediate position between ThM11 and ThM12, according to which, medieval logic, and consequently Peter of Spain's supposition theory, does not have the formal characteristics of post-Fregean theories of language and logic, but has a tendency, conditioned by the Latin language, towards them.

In conclusion, at the end of our study we asked: how the supposition theory might be understood taking into account the whole analysis that we made? We thought that a proper answer must be offer according to the historical evolution of supposition theory tracked by the focal lens of the 'formality' concept.

First of all, we cannot speak about a medieval supposition theory, but about a variety of theoretical constructs that share common origins and purposes, despite their doctrinal differences. We may say that the story of the evolution of the suppositio concept might start with the common, intuitive and physical relation of substitution expressed by the common language. Then, this physical relation was regimented within the juridical framework of the Roman Law. Further, the concept of suppositio has suffered a process of abstraction in such a way that its relation did not comprise only physical objects. The grammatical tradition started by Priscian, at its very beginnings, considered it in such a way that the suppositing word will stand for or replace the subject or subject matter of the proposition. The logical tradition considered supposition that which is subordinated, the individual, or the substance. The Porretan tradition considered supposition the substrate which is capable to be the bearer of form. In the proximity of the arrival of terminist logic, all these particular acceptances were contaminated, in a such a way that the logical, grammatical and theological tradition presupposed the overlapping between the concepts of substance, subsistence, subject, subordination and supposition. This made suppositio a concept with logical, grammatical and ontological implications. The advent of the terminist logic marked the apparition of a formal apparatus which integrated the notion of supposition in a system of classifications and definitions which had a purpose inherited from the grammatical, theological and especially logical tradition. We can state that its purpose was that of clarifying the entity for which a term stands based on the types of terms and the propositional context. Even within the terminist tradition we can speak about an evolution of the supposition theory and a refinement of the logical tools used in studying it. The 13th century had a more realist-oriented account, although in the case of Sherwood and Lambert we can speak about a conceptualist position. In the 14th century we can find a fully developed nominalist position which integrated the mental language into the mechanics of supposition. In the 13th century doctrines, the simple supposition is primary conceived as the property of a term to be taken for its signified form or for its objects contained under that form but without having a determinate relation to them. The doctrine of SL, contrasts this position, with a strong realism regarding the existence of universals. The confused mobile

supposition is conceived as a property marked by a distributive sign; it takes place when the term stands for each of its individuals or bearers of form contained under the term or under the form of the suppositing term. The way this descending takes place is not fully and schematically specified, especially in Peter's case. The 14th century doctrines were more rigorous articulated with a focus on the connection between the property of a term to stand for something and the fact that the thing(s) for which the terms stand verifies or makes the proposition true. Although this connection with the truth value of the proposition was stated in the cases of Sherwood and Lambert, in Peter's case it seems to be rejected. In the 14th century, much more attention was given to the role of the logician in establishing the type of supposition that a term can have and on the conditions under which each mode of supposition is defined. They conceive what the 13th century logicians called 'suppositio simplex', as a property according to which a term stands for a concept or notion of the soul, void of any hard ontological commitment. Determine supposition, merely confused supposition and confused supposition were explained by both ascending and descending inferences that were made: disjunctively, with a disjunctive extreme or conjunctively, fact that enables us to speak about a schematic formality. Supplemented by much more rigorous rules of distribution, the three aforementioned types of supposition are systematically explained through types of possible inferences from the original proposition that contains the suppositing term, to a proposition or concatenation of propositions where the suppositing term is replace by its inferiors, and from those, back to the original one. Generally speaking, we can say that, starting with 14th century, the supposition was defined on more syntactical or formal grounds that in the previous century.

This specific timeline of '*suppositio*' makes us believe that the concept suffered a process of abstraction through its development. Its degree of formality grows exponentially from a concept expressed in a natural language which implies a relation of substitution between physical object to a concept integrated in a terminist theory and developed within a science of language, which implies a relation between a term and a type of entity mediated or not through the realm of mental language. Made this way, 'suppositio' becomes regimented and formalized according to the requirements of medieval logic and its semi-formal language. Rules, definitions and classification are offered in order the explain the mechanics of supposition. What this theory succeeds to do, is to offer the necessary tools for analyzing the relation between language and the different domains of reality through the study of terms placed in propositional context. What Peter of Spain's theory accomplishes, is to offer the necessary tools, although often in an inconvenient manner, for analyzing the relation between language and the extra-mental and extra-linguistic world, through the study of terms placed in propositional contexts. The supposition theory tells us for what kind of entity a term can stand in a particular propositional context. Understood as such, supposition theory itself may be considered a formalization, that is, an abstract, schematic or idealized understanding of the relation between language and the different ontological domains, or, more specifically, between terms and their generic object(s). Surely, this formalization is made according to the formal tools of the 13th and 14th century and is rendered in a Latin language regimented by logical and grammatical notions and not in a symbolic manner.

Secondly, supposition theory, in general, and Peter of Spain's version, in particular, must not be understood as a theory of: reference, inference, quantification, computational hermeneutics or conceptual notation, in the specific acceptances provided by the modern scholarship. All these interpretations are formalizations which change the object of their interpretations, in such a way that the product of formalization has more theoretical content in common with the contemporary theories of language and logic than with the medieval theories. This is in a greater manner applied to Peter of Spain's case. The auctor summularum does not offer extensive rules and comprehensive examples for a number of theoretical points related to supposition, such that a modern reconstruction in terms of the five aforementioned options seems to be problematic. The degree of formality and internal coherence of Peter's theory is low even for the 13th and 14th century account of supposition. The lack of an account for a systematic way of descending to the inferiors of the suppositing term, the lack of an ascription of a supposition for the predicate of I and O propositional forms, the ascription of a simple supposition for the predicates of A-type and possibly I-type propositions, the hard realist ontological orientation, the lack of rules for the effects of the distributive signs and negation in relation to supposition are all arguments for considering Peter's account problematic in many aspects. However, supposition theory shares particular features with all the five aforementioned interpretations but without permitting an identification with them. In the way in which from the suppositing term we can descend to a certain individual or collection of individuals, it resembles with the theory of reference. In the way in which the theory of supposition, through distribution, tells us what it means for a term to have a distributive sign, it resembles with the theory of quantification. The fact that the personal modes of supposition are defined through ascending and descending inferences which might be considered as preserving the truth value, and since this whole process takes the form of an enthymeme, it resembles the

theory of inference. Since supposition tries to determine on the basis of rules, definitions and classification the type of entity for which a term stands, and thus the possible meaning of proposition, it resembles the theory of meaning, as Dutilh suggests. Since supposition is formalizing and thus rendering a certain relation between the language and the world in a more abstract manner, it resembles the theory of conceptual notation, as proposed by Perreiah. However, those resemblances are not enough for determining what supposition is. From all the previous options put forward by the scholarship, the more adequate seems to be the last two. Supposition theory seems indeed to be preoccupied "to determine the range of possible supposita for a term; [... to] determine the ontological kind(s) of the possible supposita of a term in a given proposition, and how many of them are required in order to verify the proposition"38. Yet, we do not agree that the supposition presupposed a computational account, according to which the rules were meant to be applied mechanically, and that supposition was so truth-value focused. Our study points towards an organic development of supposition theory. In different stages of its evolution, an especially in Peter's case, the property of supposition was considered independent from the fact of rendering the proposition true. Its extensive rules for determining the types of supposition were missing or formulated in a less systematic manner. Even in Ockham's case we cannot find the degree of formality presupposed by the computational account. Regarding the conceptual notation interpretation, supposition seems indeed to be a conceptual tool for analyzing logical and linguistical phenomena, but not in the sense defended by Perreiah. Far from being a topological system of memorizing relations between terms and objects, supposition theory may be considered an attempt to offer a conceptual notation in the absence of a proper conceptual notation. Medieval logic does not have a *Begriffsschrift* at its disposal, symbolic notions and languages for rendering its theories in a proper formal manner. All it has is a Latin language regimented by logical and grammatical notions which renders its theories in a discursive but abstract manner.

³⁸ DUTILH (2018), p. 96.

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