A Counterpoint on Pragmatics in Language

Antonio Negro
University of Siena
antonio.negro@unisi.it

Abstract According to the so-called Logicality+Modulation proposal, linguistic constructions such as "It is raining and it is not raining" are judged as acceptable by speakers because they can be reinterpreted as informative sentences such as "It is raining and it is not raining heavily". This seems to corroborate the idea that the expressive capacities of language are determined not as much by what linguistic constructions say about the world, as by what speakers can make them say about the world. In the Logicality perspective, however, such possibility is meant to be constrained by the essential characteristics of the language system, which is determined by biology, thus at a variance with more relaxed conceptions of linguistic expressivity as determined ultimately, or solely, by historically-determined contingencies. In this brief contribution, I relate this contrast with the one between the Ineffabilist and the Resolute readings of Wittgenstein's *Tractatus* (the "New-Wittgenstein debate"). The analogy may allow for a clarification of the positions under discussion, shedding some light on the way pragmatic elements may enter our reflections on language.

0. Introduction

In a paper dedicated to whether Wittgenstein's *Tractatus* influenced the development of Formal Semantics, Stokhof noticed that he would «be content with discussing some systematic analogies» between the two, if only because an awareness of the connections «could help formal semantics answer questions regarding its proper status as a scientific discipline» (2008: 211–12). Similarly, although less ambitiously, in this brief note I will go into an analogy between two contrasts: on the one side, the contrast between the Ineffabilist and the Resolute readings of Wittgenstein's *Tractatus* (the "New-Wittgenstein debate"); on the other, the one between Formal and Informal conceptions of the way pragmatics might influence the expressive capacity of language. This might allow for a clarification of the positions under discussion and help their supporters answer questions regarding the status of their theoretical proposals. In particular, I shall emphasize that only a constrained framework can provide for a conception of language as a science, while nevertheless being able to accommodate some of the claims put forward by more loose approaches to language.

The article is organized as follows. The first two sections are dedicated to the two contrasts that I will counterpoint in this paper, namely the one between the Ineffabilist and the Resolute readings, within the New-Wittgenstein debate (§ 1), and the one between Formal and Informal views of pragmatics in language (§ 2). I will then present the analogy between the two contrasts in § 3, concluding with my final considerations in § 4.

1. Ineffabilist vs. Resolute readings of the *Tractatus*

The so-called "New-Wittgenstein debate" is rooted into Wittgenstein's own observation in the *Tractatus* (TLP, henceforth; McGuiness/Pears 1974 transl.):

> My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them —as steps—to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.) He must transcend these propositions, and then he will see the world aright (TLP 6.54).

Thus, apparently, the *Tractatus* has to face a paradoxical self-refutation: «it seems that the propositions of the book fail to satisfy the criteria of meaningfulness that the book itself lays down» (Bronzo 2012: 52).

This gave rise to some surprised reactions. For instance, already in the introduction to the book, Russell observed that «what causes hesitation is the fact that, after all, Mr. Wittgenstein manages to say a good deal about what cannot be said», and years later Ramsey famously commented that «what we can't say we can't say, and we can't whistle it either» (Ramsey 1929:238).

Nevertheless, it was not before the publication of the works of Diamond (1988) and Conant (1989) that a dedicated discussion on the issue took place, developing fast into the extensive and intricated "New Wittgenstein debate" between Ineffabilist and Resolute readings of the *Tractatus*. The literature on the topic is huge and there are important differences between some of the interpreters, even when they support the same reading. For the sake of this paper, I will mainly refer to the reconstructions and to the examples put forward by Frascolla (2011), Bronzo (2012), and Bogucki (2023).

On the one side, the Ineffabilist reading may be reconstructed as consisting of the following three claims.

– The *Tractatus* submits a Semantic Theory, according to which only factual contingent sentences are meaningful, that is *endowed with sense* (sinnvolle Sätze), thus saying something about the world. All other linguistic constructions are either *senseless* sentences (tautologies and contradictions – see TLP 4.461, 4.4611), which say nothing and show that they do so; or *nonsensical* sentences («most of the propositions and questions to be found in philosophical works» – TLP 4.003), which neither say nor show anything.

– But there exist *two kinds* of nonsensical constructions:
(i) *Mere* nonsenses (gibberish), namely constructions which do not comply with the *logical syntax* of language or with the *general form* of a proposition («Such and such is the case» – TLP 4.5): these can be exemplified either by ungrammatical constructions ("Peter it Derek") or by constructions in which there occur signs which are not words ("Mark is a very *abnegef* person").

_____

(ii) *Substantial* nonsenses, namely *possible* sentences which are devoid of meaning but able to convey something (ineffable). A possible sentence is a construction which, although may have the appearance of a meaningful sentence (it complies with the general form, or with the logical syntax, is grammatical, and constituted only with words), contains at least some words which have no (pictorial) meaning, i.e., words which do not correspond to a component of a state of affairs (Frascolla 2007: 216–217, Frascolla 2011: 202–03).[1] For instance, a construction such as "Julius Caesar is a prime number" is a possible sentence. Now, at least *some* possible sentences, although saying nothing about the world nor showing anything whatsoever, can be used in a fruitful way. The propositions of the *Tractatus*, which Wittgenstein himself dubbed as nonsensical, are of this kind, just as some of those occurring in traditional philosophy: although being nonsensical, they are not incomprehensible. They are «devoid of that power of depiction which genuine propositions are endowed with» but yet they can be used to convey something, producing something «similar to an illumination» (Frascolla 2007: 219, 220).

– A perspicuous logical notation (which is possible, in principle) would allow for a definitive test of the meaningfulness (sinnvolle Sätze) of a linguistic construction, because it would make manifest whether it complies with the general form, or with the logical syntax, whether the construction is constituted only by names endowed with (pictorial) meaning, whether it is contingent, etc.

On the other side, the Resolute reading is based on the following three claims:

– The *Tractatus* does not present any Semantic Theory at all, otherwise this would have been expressed in a way that it itself precludes. In particular, there is no standard of logical syntax, or of general form, which a sequence of signs must satisfy to be meaningful.

– Accordingly, any sequence of signs can be meaningful. So, there is only one kind of nonsense, which is determined by speakers' failure in assigning meaning to some of the signs in a given sequence. This holds for "Peter it Derek", "Mark is a very *abnegef* person", "Julius Caesar is a prime number", and any other nonsensical construction. In principle, speakers can still find an innovative *meaning convention* according to which those constructions stop being nonsensical. This is what happened with sentences such as "Trieste is no Vienna", where a new use for the noun "Vienna" was introduced, namely as a predicate, so that the sentence turned out to be meaningful (cf. TLP 5.4733, Bogucki 2023).

– There is no such thing as *the* perspicuous logical notation: either a logical notation is incomplete or it is not unique, because there is no such thing as *the* logical syntax of language. Accordingly, *a* logical notation can be only useful to present speakers with different possibilities of assigning meaning, so that they can choose one, or not choose at all. *A* logical notation is just «a tool for achieving clarity about what we want to do with our words; it is instrument […] for interrogating our relationship to our sentences» (Bronzo 2012: 54–55).

_____

[1] Actually, in the most accredited version of the Ineffabilist reading (Hacker 2000), these nonsenses are such because they violate the *logical syntax* of language: the logical categories of the words are such that they cannot be connected in a meaningful way. According to Bogucki (2023, § 3), this interpretation is not supported by the *Tractatus* and can only be based on Wittgenstein's earlier works. See also the contributions of Marconi, Frascolla, Perissinotto, and Voltolini in *Rivista di Filosofia*, 3/2024: 479–544.

---

2. *Formal* vs. *Informal* views of pragmatic influences on language

In general, one can characterize Pragmatics as dealing with the effects of context on language, thus with facts about utterances, possibly speakers' intentions and beliefs, social institutions and the like (Korta and Perry 2024). In this paper, I am interested in how pragmatics might influence the *expressive capacity* of language, comparing Formal and Informal approaches, as exemplified by Pistoia-Reda in his work on the Logicality of Language Hypothesis.

According to this hypothesis (Chierchia 2013, Del Pinal 2019, Fox and Hackl 2006, Gajewski 2002, 2009), the faculty of language is endowed with a logical device that is capable of recognizing informationally trivial constructions, namely sequences of signs that, under an appropriate analysis, turn out to express tautological or contradictory contents. As such, the hypothesis goes, these constructions are dubbed as ungrammatical by the language system, hence not included in the output of syntax. Typical examples in the literature are "There is every fly in my soup" or "Some students but John smokes", which indeed are judged as unacceptable, or deviant, by speakers. These constructions, once analysed according to independently motivated semantic analyses,[2] turn out to correspond, respectively, to "Every fly in my soup is a fly in my soup" and to "Some students smoke and no student smokes", thus expressing, respectively, a tautological and a contradictory content.

The hypothesis is able to account for a wide class of linguistic data. But, of course, its supporters had to tell a story as to why blatantly trivial constructions such as the contradictory "It rains and it does not rain" are instead dubbed as grammatical by the faculty of language (and considered as acceptable by speakers). This has been called "The Analyticity Puzzle for Logicality": if Logicality is correct, then only informative, namely contingent (non-analytic) constructions should be included in the output of syntax.

The most accredited reply to this issue (Del Pinal 2019, 2022, 2025, Pistoia-Reda, San Mauro 2021, Pistoia-Reda, Sauerland 2021, Sauerland 2014) consists in conceiving of the deep (logical) form of sentences as endowed with a so-called Rescale Operator (**R**). In a given context, the operator may provide a modulation of the descriptive expressions of a trivial construction, hence a resulting contingent interpretation of it. In the case of "It rains and it does not rain", the logical form would be something like

$$\mathbf{R}(\text{It Rains}) \quad \text{AND} \quad \text{NOT: } \mathbf{R}(\text{It Rains})$$

Technically speaking, the Rescale operator is a Kaplanian *character*, whose specific contribution is pragmatical in the sense that it depends on a certain context of utterance. In principle, the operator can stay silent, thus just producing the interpretation "It rains and it does not rain". But it can also be activated, in one or more of its occurrences, thus yielding either a strengthening$^+$ or a weakening$^-$ of the meaning of the predicate "It Rains". For instance, assuming that a strengthening of the second occurrence of the predicate is activated, that is

$$\mathbf{R}(\text{It Rains}) \quad \text{AND} \quad \text{NOT: } \mathbf{R}^+(\text{It Rains})$$

---

[2] In these cases, respectively, the analyses put forward by Barwise and Cooper (1981) and von Fintel (1993).

_____

then, in a given context, the *contingent* interpretation "It is raining and it is not raining heavily" may be produced (notice that the modulated predicate, "it rains heavily" applies to a subset of the situations to which the original, weaker, predicate applies).

It is essential to notice that no modulation can rescue sentences such as the above "Some students but John smoke" from triviality. For instance, "Some philosophy students but John smoke" would be unchanged as far as its logical status goes, for it would correspond to "Some philosophy students smoke and no philosophy student smokes", still expressing a contradictory content. Indeed, the logical status of such sentences, which are dubbed "linguistically trivial" in the literature, depends ultimately on the behaviour of functional expressions such as "Some" or "but" (which are not descriptive, hence cannot be modulated). Thus, Logicality's main claim can be better specified in a way that opposes the Analyticity Puzzle as follows: only (possibly) contingent constructions are included in the output of syntax.

It is important to stress that the reinterpretations allowed by the Rescale operator are *pragmatic*, in the sense that they are contextual, but are *not conversational* (post-propositional), for the operator belongs to the deep form of the constructions and thus acts primarily on the propositional level. Of course, the actual completion of a reinterpretation *is* post-propositional, consisting in the speaker's final determination of a specific meaning within a specific context (in the above case, the determination "it rains *heavily*"), but its possibility—so to say—is not, for the Rescale operator is supposed to belong to the essential components of the language faculty itself.

According to Pistoia-Reda (2021, 2024), the existence of such pragmatic reinterpretations corroborates the idea that the expressive capacities of language are determined not as much by what linguistic constructions say about the world, as by what speakers can make them say about the world. Here, based on the above considerations, the expression *can* should be interpreted in a twofold sense: in a *permissive* sense, for the operator can be activated or not; and in a *constrained* sense, for the operator allows only for reinterpretations of the descriptive expressions, not the functional ones, the latter being ultimately determined only by biology and providing for the basic architecture of language (as *per* the Chomskyan tradition): speakers can contribute creatively only to the lexical component of language, thus not in disregard of the necessary basic principles of our language system.

To illustrate the latter point, Pistoia-Reda (2021) compares the Rescale approach to Logicality with Informal approaches to pragmatics and language, such as the one that can be famously found in Gramsci's comment about Croce's sceptical opposition to the idea of grammar as a science. Here is Croce:

> Someone approaches a round table and says: "This round table is square". The grammarian remains silent, perfectly satisfied, while the logician exclaims "Absurd!" […] [Indeed] how could anyone consider scientific a discipline aiming at theorizing about things such as "A round table is square", that is about words devoid of sense? A science, which would declare rational that which is totally irrational—should not be itself considered irrational? (Croce 1905: 531–533, my transl.).

To oppose Croce's reasons to the conclusion that language is immediately irrational, Gramsci advanced in 1935 a wider conception of language, one that takes in consideration how it can be effectively used in specific situations, each time for peculiar reasons which depend on a blend of historical, cultural, and natural aspects. Under his view, for example, a contradictory construction can be endowed with some sense in certain contexts: «The proposition may be illogical in itself, contradictory, but at the

---

same time "coherent" within a broader framework» (reported in Pistoia-Reda 2021, my transl.). Actually, Gramsci's conception goes so much beyond the purely formal level of language that in his view speakers can act in disregard of its rules depending, again, on specific contexts and reasons, so that even ungrammatical constructions can be given some kind of expressivity.

3. The analogy

There is an evident analogy between the two contrasts illustrated in the previous sections. More specifically, the Ineffabilist reading seems akin to the Formal view for the emphasis given to some basic constraints on language, just as the Resolute reading is similar to the Informal view for their greater looseness and their being irrespective of (supposed) basic linguistic principles.

— *Constrained conception* of the Expressive Capacities of Language (Ineffabilist reading and Formal view). Both for the Ineffabilist reading and for the Formal view, the expressive capacity of language can only be widened while satisfying some basic, *structural*, hence ineluctable, principles. In the first case, speakers go beyond the expressive limits determined by the Tractarian Semantic Theory by *not* endowing some of the words occurring in a linguistic construction with a (pictorial) meaning, thus possibly succeeding in conveying something ineffable (substantial nonsense)—but only if the construction complies with the general form of proposition or with the logical syntax in the first place (only if the construction is a possible sentence). If the latter condition is not met, then the construction is definitely gibberish. In the second case, speakers go beyond the expressive limits that would pronounce a trivial construction as uninformative by modulating the meaning of some of the descriptive expressions there occurring, thus obtaining a contingent sentence—but only if its triviality does not depend on its functional expressions (only if the construction is not linguistically trivial). If the latter condition is not met, then the construction is definitely uninformative (and ungrammatical).

— *Unconstrained Conception* of the Expressive Capacities of Language (Resolute reading and Informal view). Both for the Resolute reading and for the Informal view, the expressive capacity of language can be widened in disregard of (supposed) basic principles or rules. In the first case, speakers specify *new* meaning conventions in such a way that *any* linguistic construction may turn out as meaningful, irrespective of whether it complies with any (supposed) general form or logical syntax. In the second case, speakers may use *any* linguistic construction in a *new* expressive way, be it a contradictory or even an ungrammatical construction.

4. Final reflections

In this final section I intend to focus on some details of the conceptions that I have presented. The general question in which I am interested is what a rational reflection on language is supposed to contribute. A connected and more specific issue pertains as to whether and how pragmatic elements should enter such reflection.

First of all, let me stress what may seem obvious, namely that the constrained conceptions seem to offer a *more solid* reconstruction of language. This is not to say that the unconstrained conceptions appear as uncomprehensible or wrong. On the contrary, they refer to linguistic phenomena which are not difficult to encounter, chiefly to the possibility of usings words and linguistic constructions in a creative way, in response to

_____

specific needs and reasons that our activities determine. In order to better understand what is at play here, it will be of some help to focus on the general motivations that inform them.

As stressed by Pistoia-Reda (2021), the Formal conception exemplified by Logicality departs from the Informal one that could be attributed to Gramsci already in its basic assumptions. For Gramsci, indeed, a purely formal/mechanical analysis of language is not enough to *comprehend* it in its complexity: to this aim, also the historical-natural-cultural component of language should be taken in consideration (Cimatti 2016). From this point of view, it is not surprising that the Informal view and the Resolute reading are similar, for the latter «has its roots in an approach to the later Wittgenstein which had already been around for several decades» (Bronzo 2012: 48), namely in a conception of language as something essentially connected to actual use and to our form of life; a conception that makes us aware of our innate tendency to fall into certain forms of illusion, whose responsibility, however, lies entirely in the way in which we act as speakers. These are the kinds of things that the unconstrained conceptions are interested in, and this seems to be the kind of comprehension of language they aim to obtain: a critique of language as it happens or, one may say, a *post-hoc* understanding of language, namely one that singles out important aspects of how language works in practice while not requiring a preliminary individuation of basic rules or general principles that supposedly regulate it. In other words, the unconstrained conceptions do not make, indeed they are not interested in, *predictions* about language. They do not aim at the formulation of a *theory*, quite the contrary: as Bronzo put it, «the austere [i.e., resolute] conception of nonsense can be formulated precisely as the rejection of any theory of the bounds of sense» (Bronzo 2012: 64).

Based on the above considerations, it seems now clear why the constrained conceptions appear as solid proposals instead: they are based on rules or principles, they can answer questions about future uses of language in a precise and testable way, namely about the acceptability (grammaticality) or about the meaningfulness of a linguistic construction. In a nutshell, they allow for the formulation and the empirical test of *precise formal hypotheses* (cf. Rizzi 2016). On the contrary, if questions at all can be made within the unconstrained conceptions, they would be open-ended questions, consistent with the formulation of any answer, because depending essentially on practical aspects, namely on the specific moment in which a certain speaker decides whether he would assign a certain meaning to a certain word—all things that cannot be systematically anticipated.[3]

This is not to say that one should disregard pragmatic components in constructing *theories* of language. It is not a matter of what, but rather of how. Indeed, the difference between the two conceptions can be also rephrased in terms of concepts which are canonical and accepted in linguistics, namely the distinction between Performance (effective use) and Competence (correct use, unconscious knowledge) or the one between Acceptability (an empirical notion) and Grammaticality (a theoretical notion). In this respect, it is evident that one of the main merits of the Logicality+Modulation proposal is exactly the way it incorporates pragmatic components into a formal theory of language. In a sense, this proposal represents a third way between the Chomskian (purely formal) and the Gramscian (purely pragmatical) approaches to language, for the Rescale operator, although allowing for different specific pragmatic reinterpretations, contributes in the first place to the propositional level of language, as I have emphasized

_____

[3] Cf. Recanati's discussion (2004: 444-445) of Kaplan's distinction between Semantics and Metasemantics, Stalnaker's distinction between Descriptive and Foundational semantics, and Lewis's distinction between language as considered "in complete abstraction from human affairs" and language as "a social phenomenon which is part of the natural history of human beings".

_____

in § 2. In this way, both the structural component of language (the deep logical form determined by biology) and the effective, unpredictable, contribution of speakers, are taken in due consideration within the same general theoretical framework, in agreement with the Ineffabilist claim that «all that logical syntax permits is correct, [but] it is up to speakers to carry out the operation of fixing the meanings of words» (Frascolla 2007: 216).

Acknowledgements

References

Barwise, John and Robin Cooper (1981), «Generalized quantifiers and natural language», in *Linguistic and Philos*ophy, vol.4, n.2, pp. 159–219, doi: 10.1007/BF00350139.

Bogucki, Krystian (2023), «A Defence of the Austere View of Nonsense», in *Synthese,* vol.201, n.150, doi: 10.1007/s11229-023-04138-x.

Bronzo, Silver (2012), «The resolute reading and its critics. An introduction to the literature», in *Wittgenstein-Studien*, vol. 3, n.1, pp. 45-80, doi: 10.1515/wgst.2012.45.

Cavell, Stanley, Crary, Alice, Read, Rupert (2000), *The New Wittgenstein*, Routledge, London &New York.

Chierchia, Gennaro (2013), *Logic in Grammar: Polarity, Free Choice, and Intervention*, Oxford University Press, Oxford.

Cimatti, Felice (2016), *La tradizione italiana*, in Cimatti, Felice, Piazza, Francesca, a cura di, *Filosofie del linguaggio*, Roma, Carocci, pp. 163-182.

Conant, James (1989), *Must we show what we cannot say?*, in Fleming, Richard and Payne, Michael, edited by., *The Senses of Stanley Cavell*, The Bucknell Review, pp. 242-83.

Croce, Benedetto (1905), «Questa tavola rotonda è quadrata», in *La Critica*, vol. 3, pp. 531-534.

Del Pinal, Guillermo (2019), «The Logicality of Language: A new take on Triviality, "Ungrammaticality", and Logical Form», in *Noûs* vol.53, n.4, pp. 785-818, doi: 10.1111/nous.12235

_____

Del Pinal, Guillermo (2022), «The logicality of language: contextualism versus semantic minimalism», in *Mind*, vol. 131, n. 522, pp. 381-427, doi: :10.1093/mind/fzab020.

Del Pinal, Guillermo (2025), «Meaning-driven unacceptability, the semantics–pragmatics interface and the "spontaneous logicality of language" », in *Philosophical Studies*, vol.182, n.3, pp.989-1021, doi: :10.1007/s11098-025-02298-9.

Diamond, Cora (1988), «Throwing away the ladder: how to read the Tractatus», in *Philosophy* vol.63, n.243, pp. 5-27, doi:10.1017/S0031819100043102.

Fox, Danny, Hackl, Martin (2006), «The universal density of measurement», in *Linguistics and Philosophy,* vol.29, n.5, pp.537-586., doi: :10.1007/s10988-006-9004-4

Frascolla, Pasquale (2007), *Understanding Wittgenstein's Tractatus*, Routledge, New York 2007.

Frascolla, Pasquale (2011), «Sulla cosiddetta lettura risoluta del Tractatus», in *Iride, Filosofia e discussione pubblica*, vol.24, n.62, pp. 199–204.

Gajewski, Jon (2002), «On Analyticity in Natural Language», unpublished manuscript, https://jon-gajewski.uconn.edu/wp-content/uploads/sites/1784/2016/08/analytic.pdf

Gajewski, Jon (2009), «L-Triviality and Grammar», Handout of a talk delivered at the UConn Logic Group: https://jon-gajewski.uconn.edu/wp-content/uploads/sites/1784/2016/08/Logic.pdf

Gramsci, Antonio (1975), *Quaderni del carcere,* vol. 3, Einaudi, Torino.

Hacker, Peter (2000), «Was he trying to whistle it?», in Crary Alice, Rupert J. Read, edited by, *The New Wittgenstein*, Routledge, New York. pp. 353-388.

Korta, Kepa, Perry, John (2024), «Pragmatics», in Zalta Edward N., Nodelman Uri, edited by, *The Stanford Encyclopedia of Philosophy* (Fall 2024 Edition), https://plato.stanford.edu/archives/fall2024/entries/pragmatics/

Pistoia-Reda, Salvatore (2021), «A quasiGramscian divertissement on logic and language», in *Rivista Italiana di Filosofia del Linguaggio*, vol.15, n.1, pp.148-153, doi: 10.4396/2021060V3.

Pistoia-Reda, Salvatore (2024), *Senso e controsenso. Uno studio filosofico su grammatica e logica delle lingue naturali.*, Carocci, Roma.

Pistoia-Reda, Salvatore and San Mauro, Luca (2021), «On logicality and natural logic», in *Natural Language Semantics*, vol. 29, n.2, pp. 501-506, doi: :10.1007/s11050-021-09184-0.

Pistoia-Reda, Salvatore, Sauerland, Uli (2021), «Analyticity and modulation», in *International Review of Pragmatics*, vol.13, n.1, pp. 1-13, doi: 10.1163/18773109-01301001.

Ramsey, Frank P. (1929), *General Propositions and Causality*, in Braithwaite Richard*,* edited by, *The Foundations of Mathematics and Other Logical Essays*, (1931), Routledge & Kegan Paul LTD, London., pp. 237-254.

Recanati, François (2004) *Pragmatics and Semantics*, in Horn Laurence, Ward Gregory, edited by, *The Handbook of Pragmatics*, Blackwell, Oxford, 2004, pp 442-462.

Rizzi, Luigi (2016), «Linguistic knowledge and unconscious computations», in *Rivista internazionale di Filosofia e Psicologia,*, vol.7, n.3, pp. 338-349, doi: 10.4453/rifp.2016.0035.

Sauerland, Uli (2014), «Making fuzzy logic work for language», in *Semantics and Philosophy in Europe*.

Steinthal, Heymann (1855), *Grammatik, Logik, und Psychologie: Ihre Principien und ihr Verhältniss zueinander*, Dümmler, Berlin.

Stokhof, Martin (2008), *The architecture of meaning: Wittgenstein's Tractatus and formal semantics*, in Zamuner Edoardo, Levy David K., edited by, *Wittgenstein's Enduring Arguments*, Routledge, London, pp. 211–244, doi: 10.4324/9780203882573.

Von Fintel, Kai (1993), «Exceptive constructions», in *Natural Language Semantics* vol.1, n.2, pp. 123–148, doi: 10.1007/bf00372560.

Wittgenstein, Ludwig (1921), *Logisch-Philosophische Abhandlung*, Annalen der Naturphilosophie (*Tractatus Logico-Philosophicus*, transl. by D.F. Pears and B.F. McGuinness, Routledge & Kegan Paul, London 1974).