

Introduction: Logical Pluralism and Translation

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The special issue aims at bridging the gap between two mainstream debates: on logical pluralism in the philosophy of logic, and on translation in the philosophy of language. Both discussions have attracted an ever growing interest among scholars, against the backdrop of the plurality of different non-classical logics that extend, or compete with, classical logic. Even though these research trends share some common topics and methods, little attention has been paid so far to the key link that brings them together: the problem of translation in a logical-pluralistic framework. Translation plays indeed a keynote role in both philosophy of logic and philosophy of language. On the one hand, logical pluralism and translations of logics are at the forefront of the current debates on the philosophical foundations of logical consequence (e.g. Beall and Restall 2006; Field 2009; Carnielli et al. 2009). On the other hand, linguists and philosophers of language developed effective semantical tools that explain a variety of linguistic and conceptual phenomena by inquiring the conditions under which a sentence in one language can be properly said to be a translation of a sentence in another language, and when it is the case that such a translation can be considered sound (e.g. Burgess 2005; White 2012; Soames 2014).

This extremely rich and diversified situation suggests a number of philosophically intriguing issues, which come to the surface once we frame the problem of translation in a logical-pluralistic perspective. An example is the translation of proper names (Burgess 2005), which has raised difficulties for (Neo)Fregean and direct-reference semantics: could such difficulties be overcome by adopting other logical viewpoints, such as, for instance, possible worlds semantics? Could the struggle between descriptivist and Kripkean explanation (Kripke 2011) be settled in a pluralistic framework? The paper "Lost in translation?" by Giulia Felappi and Marco Santambrogio discusses the import of

translations on the problem of substitutivity of co-referential names, and tries to assess the extent to which a neo-Russellian view of the issue can be defensible.

Other philosophically interesting issues derive from the application of the concept of translation, "taken for granted" in formalised languages, to natural languages. For instance, in Donald Davidson's view, the theory of meaning takes the Tarskian theory of truth for formalised languages as a model for explaining the concept of translation in natural languages (Tarski 1983; Davidson 1984). How far could Davidson's programme be extended to other theories of truth for formalised languages? Could we expect further results by using different logical systems to explain translation in natural languages? To what extent can the concept of translation be actually "taken for granted" in formalised languages in order to understand translation in natural languages? The paper "Radical Interpretation and Logical Pluralism" by Piers Rawling touches on these classical Davidsonian themes, considering some arguments for radical pluralism that emerge from incommensurable conceptual schemes. The paper also centres on the Quinean debate on meaning variance, pondering various constraints on the possibility of embracing deviant logics (Quine 1960, 1986).

The following three papers precisely focus on the problem of meaning variance, providing an answer to the question: which translations of logics preserve the meaning of logical constants? Willard van Orman Quine's meaning variance argument against non-classical logics casts doubts on the claim that the so-called homophonic translations are meaning-preserving. How are we to assess this allegation? Is the classical counterpart of, say, an intuitionistic disjunction provided by its homophonic translation or by its Goedel-Glivenko translation? On the one hand, the paper by Stewart Shapiro, "Translating logical terms", articulates a context-sensitive resolution to the problem as to whether there can be substantial disagreement between the partisans of competing logics, elaborating further the proposal advanced in his volume "Varieties of Logic" (2014). On the other hand, in her paper "A new interpretation of Carnap's logical pluralism", Teresa Kouri develops a novel

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interpretation of Carnapian pluralism (Carnap 1937), by divorcing it from meaning variance pluralists while reconciling it, to some extent, with Shapiro's views. In "On Quine's Translation Argument", Alexis Peluce deals with Quine's argument (1960) both at an exegetical level and at a more general, conceptual, level. Were we to take Quine as a defender of an "anti-prelogicality thesis", we would face a clash with his revisability doctrine; for this reason, a weaker reading of Quine's argument is argued for.

Moreover, there are translation-based approaches to the concept of deductive equivalence between consequence relations. These approaches allow us to compare consequence relations across different languages or across systems with different data types (formulas, sequents, equations). In "Notational Variance and Its variants", Rohan French discusses the problem of equivalence between logics in its incarnation as notational variance (Haack 1974), suggesting that the only kind of translations which can witness notational variance are the so-called definitional translations.

In a pragmatic perspective, the Gricean account of speaker's meaning requires "the logic of conversation" to replace formal logic in taking care of implicatures and other implicit usages of language (Grice 1989). Is conversational logic necessary to clarify the translation of speaker's meaning? Could alternative logics provide a more comprehensive explanation of speaker's meaning? In her paper, "From natural to formal language: a case for logical pluralism", Pilar Terrés Villalonga argues for a version of logical pluralism which stays true to the Gricean spirit, viewing the rivalry between classical and relevant logic (Read 1988) as a dispute between two different senses of logical consequence that stem from different but equally legitimate formalisations of the logical vocabulary: standard in classical logic, "pragmatically enriched" in the case of relevant logic.

The last three papers foray into conceptual territories, which are still crucial for an analysis of the relations between pluralism and translation. In "Analysis as Translation", Diego Marconi revives the philosophical tradition of analysis as paraphrase (Beaney 2013), discussing some limits of this enterprise as originally envisaged, yet defending its philosophical value. In "Still in the Mood: the Versatility of Subjunctive Markers in Modal Logic", Kai Wehmeier compares two approaches (cf. e.g. Peacocke 1978 and; Wehmeier 2004) to enhancing the expressive capacities of modal languages, namely, subjunctive markers and actuality operators, contending that the former has a clear edge on its rival. Finally, dialetheism and the logic of paradox (cf. e.g. Priest 2006) take centre stage in Massimiliano Carrara's paper,

"DLEAC: A dialetheic Logic with Exclusive Assumptions and Conclusions" where a new dialetheic logic with exclusive assumptions and conclusions is introduced and given both a proof-theoretical and a semantic analysis.

To conclude, we claim that an analysis of the multifaceted problem of translation in a logical-pluralistic framework is a way to advance research in the philosophy of language and the philosophy of logic. By adopting a multidisciplinary approach, this special issue encouraged discussion among authors coming from both research domains, to establish a common ground that is not completely reducible to any inhouse philosophical dispute. The contributors provided their own perspectives on the intersection between logical pluralism and translation, opening some promising, and certainly intriguing, research avenues.

References

Beall JC, Restall G (2006) Logical pluralism. Clarendon Press, Oxford Beaney M (ed) (2013) The Oxford handbook of the history of analytic philosophy. Oxford University Press, Oxford

Burgess JP (2005) Translating names. Analysis 65(287):196–205 Carnap R (1937) The logical syntax of language. Routledge, London Carnielli WA, Coniglio ME, D'Ottaviano IML (2009) New dimensions on translations between logics. Log Univers 3(1):1–18

Davidson D (1984) Inquiries into truth and interpretation. Clarendon Press, Oxford

Field H (2009) Pluralism in logic. Rev Symb Log 2(2):342–359 Grice HP (1989) Studies in the way of words. Harvard University Press,

Cambridge Haack S (1974) Deviant logic: some philosophical issues. Cambridge University Press, London

Kripke S (2011) Philosophical troubles. Oxford University Press, Oxford

Peacocke C (1978) Necessity and truth theories. J Philos Log 7:473–500

Priest G (2006) Doubt truth to be a liar. Oxford University Press, Oxford

Quine WVO (1960) Word and object. MIT Press, Cambridge

Quine WVO (1986) Philosophy of logic, 2nd edn. Harvard University Press, Cambridge

Read S (1988) Relevant logic: a philosophical examination of inference. Basil Blackwell, Oxford

Shapiro S (2014) Varieties of logic. Oxford University Press, Oxford Soames S (2014) Analytic philosophy in America and other historical and contemporary essays. Princeton University Press, Princeton

Tarski A (1983) The concept of truth in formalized languages. In: Tarski A (ed) Logic, semantics, metamathematics. Hackett, Indianapolis

Wehmeier K (2004) In the mood. J Philos Log 33:607–630

White S (2012) The indeterminacy of translation: fifty years later. Disputatio 32(4):385–393

