New Perspectives on Quine's "Word and Object"

Francesca Ervas University of Cagliari Vera Tripodi University of Barcelona

BIBLID [0873-626X (2012) 32; pp. 317-322]

This special issue collects a selection of the papers presented at the International Colloquium Word and Object, 50 Years Later, which took place in Rome on May 28-29, 2010. In the fiftieth year since the publication of Word and Object, the conference aimed at celebrating one of the most famous and influential philosophers and mathematicians of the 20th Century: Willard Van Orman Quine. The purpose of the conference, organised by the University of Rome 'La Sapienza' and the Research Group APhEx (Analytical and Philosophical Explanation), was to discuss and explore some of the major Quinean theses. This volume collects the contributions of Marianna Antonutti Marfori, Jacob Busch & Andrea Sereni, Alberto Voltolini, Stephen White, and Giancarlo Zanet, who were speakers at the conference. The papers are unified by a common thread that is represented by the Quinean philosophical heritage and take their stance within the different areas of the current philosophical debate on this issue.

Quinean theses marked several fields of philosophy and, since its publication, Word and Object has become a landmark in the canon of analytical philosophy. During the two-day conference, at least three subjects came to the foreground, especially for their potential to still unveil, after half a century, some common prejudices in the philosophy of language. First, the thesis of indeterminacy of translation, which questioned the definition of the object of translation itself, the notion of a translation manual and the concept of translation equivalence. Second, Quine's holistic view of language, which highlighted the problem of determining the locus (if any) and the function of the units constitutive of meaning. As is well known, Quine came to doubt the very notion of meaning on account of his holistic view.

Holism, the view that the sentences of a language have to face the "tribunal of experience" together, has still a deep influence on the philosophical understanding of the way language is connected to reality. Third, his thesis of the inscrutability of reference puzzled analytical philosophers on the nature of their ontological commitments, the criteria of identity of extension, the role of conceptual schemes, etc. and put into question the validity of the very notion of reference.

However, the Quinean contribution is not limited to the philosophy of language. His work sheds light on many important topics in the philosophy of mind and the philosophy of mathematics. He is celebrated for introducing a naturalised conception of epistemology, which emphasised the role of the natural scientific method in determining the processes of knowledge acquisition. On the one hand, this view brought him to embrace behaviourism, the thesis that psychological terms do not refer to inner mental states and instead are to be analysed in terms of speakers' dispositions to verbal behaviour. On the other hand, he rejected the traditional philosophical study of scientific knowledge and mathematics in particular, because of its failure to reduce mathematics to pure logic.

The papers presented in this volume show that Quine's philosophy is not yet a matter for history, but on the contrary has marked a path of inquiry still resourceful nowadays: his indispensability argument in mathematics, his critique of modal logic, his conception of naturalism and the ways it is applied in contemporary philosophy of mind, and his remarks on the notion of translation. Marianna Antonutti Marfori's paper ('Naturalising Mathematics: A Critical Look at the Quine-Maddy Debate') focuses on the possibility of naturalising mathematical practice and offers a positive attempt to elucidate Penelope Maddy's strategy for naturalising mathematics in a Quinean perspective. As it is known, according to Quine, mathematics is part of our best overall theory of the world because it is indispensable to scientific theories. Confirmational holism guarantees that indispensable mathematics is empirically confirmed in virtue of its successful application in scientific practice. This view entails the so-called Indispensability Argument (which seeks to establish the conclusion that we ought to believe in the existence of entities, i.e. mathematical entities, that are indispensable to scientific theories). According to this Quinean line of argument, it follows that unapplied mathematics has to be rejected as frivolous and we should adopt a strong revisionary approach to mathematical practice. Maddy argues against such a position. An important motivation behind her view is to account for the methodological autonomy of mathematics. In her paper, Antonutti Marforiillustrates Maddy's position in detail in order to assess whether it can accommodate an anti-revisionary stance on mathematics within Quinean naturalism. More specifically, Antonutti explains Maddy's grounds for rejecting the conclusion of the Indispensability Argument while maintaining that mathematics is indispensable to science. She then shows how Maddy can avoid the objection that her view entails that mathematics and pseudo-science are on a par, and reformulates the objection so that it cannot be avoided. Finally, Antonutti argues that Maddy's view faces a dilemma, and ultimately fails to account for the methodological autonomy of mathematics within Quinean naturalism.

The paper by Jacob Busch and Andrea Sereni, ('Indispensability Arguments and their Quinean Heritage'), also focuses on philosophy of mathematics. It concerns the Indispensability Arguments for mathematical Platonism in connection with Quine's thesis. Quine's Indispensability Argument for mathematics is considered by many to be the strongest argument for mathematical realism: mathematical entities (i.e. sets, numbers, functions, etc.) are indispensable to our best scientific theories, therefore we ought to be ontologically committed to their existence. Bush and Sereni present some of the most discussed versions of the Indispensability Argument and show both theoretical and exegetical problems with Quine's view. They propose a different approach to indispensability that emphasizes the theoretical contributions of mathematics and Quine's remarks on unobservable entities. They suggest two minimal versions of indispensability, which they label the 'logical' and the 'theory-contribution' points of view. From the logical point of view, the notion of indispensability is understood in terms of the expressive power of theories: mathematics is indispensable to science because of nominalised theories. From the theory-contribution point of view, mathematical entities contribute to scientific theories in relevantly similar ways as theoretical entities do. The minimal version of indispensability they propose is an instance of the Inference to the Best Explanation.

Alberto Voltolini's paper ('All the existences that there are') concerns the question whether existence has to be taken either as a first-

order or as a second-order property. He proposes a three-fold notion of existence: as a second-order property, typically expressed by the *particular* quantifier; as a *substantive* first-order property of individuals, i.e. having a certain weight, being human, being Italian; and as a *blanket* property of individuals, i.e. the property of being (identical with) something. Voltolini explains what these properties are and why we need them all for our ontological purposes. Relying on this assumption, he vindicates a Meinongian position that endorses both first-order properties by giving arguments in favour of this view as the correct position in ontology; he further explores the limits of linguistic approaches to the ontology of existence, by means of a descriptive analysis of the behaviour of "there is" and "exists".

In 'The indeterminacy of translation: Fifty years later', Stephen White offers a critical perspective on Quine's thesis of indeterminacy of translation. White presents Quine's well-known 'Gavagai' mental experiment and shows the difficulties that arise when we want to equate referring expressions or predicates in the language being translated and our own. In his thought experiment of radical translation, Quine proposes a situation in which both the linguist and the native speaker see a rabbit. Quine imagines that the native speaker pronounces 'Gavagai' in seeing the rabbit, and that the linguist notices this behaviour whenever the rabbit is present. In observing a strong correlation between the presence of a rabbit and the expression 'Gavagai' pronounced by the native speaker, the linguist will infer that 'Gavagai' means 'rabbit': 'Gavagai' is a one-word sentence with the same stimulus meaning as our sentence 'There is a rabbit'. In fact, the meaning of a sentence as a stimulus to verbal behaviour is defined by what type of response it arouses in the native. Namely, stimulus meaning is a good approximation to meaning, as it is intuitively understood. However - Quine argues - if the linguist assigns the term 'Gavagai' to rabbits, it does not mean that the native could not use that term to refer to a 'rabbit-stage' or a 'rabbit-phase'. If this were so, 'Gavagai' could refer, for example, to an 'undetached rabbit part'. According to the Quinean thesis of inscrutability of reference, equally correct translation manuals might translate the same words using completely different references. Therefore, as White points out, the difficulty arises because we can associate 'Gavagai', construed as a term, with two very different terms in English and preserve the stimulus meaning of 'Gavagai' construed as a one-word sentence. Thus, White explores whether non-trivial examples of indeterminacy are achievable by considering some objections to the appeal to verbal dispositions in characterising meaning and offers an alternative framework.

In 'Quine and the Contemporary Debate on Mindreading', Giancarlo Zanet explores the main features of Quine's account of mindreading within the current debate between theory-theorists, rationality-theorists, and hybrid-theorists. The concern is with the broad issue of how to characterize the way we understand people and how we attribute to them propositional attitudes (i.e. beliefs, desires, and intentions). Moreover, he points out that the role that folk psychology plays in Quine's philosophy is crucial. Such a role enlightens the difference between Quine and Davidson on rationality. According to Zanet, a theory of rationality can be captured in a Quinean perspective if we take him as a proponent of a kind of hybrid theory, a blend of theory-theory and simulation. In conclusion, he proposes a blend of rationality-based and hybrid view-based strategies to explain mindreading in a Quinean context.

We would like to conclude this brief introduction by thanking the authors of the papers collected in this volume for their willingness to cooperate during the whole review process. We also thank all the participants at the conference "Word and Object, 50 years later", the Organising Committee (Marianna Antonutti Marfori, Daniele Santoro, Stefano Vaselli, Pierluigi Graziani, Carlo Tatasciore, Stefano Poggi and the Italian Society for Philosophy) and the Scientific Committee (Massimiliano Carrara, Carlo Cellucci, Roberto Cordeschi, Mario De Caro, Leon Horsten, Teresa Marques, Marco Santambrogio, Celia Teixeira). We are grateful to the Editorial Committee of Disputatio, the editors Teresa Marques and João Branquinho, for all the support given to the publication of this volume. Last but not least, we profoundly appreciate the efforts of the referees in reviewing the papers. Without their help, this special issue would not exist.

Francesca Ervas Dipartimento di Scienze Pedagogiche e Filosofiche Facoltà di Scienze della Formazione, Via Is Mirrionis, 1 POR Sardegna FSE 2007-2013 - L.R. 7/2007 09123 – Cagliari, Italy Vera Tripodi Departament de Lògica, Història i Filosofia de la Ciència Facultat de Filosofia, Montalegre, 6-8, 4ª planta 08001 – Barcelona, Spain