Interlingvistikaj Kajeroj

"Word and Object" 50 Years Later

Paolo Valore

In the fifty years of the publication of *Word and Object*, an international conference was held in Rome on the 28th and 29th of May 2010, to celebrate one of America's most famous and influential philosophers and mathematicians: W.V.O. Quine. The conference was sponsored by the University of Rome "La Sapienza", APhEx (Analytical and Philosophical Explanation), SFI (Società Filosofica Italiana) and SIFA (Società Italiana Filosofia Analitica).

The first day started with the Plenary Session, in which Stephen L. White (Tufts University, Medford, US), talked about "Indeterminacy of Translation: Fifty Years Later". According to Quine, when translation is concerned, the only objective facts are those that make up the overall pattern of associations of sentences with one another and with nonverbal stimulation. The *Gavagai* example is constructed as a one-word sentence that would have the same stimulus meaning in two very different translations; the problem occurs when we try to equate terms in the language being translated and our own. Since Quine thinks that the physical disposition to respond are the only objective facts and that they are exhausted by stimulus meaning, he concludes that there is indeterminacy. White thus considered someone who uses "bachelor" as an observational term example to be applied on the basis of an observational gestalt; he would mean what we mean but he would think he has some clairvoyant insight as to who is and who is not a bachelor. On the basis of the evidence Quine allows, it seems that all the questions we would be allowed to ask, as translators, to determine the correct hypothesis might be inconclusive. Recalling the Plus/Quus example, White then discussed Kripke's arguments that (contrary to what Quine assumes) dispositions cannot provide the basis for an account of meaning: a normativity argument - dispositions are a matter of what we will do, but meaning is a matter of what we should do - and a finites argument - our dispositions are finite, since our brains are finite. White suggested an alternative framework to Quine or Kripke, starting with a response to Kripke providing an analogy between the skepticism about meaning and Hume's epistemological skepticism about the external world: there is a gap between what one is given in perception and any (a posteriori) proposition about the external world, a gap that can only be bridged by an inference; hence we can never be rationally justified in preferring any hypothesis about the external causes of our perceptual experience over any other. Hume's argument leads to meaning skepticism: in order for our words to be meaningful they must - in addiction - be associated with some extra-linguistic reality to which we have access and, on Humean pictures, they would get their meanings through associations with patterns in our perceptual experience. Thus our words for extralinguistic objects have no grounding except in our present, actual per-

ceptual experience which is too thin basis to ground meaning. The skeptic is cutting off the branch on which he stands. This is a *transcendental argument* for direct or naïve realism - the thesis that we are given (we perceive) some external objects and not in a way that is mediated by any sort or representation. The answer to Krikpe's rule-following skepticism is analogous: if we were really skeptical we could not even describe the finite samples that Krikpe talks about independently of our use of the concepts Kripke wants to call into doubt.

The discussant was Francesca Ervas (Institut Jean Nicod, Paris, France), who pointed out that other Quinean assumptions have to be taked into account to better reply to Krikpe's skepticism. The objective facts are not only those that make up the overall patterns of associations of sentences with nonverbal stimulation; there is also the idea of the theory as a whole and language as a system, with a centre and a periphery. The translation occurs in holistic perspective. Therefor Kripke's Plus/Quus example is unlikely to be tracked within every translation manual. She also made some remarks about the Quinean notion of translation equivalence which, according to Ervas, has to be abandoned in order to better underpin a more basic notion of "know how", a deeper, pragmatic agreement among speakers.

Manon Schotman (University of Amsterdam, NL), with "Radical Translation and Radical Interpretation: Radically Different" argued that, Quine's radical translation and Davidson's radical interpretation, that are generally assumed to be somewhat different but compatible, are far more different than is generally assumed, both in the goals they pursue and in the philosophical stance they take. Quine's radical translation is a hypothetical situation, a means for bringing to light the ontological indeterminacy of translation. She claimed that Quine's behaviourism is simply a special case of Quine's empiricism (in perceiving language, the information we receive through our senses is mostly information about behaviour, as opposed to information that reports what goes on inside another person's head). Davidson's version of what he took to be Quine's enterprise is a means for obtaining a theory of meaning that is presuppositionless. Following Schotman, Davidson took Quine's behaviourism for methodological behaviourism and the indeterminacy of translation for an epistemological theory, and as a consequence of this misunderstanding, rejected it.

Frederique Janssen-Lauret (Archè, University of St. Andrews, UK), with "Name and Object: Quinean Descriptivism and Ontological Commitment" aimed to explore a seemingly forgotten challenge, based on the work of Barcan Marcus: the problem of proper names. The ontologically committing expressions of a theory appear to include both reference by means of proper names - mentioning things by name - and existence claims - quantifying-over. Quine contends that the former reduce to the latter. Proper names are uniquely identifying definite descriptions, analysed away *à la* Russell. Janssen-Lauret claimed that Quine's theory of names is untenable. Barcan Marcus turns the Quinean criterion on its head, taking directly referential proper names, known as tags, to be the only committing expressions, and opting for substitutional quantifiers: devoid of commitment, their truth to be explained in terms of the truth of substitution instances. Anyway, Janssen-Lauret considered Barcan Marcus's interpretation of quantification limiting (since it reduces quantified phrases to lists of substitution instances, and since names must be enumerable, it is unsuitable for non-enumerable domains). According to Janssen-Lauret, a hybrid criterion of commitment would then be needed, combining objectual quantification and direct reference: to be is to be the value of a variable, or the referent of a name. The problem of empty names, which Quine feared would be committing unless paraphrased away, is given a new solution in terms of Barcan Marcus's idea of a functional assignment of names to objects.

Andrea Sereni (University Vita-Salute San Raffaele, Milan, Italy) and Jacob Bush (University of Aarhus, Denmark), talked about "Indispensability Arguments and their Quinean Heritage". The Indispensability Argument for mathematical Platonism argues from the indispensability of mathematics in current science to the conclusion that mathematical entities exist. Many different versions are available, though all participants in the debate trace their own version back to Quine. Sereni and Bush presented some of the most discussed versions of the Indispensability Argument, lined up in a sort of continuum, starting with a minimal argument, with a minimal set of premises, and reaching another minimal argument, relevantly different form the first, through the progressive subtraction or addition of premises. They also offered their own versions of the two minimal arguments and pointed out how the two extremes of the virtual continuum are representative of two intertwined strands in the debate on the Indispensability Argument: the "logical point of view" (indispensability is understood in terms of the expressive power of theories) and the "theoretical contribution point of view" (mathematical entities contribute to scientific theories in relevantly similar ways as do theoretical entities).

Robert M. Farley (University of Illinois at Chicago, US), with "Quine's Indispensability Argument", followed Quine's argument for mathematical realism from quantification to existence, aiming to explain how this argument comports with Quine's philosophical project generally and how the premises fit within (and are supported by) Quine's commitments to naturalism and holism. He then considered the differences between the brand of mathematical realism bought by Quine's argument and the view held by more traditional realists like Gödel. Farley claimed that Quine's rejection of modality and quantification into opaque contexts set him apart from nearly all prior mathematical realists. Finally, he considered a famous objection to the indispensability argument (realized in the form of Hartry Field's fictionalism) and reconstructed some responses on behalf of Quine.

The afternoon started with the second plenary Session, in which Cesare Cozzo ('La Sapienza' University of Rome, Italy) talked about "Quine's argument for meaning holism". Starting from Putnam's *Meaning Holism*, in which Putnam draws an inference from the epistemological holism [EH] to the meaning holism [MH] (sentences are meaningful only in the whole system), Cozzo asked if we can avoid this inference, as he judged EH to be legitimate, unlike MH: while MH conflicts with our pre-theoretical criteria of understanding, EH is simply a fact. In order to avoid the inference, he defined two kinds of properties of an expression: meaning properties (MPs) and epistemic properties (EPs) and three different version of EH. *a*) The first one is Quine's thesis: the empirical content of a statement cannot be determinate in isolation, but only together with the totality of the system. Cozzo judged Quine's thesis onesided, as Quine considered only the empirical content; but we can infer MH from Quine's thesis with an additional premise, namely empiricist verificationism: meaning is empirical content (T1). If empirical content is holistic and if we add T1, the meaning is holistic. But there are other formulations and we can add a weaker additional premise, namely the connection between meaning and epistemic value (T2) and, according to Cozzo, every adequate theory of meaning ought to accept this principle. *b*) The second version is extreme EH: *all* EPs requires the whole epistemic context. If we accept extreme EH and T2, we get MH. To avoid this, we should reject the extreme EH: it assumes a notion of *total dependence* and what we have to employ is a *relevant portion* of the epistemic context, in order to justify a particular EP (and the relevant portion is also relative). *c*) The third version is moderate EH: just *some* EP requires part of the whole epistemic context and that seems to be the case. Cozzo wondered if we can accept this third version without falling into MH. We have here a demarcation problem between EPs and, in order to solve this, Cozzo introduced the notion of primi-

tive EPs (properties such that competent speakers normally use in such a way that they neither acknowledge the possibility nor the need of giving a justification and consider any deviation as indicating a lack of understanding). Primitive EPs do not depend on the epistemic context and are not affected by moderate EH. But T2 and the thesis on constitutive properties are not enough for we have to consider presupposition as another way in which an expression can depend from another expression. The solution for the main problem requires then: T2, the thesis on constitutive properties, a relation of a presupposition which satisfies some requirement (it is connected and not symmetric), a theory that must be consistent with the facts of moderate EH. In conclusion, he defended an "epistemic conception of meaning", dropping both the requirements of the justificationist (that only some of the primitive EPs are meaning constitutive and that non-constitutive EPs should be justified by grounding them on the constitutive properties) and adopting not only the thesis on constitutive properties but also the thesis that *all* primitive EPs are meaning- constitutive.

The discussant, Daniele Santoro (LUISS, Rome, Italy), discussed some issues in relation of the definition of primitive EPs: he presented a case in which it seems that the presupposition can also be a symmetric relation. He then focused on the notion of "acceptance" and the normative bearing connected to "meaning". In conclusion, he recalled the case of analyticity and the question of the *a priori*.

Anna Ciaunica (University of Burgundy, France) presented the talk "Back to Gaps! - Naturalizing the Psychophysical Link". Quine famously held that philosophy was continuous with science and one might claim that a naturalized epistemology underlies a naturalized ontology. If so, how then to interpret the fact that the psychophysical link *is* a problem? Cianuca defended the idea that the so-called "psychophysical gap" separating consciousness and its neural support should not be considered as a sort of "Final Frontier" for scientific explanation, but merely as a *natural* kind of gap: according to Stroud and Dupré what we need is a new "expansive" definition of naturalism if we want to say something philosophically interesting about human mind. Thus, the adventure of naturalization continues, but in a more sophisticate way: it is the very existence of gaps in the core of developments in today's natural science which invites to consider consciousness as a legitimate and fully recognized member of the natural world.

Giancarlo Zanet (University of Palermo, Italy) presented the talk "Quine and the Contemporary Debate on Mindreading". Contemporary debate on mindreading features, at least, three different theoretical options to answer: theory-theory of mind, simulation theory, and rationality theory. It is almost becoming a shared view that a good answer to the above questions can be afforded by a *hybrid view*, a blend of theory-theory and simulation. But, curiously enough, both theorists like Goldman (who defends a *hybrid view* in which simulation plays a major role) and rationality theorists (Davidson and Dennett) refer to Quine as a predecessor. Zanet aimed to answer some different questions about Quine that emerges from the contemporary debate on mindreading: *a*) which role folk psychology has to play according to Quine? *b*) was Quine a simulation theorist? did Quine influence simulation theorists? *c*) was Quine a rationality theorist? is Quine account completely assimilable to those of Davidson or Dennett on this issue? are there crucial differences that need to be pointed out? On the score of the answers to these questions, he finally tried to suggest a Quinean inspired blend of rationality-based and *hybrid view*-based strategies to explain mindreading.

The contribute presented by Francesca Boccuni (University of Padua, Italy) was "Quine's Sheep: The Case of Second-Order Logic". According to Quine, second-order logic (SOL) is set-theory in disguise. This claim heavily relies on the following premises: Quine's theory of ontological commitment; Quine's preferences of classes over proper-

ties; the fact that set-theoretic semantics has been the standard interpretation of SOL for a considerable amount of time. It has been shown that all of these premises may be disputed on solid grounds. Since plural logic (PL) and SOL are inter-definable, they seem to provide equal alternatives and rely merely on ontological (or at least broadly philosophical) preferences. Boccuni addressed a non-ontological argument for a distinction between PL and SOL grounded on their different mathematical applicability and presented a second-order predicative Fregean set-theory augmented with PL, showing that its mathematical strength is significantly different from that of the same second-order predicative set-theory augmented with SOL. The conclusion was that, even though there are neither (Quinean) syntactic nor semantic tests to decide for a set-theoretic interpretation as opposed to a plural interpretation of second-order quantification (or viceversa) and in spite of the inter-definability of PL and SOL, some substantial differences between them may be found in their applicability to mathematical discourse, in particular in the different mathematical strengths of (some) second-order set-theories.

The second day started with the Plenary Session, in which Alberto Voltolini (University of Turin, Italy), with "All the existences that there are", contributed to the longstanding debate on existence: is existence a first-order [FO] or a second-order [SO] property? Meinongians prefer the first option, perhaps Kantians; definitely both Fregeans and Russellians like the second one. According to Voltolini, both parties are partially right and partially wrong and there are (at least): one SO property [a] and two FO properties [b]. a) *Qua* SO property, existence is the property for a FO property to be instantiated; this SO property is existential for the relevant SO predicate expressing it is mobilized in ontological questions, questions on whether certain metaphysical kinds are instantiated. b) The formal FO property [b1] is trivial: "to be a thing" or "to be identical with something" is existence in logical sense. For given its formality, this property is universal (not informative). The substantive FO property/ies [b2] is/are not trivial; candidates are existence *tout court* [b2i] and existence in a physical or spatiotemporal sense [b2ii] (those endorsing b2i often assume that b2ii is a species of b2i, together with existence in a non- spatiotemporal sense [b2iii]). According to Voltolini, we need both FO properties (b1 and b2) as existential ones in order to understand the point in ontological debate. For example, in the debate between physicalists (there are only physical things) and non-physicalists (there are things which do not exist in physical sense), the physicalists assume that the physical existence is universal, the non-physicalists that the universal FO property is the formal one; in the debate between Quineans (there are only existent things) and Meinongians (there are things which do not exist), the Quineans assume that existence *tout court* is universal, Meinongians that the universal FO property is the formal one; and so on. Taking the substantive FO property/ies as non-universal enables us to perform a contextual quantifier restriction. Another advantage is that we can play with all the properties we have in mind (for example: "there are fictional objects" is true if the quantifier occurs unrestricted, true if the quantifier occurs restricted to the existents, yet false if quantifier occurs restricted to the spatiotemporal existence). A third advantage is that it allows us to make existential comparison between individuals (for example: "Unlike Prince Charles, Hamlet does not exist" is true only if "existence" is spatiotemporal existence). Finally, he made some remarks on Meinongianism and empty names: allowing for substantive non-universal FO property/ies does not entail that Meinongians have to deny that there are empty directly referential terms; it simply means that the few true negative existential involving such terms have a metalinguistic reading ("does not refer"). Voltolini considered also some merely apparent counterevidences again the metalinguistic thesis and Moltmanns' objection that one cannot get any substantial philosophical thesis on existence by checking how such locutions are used in the natural languages, for they are terribly

vague.

The Discussant was Andrea Borghini (Holy Cross, Massachusetts, US). He was very sympathetic with Voltolini's presentation: more than one property is involved here, but he wondered if we can have one property that does all the job in order to accommodate the ontological disagreement and regard other uses as a sort of subclasses of that property. He asked a clarification about the choice of considering existence a property rather than a predicate. He then considered the ontological commitment: nothing constrains us to interpret an existential sentence as expressing a SO or a FO property, for language can suggest but not force a move. Borghini showed different interpretations of the same sentence as involving SO or FO predicate and he tried to show that FO substantive properties can be interpreted as SO properties (the property of "being spatiotemporally related" or "being *tout court*" is instantiated) and even FO formal properties may be interpreted as a SO property (the property "being identical with" is instantiated). Finally he made some remarks about the thesis that existence as a SO property entails descriptivism, the notion of "*true* negative existantials involving directly referential terms" and the relation between existence and identity.

Juan Josè Lara Peñaranda (University Of Murcia, Spain) presented "Inscrutability of Reference, Ontological Relativism and Ontological Underdetermination": the inscrutability of reference has been normally linked with that of ontological relativity and Quine himself considered both elements of the thesis so inextricably linked that they were interchangeable for him. Lara Peñaranda defended a partially Davidsonian reading of the thesis, such that it does not have (in part) the consequence of ontological relativity: proxy functions do not offer different ontologies, but different descriptions of the same ontology. If this is correct, as long as we speak about the entities of our ordinary environment, inscrutability of reference is a linguistic thesis about the impossibility of fixing univocally the reference of our terms, but it does not have ontological consequences. On the other hand, inscrutability does have a consequence for Quine's criterion of ontological commitment but what inscrutability shows, and proxy functions prove, is that it is possible to consider a number of different entities for the variables of a discourse to range over. Lara Peñaranda also pointed out the limitations of this Davidsonian conception of inscrutability when we consider the case of different scientific theories: when two empirically correct theories are not inter-convertible via reconstruction of predicates, i.e., where no proxy has been found in order to interconvert them, it must be considered that both theories have different ontologies. Thus, when scientific posits about the inobservable part of nature come into play, it will be probable - given the complexity of mature theories and the number of its extremely distant from observation posits - that they depart in ontology, in spite of Quine's attempts to do so, appealing now to a "sectarian line", now to an "ecumenical one".

Antti Keskinen (University of Tampere, Finland), with "Quine's Critique of Modal Logic and His Conception of Objects" considered Quine's critique of quantified alethic modal logic from the perspective of his epistemological conception of objects. Quine argues that the notion of a necessary trait of an object makes sense only as relative to one or another linguistic specification of the object, if at all, and that this is incompatible with binding a variable in the scope of a modal operator with a quantifier lying outside that scope: quantified modal logic requires that the distinction between the necessary (essential) and the contingent (accidental) traits of an object makes sense independently of any assumed linguistic specification of the object. Nowadays it is rather widely held in the philosophical community that Quine's critique of quantified modal logic has been satisfactorily answered (e.g. by Dagfinn Føllesdal with a non-descriptivist theory of singular reference), but Keskinen argued that when Quine's critique of quantified modal logic is

examined from the point of view of his epistemological conception of objects, it is seen how his epistemology supports the critique. According to Quine's epistemology, all objects are posits which depend for their existence and identity on the theory in which they are posited; objects themselves are inseparable from descriptive classifications made by means of the predicates which appear in the sentences of the theory and, in Keskinen's view, the referencetheoretic solution to Quine's critique, proposed by Føllesdal and others, is unacceptable from the point of view of Quine's philosophy because that solution involves a view of objects as theoryindependent in a way which is incompatible with Quine's epistemological conception of objects.

Gabriel Târziu (University of Bucharest, Romania), with "Quine's Way to Realism about Mathematics", draw the attention to the ontological status of mathematical entities and the so-called "indispensability argument" usually attributed to Quine. He analyzed some of the formulations of the argument to see which one of them (if any) is closer to what can be taken as "Quine's indispensability argument" and then focused on the criticism coming from the nominalists. According to Târziu, the realists are in a better position than we tend to think: they don't have to use, for their argument, any of the premises which have been lately under a sustained attack. Even so, Târziu claimed that the realists face big difficulties when they try to use an argument of indispensability in order to sustain their position. For this it is sufficient to draw the attention upon a problem quite neglected in recent philosophy of mathematics: the problem of the applicability of mathematics.

Marianna Antonutti (University of Bristol, UK), contributed with "Naturalising Mathematics: A Critical Look at the Quine-Maddy Debate". According to Quinean scientific naturalism and the so-called Quine-Putnam indispensability argument, mathematics is part of our overall theory of the world and, as such, is continuous with science both on the ontological and methodological level. As a consequence, Quine rejects unapplied mathematics as recreational. This implies a strong revisionary attitude towards mathematics. Maddy, among others, argues against such an attitude on the basis of both ontological and methodological considerations: (i) confirmation does not holistically extend across different theories that are part of our overall best theory of the world, and more specifically ontological commitment does not extend from scientific to mathematical entities; (ii) mathematics does not proceed through scientific method, but has its own distinctive methods and goals and it should be considered as a whole, and understood and evaluated in its own terms and according to its own standards. In particular, Maddy rejects the idea of the applicability of mathematics as a guide to mathematical ontology. Antonutti presented her own version of an objection to Maddy that has first been made by Dieterle (if mathematics is independent from scientific standards, it will be on a par with lots of other intellectual enterprises whose results we would count as pseudo-science), also acknowledging Maddy's reply to Dieterle. Antonutti's aim was to assess whether Maddy's arguments provide a viable way of combining Quinean scientific naturalism and a non-revisionary stance towards mathematical practice, distinguishing theoretical and ontological indispensability of mathematics, and appealing only to the former to explain the role of mathematics in our overall theory of the world.

About the author / Pri la aŭtoro

Contact address / Kontaktadreso

Paolo Valore
Università degli Studi di Milano, Italia
Facoltà di Lettere e Filosofia
Dipartimento di Filosofia
Via Festa del Perdono 7
20122 - Milano - Italia
Email / Retadreso: paolo.valore@unimi.it.
Web / Retejo: http://dipartimento.filosofia.unimi.it/index.php/paolo-valore.
ResearcherID: A-1822-2010

Copyright