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RITA BRUSCHI  
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a bibliographic guide

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RITA BRUSCHI

WILLARD VAN ORMAN QUINE:  
A BIBLIOGRAPHIC GUIDE



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*Ai miei genitori*



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## PRESENTAZIONE

*Il pensiero di Willard Van Orman Quine ha ormai assunto un ruolo essenziale all'interno di una vasta area di indagine in cui confluiscono molteplici interessi: dalla logica alla teoria della conoscenza, dalla filosofia del linguaggio all'epistemologia. Le analisi di questo autore sono all'origine di profondi ripensamenti intervenuti nella formulazione di concetti fondamentali della riflessione filosofica e linguistica, come per esempio quelli di analiticità, significato, teoria. Si capisce allora come l'approntamento di una bibliografia sistematica dedicata a questo autore rappresenti un importante contributo alla ricostruzione di un momento fondamentale del dibattito filosofico contemporaneo.*

*La dottoressa Bruschi ha svolto questo compito con notevole precisione filosofica e altrettanto grande sensibilità critica. La bibliografia degli scritti di Quine si raccomanda per la sua completezza, mentre la parte dedicata ai saggi su questo autore, ai dibattiti che le sue posizioni hanno sollevato, ai vivaci scambi di vedute che non di rado hanno polarizzato l'attenzione del mondo filosofico, contiene anche, nella maggior parte dei casi, utilissime indicazioni sui contenuti.*

*La terza parte del lavoro è costituita da un indice sistematico a molteplici chiavi di lettura, che rappresenta certamente un originale e prezioso strumento di lavoro di sicuro interesse per lo studioso. I risultati della ricerca, infine, sono preceduti da un saggio introduttivo che costituisce un'esposizione sintetica e al tempo stesso completa e approfondita dell'itinerario filosofico di Quine.*

*La commissione raccomanda quindi caldamente la pubblicazione di questo lavoro nella collana di Facoltà.*

CORRADO MANGIONE  
ANDREA BONOMI  
GIULIO GIORELLO  
GIOVANNI ORLANDI



## PREFACE

*I am overwhelmed by the quantity of publications about my work that Dr. Bruschi has shown to exist. I was aware of only a portion and familiar with less, for I have done poorly by my commentators and critics. I am thankful indeed for so much recognition, however sharp may be the divergence of views.*

*I am grateful to Dr. Bruschi for choosing to devote her time and scholarly talents so unstintingly to this compilation, and to the publisher for deeming a Quine bibliography sufficiently useful to scholars to warrant a book. That the bustle of scholarly activity about my writings may continue is not only my pious hope, but evidently the publisher's expectation and Dr. Bruschi's as well. Her exhaustive listings and meticulous synopses should encourage that activity, for they can spare the scholar much searching of libraries and occasional duplication of anticipated arguments, as well as suggesting new lines for progress or attack.*

Harvard, 9 July 1984

W. V. QUINE





## INTRODUCTION

This work is the result of an interest born some years ago while writing my degree thesis under the guidance of Professor Corrado Mangione of the University of Milan.

The subject of the thesis was the examination of various aspects of the thoughts of W. Van Orman Quine, an author into whom, to confirm that interest, I have since researched.

I had deeply examined several subjects and consequently extended my knowledge of discussion on this author with reference to various themes which he considers. Thus, I constructed the working tools which have resulted, amongst other things, in the collection of a highly impressive mass of bibliographic data.

This guide is thus proposed as a result of the work done from the starting point of the need to bring together and organise the output on Quine. It aims to offer a manageable instrument which gives multiple modes of access to the relevant existing publications. This work is intended for all those who are studying Quine, or, in a wider perspective, the history of debate on the philosophy of language in this century.

Whether one is interested in philosophy used also as an attempt to understand the dynamics of scientific knowledge, or in logic, one cannot but be interested in Quine. It is appropriate to say that his contributions are universally well-known and their relevance it could be said enormous, even fifty years after the publication of his first article. His writings have given rise to a debate which, as this work documents, has involved up to present day scholars from all over the world.

\* \* \*

Born in Ohio in 1908. Quine took his degree in Mathematics (1930) and then attained a Ph. D. in Philosophy (1932) under the guidance of A. N. Whitehead. He came to Europe immediately afterwards and studied in Vienna, Warsaw (where he met Tarski, Lesniewski and Lukasiewicz and where he started his first book *A System of Logistic* [1934]), and Prague.

Here he met R. Carnap, who was working on *Logische Syntax*. With Carnap he started a warm friendship which was also an opportunity for study, and for discussion which delineated the field of their long-term interest. Despite the deep divisions which separated them, the influence of Carnap makes him considered not only as Quine's teacher but also as, perhaps, the most important interlocutor of Quine, even in later years.

We can define thus the progress of Quine's research: mathematics and philosophy meet in the critical thought on the scientific significance of logic, approached not only from its, let us say, technical aspects, but also from the standpoint of the ontological and gnoseological problems which are implied.

The contributions of Quine in the field of logical mathematics are widely recognised. With reference to set theory we are indebted to him for the solution that, introducing specific restrictions in the field of admissible entities to the theory, is capable of overcoming the disadvantages of the Russell theory of types, avoiding the problem of paradoxes.

On the other hand his work represents a connection of the neo-empiricist epistemological European traditions and American pragmatism. Thus, it becomes even more interesting in so far as it lends itself to throwing light on the various distinctions assumed, in different cultural contexts, from a perspective in which the analysis of language represents one of the fundamental directions of research.

Quine's viewpoint, in addressing the specific problem of language and its meaning, finds common ground with the attitude of Frege and Russell: note the distinction between meaning and reference, the theory of descriptions, and the problem of the existence of abstract entities.

A fundamental factor in Quine's thought is the confirmed tendency to strictly limit the acknowledgement of abstract entities. From this is born the need to do without meanings as they are considered in Plato-

nism or semantic mentalism — as ideal entities of a no more clearly specified nature, or as ideas and concepts in the mind of a speaker.

Quine presents an elaborate theoretical framework, capable of explaining the functioning of a language and its meaning from another point of view. The theory he presents interprets the meaning of a word or an expression in terms of stimuli and of dispositions to provoke certain responses. In this theory, together with the influence of Deweyan pragmatism one can identify the need for a behaviourist analysis of linguistic situations. It follows that, since the production of language is conditioned by an external factor — sensory stimuli —, we can use the concept of meaning in an empirically acceptable way, only to the extent to which it can be characterised in terms of disposition to behaviour.

The intention is to succeed in explaining, with the aid of empirical semantics, all the various problematical areas on which philosophical thought on language has concentrated. The analysis of the notions of synonymy and analyticity, for example, the choice of language in which to explain the results of scientific research and the ontological extent of logical discourse, to mention but a few.

Quine, although working within the horizons of neoempiricism, subjected the theories of this current to radical revision. He demonstrated, for example, how the key concepts of the theory of meaning were definable only one in terms of the other, thus forcing the logical positivists to clarify their ambiguous semantic formulations. One cannot but recognise the value of having provoked discussion of concepts which, although fundamentally important to mainly contemporary epistemology, were often taken for granted or, anyway, were not examined with sufficient thoroughness.

I think it interesting to trace out these points following the development of Quine's research by way of a report, however brief, on some of his most important works.

In the decade 1943-53 we find a considerable part of Quine's work relating to problems of the philosophy of language.

*Notes on Existence and Necessity* appeared in 1943, *On what there is* in 1948, *Semantics and Abstract Objects* together with *Two Dogmas* in 1951. The collection of essays *From a Logical Point of View* was published in 1953.

Quine accepts and confirms the distinction adopted by Frege be-

tween the meaning and reference of words: « substantives can be used indesignatively without depriving them of meaning<sup>1</sup> ».

By freeing ourselves from the view that the meaning of a singular term presupposes an entity specified by that term, we resolve the so-called tangle of 'Plato's beard'. Nonbeing must, in some way, be — otherwise what is it that there is not? If we say 'Pegasus is not' the nonbeing of Pegasus must, in some way, be. Therefore, one is forced to imagine an entity referred to as Pegasus. Quine's answer is that one needs to make a clear distinction between the object denoted as Pegasus and the meaning of the word 'Pegasus': « a singular term need not name to be significant<sup>2</sup> ».

With regard to general terms the situation is in some ways different. From the semantic point of view the difference between singular and general terms is approximately that the former refer to a single object, however complex or diffuse, « while a general term is true of each, severally, of any number of objects<sup>3</sup> ».

We think of 'Pegasus' as a singular term although it does not refer to a genuinely existing referent. On the other hand, we think of 'natural earth satellite' as a general term although it refers to a single object, in that, according to general thought we intend to refer, by 'Pegasus' to a single object, while not intending the specific reference of 'natural earth satellite' as is implied by that term.

Singular and general terms must be further distinguished by their grammatical role — that of predication. Predication links a general term and a singular one in such a way as to form a statement which is true to the extent that general term is true with respect to the object, if there is one, to which the singular term is referred. We can treat the noun, adjective and verb simply as variant forms of a general term. This does not aim to denote entity but is true for certain entities, and the class of all entities for which a general term is true, is called the range of this term.

Quine found an ally in Frege: « the tendency to confuse meaning with reference is the one which Frege took pains to combat (...) Frege kept meaning and reference sharply separated in all cases. He construed

<sup>1</sup> *Notes on Existence and Necessity*, « The Journal of Philosophy », XL (1943), p. 118.

<sup>2</sup> *From a Logical Point of View*, New York, Harper Torchbooks, 1961<sup>2</sup>, p. 9.

<sup>3</sup> *Word and Object*, Cambridge, MIT Press, 1960, pp. 90-91.

a general term as *naming* its extension — the class of all things of which the term is true — and he construed a statement as naming its truth value. On the other hand, he took the meaning (*Sinn*) of a statement to be the proposition, this being analogous to the intension or idea which is the meaning of a general term. For singular terms, likewise, he recognized meanings, distinct from the objects named<sup>4</sup> ».

Quine, however, wants to thoroughly examine this distinction, and proposes an independent denomination for the study of each area: the theory of meaning and the theory of reference.

Frege treats general terms and statements as singular terms as each is the name of a single entity (a class or truth value) but this leads to an excessive broadening out of the category of singular terms. Quine, on the other hand, feels that once separation has happened, it is not necessary to look for a specific object to ensure meaning. A general term has its own range (the class of all things of which it is true) and a statement has its truth value. However « there is no need to treat the general term as a name of its extension, nor the statement as a name of its truth value. Names can be formed for classes and for truth values, as for anything else; but I prefer not to regard the general terms and statements as names at all<sup>5</sup> ».

To clarify Quine's points about designation, let us go on to examine language of the first order.

The truth value of a quantified statement depends not only on the meaning of the assertion to which the quantifier is applied but also on the choice of the universe in relation to which the quantifier is interpreted. The universe selected to interpret the quantifier is the range of values of the variables and the entities of the universe are the values of the quantifying variables.

Generally speaking, entities are assumed by a theory if, and only if, they have to count among the values of bound variables (so that the statement of the theory are true) that is to say, if they have to be part of the universe which determines the construction of the quantifiers.

Translating a theory into a language of the first order also helps to clarify its ontological limits: the objects which the theory considers to be existent are precisely those on which the quantifiers vary. It

<sup>4</sup> *Semantics and abstract objects*, « Proceedings of the American Academy of Arts and Sciences », LXXX (1951), p. 90.

<sup>5</sup> Op. cit., pp. 92-93.

follows that a term can be regarded as the name of something only if it can substitute the quantifying variable without leading from truth, to falsity or nonsense.

To say that Frege uses general terms as class names and statements as truth values is like saying that he means to substitute general terms for variables of quantified classes and statements for variables of quantified truth values. This would lead to an erroneous evaluation of the ontological aspect of the question. By saying that some dogs are white we admit white dogs to our universe but we are not committed to recognise any abstract entities such as 'dogness' or the class of white things.

Quine considers general formulation of the theory of reference to be at fault in the way that, as in Frege, it refers prematurely, and quite unnecessarily, to abstract entities.

To get over the problem which crops up with words having no denotation, such as 'Pegasus', Quine goes back to Russell's theory of descriptions in which a term is defined not by giving a direct equivalent but by paraphrase. A description may occur meaningfully even when it does not refer to anything. In the case of Pegasus, we can substitute the description 'the winged horse captured by Belerophonte'. If the concept of Pegasus had been so obscure as to preclude a descriptive phrase we could have said 'the thing which is Pegasus' or 'the thing which pegasises'. « Whatever we say with the help of names can be said in a language which shuns names altogether<sup>6</sup> ».

So, for Quine, to establish ontological extent of whatever discourse we must consider not singular terms, which can be eliminated, but what is placed in the range of values of quantified variables.

So we now move on to the ontological commitments of logic, which is perhaps at the heart of Quine's study.

By 'ontology' Quine means the field of action implied by the reference of logical discourse: in other words he means to emphasize the fact that, at the basis of logical structures we find an ontological field of reference. Every logic theory implies a reference to something which *is* — it is ontologically committed and sets up a relationship between terms and entities.

Following in Russell's footsteps, Quine unloads the weight of re-

<sup>6</sup> *From a Logical Point of View*, cit., p. 13.

ference onto variables bound by quantifiers. The bound variables of a theory's propositions determine minimum ontological extent: being considered an entity means purely and simply being regarded as values of a variable.

By means of this checking criterion of the ontological commitment of a theory, we can consider the various attitudes which may be adopted in a discussion of the philosophy of mathematics. It might be thought that bound variables refer to abstract but existent entities, or to abstract entities which are to be constructed with predetermined elements. Then again, one could deny any ontological reference to variables, considering logic and mathematics as a series of meaningless signs which, however, may have a certain practical application. These three attitudes which correspond respectively to Frege and Russell's logicism, to Poincaré and Brouwer's intuitionism and to Hilbertian formalism, reflect, in turn, according to Quine, realism, conceptualism and nominalism, the main points of view of the medieval ontological argument. The difference between the three attitudes can be traced back to different ontologies that is to the varying width of the field to which bound variables refer.

At the basis of the philosophy of mathematics, in an historical perspective, we find an ontological assumption, the choice of a given conceptual framework, so that the ontological problem can also figure as the problem of the philosophical premise of theories, a premise to be identified and made explicit.

One has to choose between contrasting ontologies in the same way that one chooses a scientific theory or a physical system — that is to say, adopting the simplest conceptual framework to which fragmented areas of experience can be adapted. In this way, the determination of ontology is akin to the determination of a rationally organised pattern structured along empirical lines.

To sum up, from logic we pass to ontology which can be regarded as the sphere of choice of premises on which theories may be founded which, in turn, go back to the 'stream of experience' in which theories are constituted on the basis of pragmatic criteria. As a field of reference for theories, ontology shifts to the empirical plane, on which the conceptual framework is built and from which the formal structures of theories originate.

Quine approaches the matter, in confronting questions of existence in such a way that the presumed demarcation line between speculative

metaphysics and natural sciences is less evident. It is a question of escaping from the dogmas of empiricism by embracing a radical pragmatism.

In accordance with the first dogma it is possible to draw a clear, rigorous distinction between analytical truths and synthetic truths. The second one is the dogma of reductionism — that is to say the belief that each meaningful statement is equivalent to some logical construction based on terms referring to our immediate experience — in other words only propositions which can be reduced to experience are meaningful.

Quine considers two types of analytical truths: those which are true thanks to their logical form (e. g. « no unmarried man is married » which holds true whatever words are put in place of 'man' and 'married') and those which are true by virtue of synonyms substituting synonyms (e. g. bachelor/unmarried: « no bachelor is married »).

The difficulties regarding the notion of analyticity concern propositions of the second type rather than of the first type because in trying to define synonymy another difficulty arises, in that the synonymy required by analyticity consists in the interchangeability of synonyms in a context which continues to be analytical.

It is still possible to say that: « truth in general depends on both language and extralinguistic fact. (...) Thus one is tempted to suppose in general that the truth of a statement is somehow analyzable into a linguistic component and a factual component <sup>7</sup> ».

In some statements the factual component should be lacking, and these are analytical statements, but: « a boundary between analytic and synthetic statements simply has not been drawn. That there is such a distinction to be drawn at all is an unempirical dogma of empiricists, a metaphysical article of faith <sup>8</sup> ».

Quine then brings his criticism to bear on verificationism by which the meaning of an assertion is the empirical method with which it is confirmed or refuted so that an analytical assertion is defined as an assertion verified by whatever method.

This theory demands that each assertion can be reduced to an empirical context. Although it may seem that this denies logic an independent procedure for establishing the meaning of an assertion, actually the empirical reduction of the verificationist theory leads to the

<sup>7</sup> Op. cit., p. 35.

<sup>8</sup> *Ibidem*.



distinction between synthetic propositions and analytical propositions which, as we have noted, are independent of any method of experimental confirmation or rejection.

So the very thing which seemed to suggest a radical reduction of logic to experience introduces a field of logical truths which are completely independent of experimental data, and it is the very impossibility of an empirical reduction of all propositions that gives rise to the sphere of analytical propositions.

The dogma of reductionism is based on the assumption that physical objects (and assertions to which all 'meaningful' statements should be reducible) enjoy privileges when compared to logical ones, for example.

Actually, physical objects are put into the conceptual framework of science as instruments used to predict future experiences in the light of past experiences and they are introduced « as convenient intermediaries — not by definition in terms of experience, but simply as irreducible posits comparable, epistemologically, to the gods of Homer<sup>9</sup> ». It would certainly be a mistake to believe in Homer's gods and not in physical objects, « but in point of epistemological footing the physical objects and the gods differ only in degree and not in kind. (...) The myth of physical objects is epistemologically superior to most in that it has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience<sup>10</sup> ».

The analysis of the theory of verification is carried out with reference to the work of Carnap, *Der logische Aufbau der Welt*. The relationship between a proposition and the conditions in favour or against its confirmation results from a direct recording of immediate experiences, so that every statement is meaningful if it can be translated into a statement, true or false, about immediate experiences. « Radical reductionism, conceived now with statements as units, set itself the task of specifying a sense-datum language and showing how to translate the rest of significant discourse, statement by statement, into it.<sup>11</sup> ». « My countersuggestion (...) is that our statements about the external world

<sup>9</sup> Op. cit., p. 42.

<sup>10</sup> *Ibidem*.

<sup>11</sup> Op. cit., p. 37.

face the tribunal of sense experience not individually but only as a corporate body<sup>12</sup> ».

Quine explains the common roots of the two dogmas of empiricism: he begins by criticising the concept of analyticity and, through the theory of verification, goes on to consider reductionism putting forward in correlation: « The two dogmas are, indeed, at root identical. (...) the truth of statements does obviously depend both upon language and upon extralinguistic fact; and (...) this obvious circumstance carries in its train (...) a feeling that the truth of a statement is somehow analyzable into a linguistic component and a factual component. The factual component must, if we are empiricists, boil down to a range of confirmatory experiences. In the extreme case where the linguistic component is all that matters, a true statement is analytic. But I hope we are now impressed with how stubbornly the distinction between analytic and synthetic has resisted any straightforward drawing<sup>13</sup> ».

The unit of meaning is not, then, the single statement but the theory to which the statement belongs or, going a step further, the totality of all scientific theories, for which it makes no sense to divide the statements into distinct epistemological categories.

Quine sees the whole body of the sciences as a force field in which we can distinguish a centre and a periphery; the statements on the edge are conditioned by non-verbal stimuli whilst those at the centre are theoretical statements whose links with extra-linguistic stimuli consist almost exclusively in the reverberations through the field.

Every change in scientific theories leads to a change in the distribution of the truth values of the statements included in the force field. The peripheral statements are those closest to our own experience and thereby most easily subjected, in terms of contrary experience, to variation in the truth values assigned to them. Instead, the statements at the centre are those less related to direct experience and are therefore saved, if not completely, from the eventuality of easy and frequent modifications. Moreover, because of their very position, they are connected to a greater number of statements which, in turn, the system being a connected whole, must undergo a redistribution of values.

« But the total field is so underdetermined by its boundary conditions, experience, that there is much latitude of choice as to what

<sup>12</sup> Op. cit., p. 39.

<sup>13</sup> Op. cit., pp. 39-40.

statements to reevaluate in the light of any single contrary experience<sup>14</sup> ». As if to say that the sum of our knowledge remains empirically underdetermined.

Quine confirms that the comparison with experience comes not with regard to single statements but to the system in its entirety. This leads to certain circumstances: first of all involving the notion of meaning, since the basic unit of measurement for empirical meaning comes to be science in its totality then we cannot speak no more about the meaning of a single statement. Secondly, no statement is immune to revision: « a recalcitrant experience can (...) be accommodated by any of various alternative reevaluations in various alternative quarters of the total system<sup>15</sup> »; even the mathematical and logical laws can be called into question by a conflict with experience: « in science all is tentative, all admits of revision — right down, (...) to the law of the excluded middle<sup>16</sup> ».

On the basis of these two observations, making distinctions between analytic and synthetic makes no sense. Any proposition, however peripheral, can be deduced from a logical system, just as experience could make us see even the laws of logic at the very centre of the force field in a new light and change them.

In 1960 Quine turned his attention to the ponderous problem of meaning with the work *Word and Object*, destined to open a debate which has yet to be concluded. Obviously we cannot avoid pausing on this subject.

As we have seen in the model of the force field, we can speak of meaning only with regard to the general context of the statements. Quine, however, seeks to isolate in every statement that part of meaning which relates to conditioning by non-verbal stimuli and this he calls 'stimulus-meaning'.

We should consider the class of sensory stimuli which lead either to assent (affirmative stimulus-meaning) or to dissent from (negative stimulus-meaning) statements. The ordered pair of the two defines the stimulus-meaning of the statement.

<sup>14</sup> Op. cit., pp. 40-41.

<sup>15</sup> Op. cit., p. 42.

<sup>16</sup> *The scope and language of science*, « British Journal for the Philosophy of Science », VIII (1957), p. 17.

The stimulus-meaning is defined for all statements in the field and, on the other hand, allows us to disregard the links between the statements, considering them one at a time independently of the whole. In this way the fraction of meaning due to the stimulus can be isolated, the 'net empirical content' of every statement.

The introduction of stimulus-meaning helps Quine to define a particular notion of analyticity called 'analyticity-stimulus', trying, without going back to the original distinction which he rejected, to account for the existence in language of certain types of statement.

A statement has 'stimulus-analyticity' if it is always true in terms of stimulus-meaning, that is if the subject would be affirmed given any type of stimulus.

In the class of stimulus-analytic statements it is not possible to distinguish between factually true statements and statements true due to linguistic convention. This is Quine's real aim, even if it involves again working with statements dependent on stimuli and those completely independent of them.

The redefinition of analyticity as stimulus-analyticity allows us to eliminate viciousness of the argument that a statement is defined as being analytic if it is true independently of the development of the facts, but at the same time this limiting the possibility that certain facts might develop. For example, if we are never able to find a married bachelor it is because we have already given this eventual fact the analyticity that we are still trying to define. Stimulus-analyticity, on the other hand, allows to release the definition of analyticity from this vicious circle. This is because we underline the dependence of the statement not of the facts but of possible stimuli, which do not become delimited in any way.

As far as the connected problem of synonymy is concerned, Quine intends to distinguish between synonymy in the widest sense and synonymy in the narrow sense. The former might be formulated intuitively in these terms: two phrases or words are synonymous when they lead to assent or dissent in a concomitant way. The synonymy meant in a narrow sense (or cognitive synonymy) is, on the contrary, asserted with regard to two propositions if and only if their biconditional is analytic, and for the singular terms if the proposition that asserts their identity is analytical.

The propositions called analytic in the natural language are, for Quine, all those which are logically true. (For example, « Every thing

is the same as itself »), plus others of the type « all the weak are not strong ». To justify the analyticity of propositions like the latter it is often invoked the notion of synonymy maintaining that 'weak' and 'not strong' are synonymous. But how can this synonymy be explained? It is not enough for this to be based on extensional consideration stating that the class of the weak is identical to that of the not strong — because if it were to happen that all rich people also enjoyed longevity whilst noone else did it would not be possible to say that 'rich' and 'long-lived' were synonymous. We have recourse, then, to the notion of necessity — in which two terms are synonymous if the statement that affirms their identity is necessary. But the notion of necessity is usually explained in terms of analyticity and one falls thereby into a vicious circle. This leads Quine, apart from refusing the analytic-synthetic dichotomy, to look for a definition of the synonymy without having recourse to analyticity. To determine the cognitive synonymy of the two terms it is not enough, in fact, to go to a dictionary or to the criterion of interchangeability — in as far as the fact that 'a man not strong' and 'weak' are interchangeable guarantees the truth of the proposition, not analyticity.

The notion of stimulus-meaning helps to define a certain type of synonymy. The statement which has the same stimulus-meaning can be called a stimulus-synonym but Quine considers that: « sameness of stimulus meaning has its shortcomings as a synonymy relation<sup>17</sup> ». Let's look at his reasoning.

Quine posits the case of a linguist who has to translate a tribal language having no previous experience of, nor information about the linguistic behaviour of the subjects. He has to translate the language of the tribe through direct contact with it. At first he would listen to the native speakers, hoping to pick up enough rudiments to form questions in their language. He would point to objects, pronouncing what he believed to be their names, observing whether the natives indicated assent or not.

On other words, the linguist would try to place the relationships of stimulus-synonymy between statements in his own language and statements in the indigenous language.

To do this, however, he needs to be sure of the behaviour of the natives and above all must know which gesture indicates assent and

<sup>17</sup> *Word and Object*, cit., p. 37.

which dissent. He might be able to make a correct translation only by referring to a certain number of hypotheses (analytical hypotheses) since the synonymy relationships of which the translation would consist are placed arbitrarily. That is, the correlation between statements in one language and those in another is made depending on a choice or a series of choices, as they are not deductible from experience.

The translation is necessarily indeterminate because, merely by observing the stimuli that lead to the use of certain verbal expressions, it is not possible to determine if such an expression should be considered a term.

If the natives use the term 'gavagai' every time that we would use 'rabbit', then one would think that 'gavagai' and 'rabbit' had the same stimulus-meaning. But we could equally think that 'gavagai', as opposed to 'rabbit', indicated not so much a rabbit as one of its parts, stages, or even its very 'rabbiness'. The doubt cannot be removed until those elements of the native language corresponding to our articles, pronouns and demonstrative adjectives, plural and singular, that is, our linguistic apparatus of objective reference have been singled out.

« Occasion sentences [i.e. what impose assent or dissent if they are formulated interrogatively after a present stimulus] and stimulus meaning are general coin; terms and reference are local to our conceptual scheme<sup>18</sup> ».

The extreme case of radical translation (that is the translation of a totally unknown language) is used by Quine as a resolving aid to his general hostility towards intensions, semantic mentalism and Platonism.

In fact, to safeguard the traditional notion of meaning, the phenomenon of translation itself is appealed to. It is believed that the meaning is respected by presenting it as the thing that the various translations set out to respect. We have seen, though, how the question of synonymy has no sense unless the question of meaning itself has sense, and it is exactly this which makes for controversy.

In every translation an area of ambiguity exists that excludes the idea that the real aim of the exercise is the finding of 'synonyms' in the normal sense of the word. In radical translation, then, the aim is nothing more than to establish the correlations between the simple enough verbal performances and those non-verbal stimuli that are well enough distinguished.

<sup>18</sup> Op. cit., p. 71.

Translation is in the domain of hypothetical reconstruction because the linguist, in a more or less arbitrary way, has to divide the indigenous statements into relatively short and recurrent elements and then put them into some sort of relationship with words and locutions in his own language. All this whilst undertaking the establishment of a lexicon, starting from which he could begin to translate phrases for which it is impossible to have recourse to direct proof.

The analytical hypotheses of translation constitute the fulcrum of the thesis of the indeterminacy of translation. They cannot definitely be confirmed or refuted by any linguistic evidence. They are the linguist's guiding principles, the main lines along which translations are made. The indeterminacy thesis of translation really asserts that they cannot do without analytical hypotheses of translation and that, given whatever linguistic evidence, there exist incompatible analytical hypotheses which, however, conform to that evidence. Moreover, several translation manuals are possible, by means of which we can obtain different and even contradictory statements starting from the same statement. And as: « there is nothing in meaning that is not in behaviour<sup>19</sup> » and all the manuals are incompatible with each other but compatible with the observable verbal behaviour, we have no factor which allows us to single out and preselect a translation or manual which would lead to a certain translation.

According to Quine, there is no sense in asserting that there is a correct translation — even if we ignore it. For him, as a general principle, there is no such thing as a correct radical translation from one language into another. It is impossible to speak of correct or incorrect translation because « there is not even (...) an objective matter to be right or wrong about<sup>20</sup> ».

The point is, in conclusion, that it is not possible to distinguish translations as 'equally correct' and this is an usual occurrence.

So the choice of an adopted translation depends purely on convention, for example on the simplicity of a manual. A manual of translation is a linguistic 'theory' which, having analytical hypotheses of translations as axioms, puts forward a biunivocal correspondence between the stimulus-meaning of two different languages. In fact, such a theory has the task of accounting for the entirety of the disposition of the subject

<sup>19</sup> *Philosophical progress in language theory*, « *Metaphilosophy* », I (1970), p. 9.

<sup>20</sup> *Word and Object*, cit., p. 73.

to give assent or dissent to statements behind certain extra-linguistic stimuli. Thereby, in a certain sense, it has the task of predicting the attitude of the subject, just as a theory of physics must predict the occurrence of certain events.

The parallelism between theories of physics and manuals of translation is seen by Quine as: « In respect of being under-determined by all possible data, translational synonymy and theoretical physics are indeed alike. The totality of possible observations of nature, made and unmade, is compatible with physical theories that are incompatible with one another. Correspondingly the totality of possible observations of verbal behavior, made and unmade, is compatible with systems of analytical hypotheses of translation that are incompatible with one another<sup>21</sup> ».

But the parallel ceases in as much as: « Though linguistics is of course a part of the theory of nature, the indeterminacy of translation is not just inherited as a special case of the underdetermination of our theory of nature. It is parallel but additional. (...) indeterminacy of translation (...) withstands the whole truth about nature. (...) there is no real question of right choice; there is no fact of the matter even to *within* the acknowledged under-determination of a theory of nature<sup>22</sup> ».

So according to Quine, while it is possible to choose one of the theories compatible with empirical evidence, based on criteria of elegance, simplicity etc., it is not possible to decide on one manual of translation as the most correct, because exercising this choice means recognising the meanings of the words, the entities that allow the identification of a good translation, making each statement to be translated correspond to a 'good translation' — that is, with the same meaning.

We know, by now, how this is refuted by Quine, who rejects the concept of meaning as a mental entity independent of language, and he criticises « the myth of a museum in which the exhibits are meanings and the words are labels<sup>23</sup> ».

For him, it is only possible to speak of meaning in terms of the analysis of manifest verbal behaviour. The indeterminacy of translation

<sup>21</sup> *Reply to Chomsky*, in *Words and Objections*, Davidson and Hintikka (Eds.), Dordrecht, D. Reidel, 1969, pp. 302-303.

<sup>22</sup> *Ibidem*.

<sup>23</sup> *Ontological Relativity and other essays*, New York, Columbia, 1969, p. 27.



is really due to the fact that every manual of translation is underdetermined with respect to every observation of verbal behaviour.

In 1969 a collection of six essays was issued entitled *Ontological Relativity and other essays* in which, along with other subjects, various notions central to *Word and Object* were rediscussed. In particular, the indeterminacy of translation was considered in view of its repercussions in ontology.

According to Quine it is impossible to distinguish reference on a purely ostensive basis; recognising a certain presence (a scene with rabbit) is still not the same as referring to objects. The native and the linguist who give assent to certain phrases can have different referential mechanisms. The objects can be identified in a different way without changing the stimulus-meaning of rabbit one iota, as the reference does not exist independently of an individuation apparatus.

Whilst the stimulus conditions of a statement can constitute sufficient evidence to determine whether it is true or false, to establish the existence of the object it is also necessary to have linguistic mechanisms to single out and quantify it. Ontology is relative, then, as what we have at our disposal is not the sum of sensory impressions and data from which the existence of the object may be inferred but rather the sum of stimuli that lead to assent to or dissent from the statement. Two people can give the same stimulus-meaning to 'rabbit', yet use the term as a predicate of very different types of objects. The two have different ontologies but it makes no sense to ask which of them is true. The ontologies are neither true nor false, though for pragmatic reasons one might be broadly preferable to another.

Reference is then, in the ultimate analysis, inscrutable because the question of what the object to which we refer really is (a rabbit, a stage of a rabbit or something else) has no answer.

Moreover, there may also be indeterminacy of reference without different languages being in play; something independent of translation which already manifests itself 'at home' between speakers of the same linguistic community.

Indeterminacy gets so out of hand that we have to confess we are lacking in any physical proof of the reference of the words we use.

Quine's model makes it difficult to distinguish between the sum of our linguistic knowledge and our knowledge in general.

Let us say, in the meantime that Quine uses the term 'theory' to

indicate the class of all statements which we believe to be true within the bounds of a given item of vocabulary. This attitude is perfectly understandable in the context of his holistic conception by which particular theories only assume meaning alongside our general knowledge of the world.

However, one way of operating the distinction between theory and language is rendered impractical by the very theory of the indeterminacy of translation, which precludes the possibility of expressing a given theory in different languages.

Quine equates a theory with the sum of beliefs of a community in which a given language is spoken — in this way the community's language meets the theory of the community: « when a belief is shared by the whole linguistic community (...) a distinction between language and theory runs into trouble <sup>24</sup> ».

Thus, anyone who speaks a different language dissents from the theory as well — i. e. dissent among speakers is interpreted as a verbal disagreement on the use of words: « rather than charge someone with an altogether absurd belief, we conclude that his use of a crucial word differs from ours. (...) our disagreement with him is verbal rather than factual. (...) The negation of the absurd sentence in question is made to count as a community-wide belief, by cutting the community down to size; and our friend's utterance counts then only as a foreign homophone of the absurd sentence <sup>25</sup> ».

Linguistic deviance thus seems to be inseparable from divergence in theory. A change in the beliefs of a linguistic community is never separated from a change in the use of words.

Basically, Quine believes that the formulation of a deviant logic amounts to an abandonment of operations which are characteristic of our orthodox logic and to the new definition of operations — and not only to the redefinition of those already known. All this because: « there is no residual essence of conjunction and alternation in addition to the sounds and notations and the laws in conformity with which a man uses those sounds and notations <sup>26</sup> ».

A logician who refutes the principle of non-contradiction, for example, no longer attributes the usual meaning to the sign of negation

<sup>24</sup> *Reply to Chomsky*, cit., p. 310.

<sup>25</sup> *Ibidem*.

<sup>26</sup> *Philosophy of Logic*, Englewood, Prentice Hall, 1970, p. 81.

and though he believes he is negating logic, he is actually just changing the subject.

In *Word and Object* Quine puts forward as a hypothesis a case in which certain native speakers accept statements translatable as « p and not-p » as being true. This affirmation is, by our semantic criteria, absurd. How to translate it?

« Wanton translation can make natives sound as queer as one pleases. Better translation imposes our logic upon them (...) »<sup>27</sup>.

Here Quine polemizes with Lévy-Bruhl's<sup>28</sup> doctrine of « prelogical mentalities » in which so-called primitives are seen as having a mentality which is oriented quite differently from ours, and developed in institutions, method of proceedings and beliefs that we manage to interpret and to which we lend unity and coherence only by seeing them as representing a « deviant logic ».

Obviously, a radical translator, in his attempt to lend meaning to verbal and non-verbal behaviour cannot leave out of consideration the introjected cultural models of which orthodox logic itself is part.

In the final analysis, the reasons for choosing one way of translating language as opposed to another depend on the characteristics of *our* linguistic apparatus and not on that of the language to be translated. In fact Quine says, with respect to the different methods at our disposal for correlating two languages, that: « none preferable to another save as favored by a rationalization of the *native* language that is simple and natural to us »<sup>29</sup>.

It is a feature of Quine's style that he picks up the thread of preceding themes and re-works these themes, allowing for development and elaborations. In *The Roots of Reference* (1974) he touches on some of the themes contained in *World and Object* and *Ontological Relativity and Other Essays*.

The aim is to broaden our understanding of reference taking two main subjects into consideration: how we form our hypotheses (the problem of observation and theoretical propositions and how we form our argument on objects (the problem of reference in itself).

<sup>27</sup> *Word and Object*, cit., p. 58.

<sup>28</sup> Cfr. Lévy - Bruhl, *Les fonctions mentales dans les sociétés inférieures*, Paris 1910.

<sup>29</sup> *Ontological Relativity*, cit., p. 5.

When a baby correctly emits the word 'red' or agrees to its use in the presence of a red handkerchief or a tomato, for example, it is impossible to say whether, for him, 'red' is a singular abstract term (the name of the colour) or a general concrete term. The reference is inscrutable: as we have already noted, we cannot establish it without translating a considerable part of the speaker's linguistic apparatus. The baby's and the native speaker's positions are parallel even taking into account the difference that while the baby is learning the language, the native speaker knows his, and so the native speaker's reference is to be defined while the baby's is to be acquired. But for both, there are cases where the truth of the subject is independent of the reference of the expressions used.

Quine is interested in language learning because the best way to study the acquisition of theories is to study the acquisition of the language used to express them. Epistemology must describe the process whereby we pursue scientific knowledge and the history of this acquisition figures as a matter of psychology. So it is a question of showing how the necessary linguistic ability is accumulated.

Quine shows how some of the basic notions of the theory of learning (perception, dispositions, similarity) can be provided by behaviourist psychology which recognises only those mental phenomena which are manifested in behaviour and by materialist psychology which identifies mental entities as physical mechanisms, even if they are not yet understood.

He then moves onto the problem of the genesis of observation sentences, which play a decisive role on the acquisition of language, in supporting scientific theories, in penetrating other languages; mass and general terms and so on.

So the main theme of epistemology comes to be the study of the way we learn to talk about the world.

Quine's work can be thought of as an attempt to recover and re-direct empiricism which, even though it has been unable to deduce science from immediate experience or to rationally reconstruct the scientific discourse, still holds credit for Quine and so we can re-valuate it and re-establish its aim. This consists in describing how we construct our theory of the world, given the evidence of our senses.

Quine suggests that the task of epistemology is to find a factual description of the link between observation and theory or, as he put

it: « between the meager input and the torrential output (...) »<sup>30</sup>. Here, there is a methodological sliding towards naturalism in the sense that this factual description must be realised in the context of empirical psychology. Quine's behaviourism is not exhausted in his considerations of perception and the learning theory but also includes his ideas on semantics.

Theories are linguistic entities, that is to say structures of public statements which belong to public languages. Theories are social phenomena because such are languages: « Language is a social art which we all acquire on the evidence solely of other people's overt behavior under publicly recognizable circumstances »<sup>31</sup>. When thought of in this way, language can be approached through intersubjective research techniques, which are usually characteristic of the natural sciences. Quine expresses this naturalism when he says that: « knowledge, mind, and meaning are part of the same world that they have to do with, and (...) they are to be studied in the same empirical spirit that animates natural science »<sup>32</sup>.

On the other hand, observations are visual, auditory, tactile and olfactory, in other words they are sensory and hence subjective but socially shared. So we should speak of observation sentences rather than of observations.

The relationship between theoretical discourse and merely observation discourse has two aspects, one epistemological and the other semantic. Observation sentences act as evidence in the theories because their public dimension provides a basis for intersubjective agreement. They also play a semantic role because, after all, every attribution of meaning to words is based on perceptible evidence.

The workings of Quine's philosophy are numerous and such as to lend themselves to more than a single reading. This brief introduction, on the other hand, is proposed only to expound — I hope correctly — some themes without embarking on the presentation of a further critical essay on the author, also because the reader will find many of these listed in the text.

I have tried, however, to highlight those which seem the most

<sup>30</sup> Op. cit., p. 83.

<sup>31</sup> Op. cit., p. 26.

<sup>32</sup> *Ibidem*.

characteristic aspects of Quine's thought: the critique of intensions, empirical semantics, behaviourism and naturalism.

Quine's philosophy itself is an attempt to resolve what he considers to be the central problem of epistemology. In this attempt, the crucial position is undoubtedly occupied by naturalism and by behaviourism, closely correlated to language, its meaning and its acquisition.

\* \* \*

We move on to the examination of the characteristics of this guide which intends to be complete, however without arrogating it.

Firstly, completeness in bibliographic research can constitute an inspirational model rather than a concretely achievable goal: the arguments tackled by Quine had, and still have, a resonance and extent which may make the researcher think he has omitted works which, perhaps, had every right to be included.

Secondly, the debate on his thought is clearly more difficult to circumscribe as Quine himself is still alive (circumstance that gives this work an unusual aspect and constitutes one of its more evident, perhaps, characteristics of originality), and he keeps himself absorbed in the life of research and study which has made his presence one of the most important in the philosophical research of the last half century, and therefore continuing his output.

On the other hand, it is not the case here of an ordinary bibliography. My work is not limited to the editing of bibliographic data but, so far as the writings of Quine are concerned, I have tried to provide the reader, for all that directly examined, with an initial orientation on the contents of cited works.

This information offers the user the advantage of being able to proceed with research with more available data as well as the possibility of a more rapid selection of material.

In any case, the abstracts are meant to describe rather than evaluate in that, given the multiplicity of interpretations of Quine's work, it seems most important to leave readers to draw their own conclusions.

Likewise chronological ordering was chosen, which follows the year in which the various writings appeared. It seemed that this arrangement would make it easier to see how Quine's thought was received in an historical perspective.

So far as organising principles are concerned, the obvious selection criterion was that the works would be based on the thought of Quine.

There is a great deal of output on the effect of Quine's reflections on the philosophical process, without however Quine being discussed predominantly or explicitly. Works in which the influence of Quine can be seen in the approach to, or solution of, certain problems, are also numerous; however it is dealing here with works which cannot be in all honesty properly defined as being 'on' Quine.

At any rate, I have tried not to eliminate those materials which could be used for the study of this author, and the application of his thought to other areas and disciplines.

This work is organised thus:

— in *Part One* the Quine's works from 1930 (when his first Book Review appeared) up to now are listed chronologically. The list is complete: in drawing up the titles to 1975, I was aided by the bibliography published in Davidson-Hintikka<sup>33</sup>; for the latter works, the list prepared by me was approved and completed by Quine himself through a personal communication;

— in *Part Two* there are 940 entries, in chronological order and the authors are arranged, each year, alphabetically. They include 857 articles appearing in periodicals (of which 77, marked °, are critiques, replies, discussions or cross-references between authors) and 83 books, marked \*. For each entry the necessary bibliographic information is given to correctly identify it<sup>34</sup> and, for all the works directly examined, a brief abstract has been written with the intention of illustrating the contents and providing an initial orientation for the reader. Each entry is also numbered progressively and these numbers act as reference to all four of the Indexes which make up *Part Three*.

This list, as I have already said, is not perhaps exhaustive. On the other hand, I hope not to have committed unpardonable errors of omission since I made use, in compiling the collection, of a culling from the most representative European and American journals dealing with philosophical debate, as well as with those bibliographic catalogues widely respected amongst researchers in philosophy.

<sup>33</sup> Davidson-Hintikka (Eds.), *Words and Objections*, revised ed., Dordrecht, D. Reidel, 1975.

<sup>34</sup> Also in this case, as for Quine's works, only the first edition is cited and translations are omitted.

— *Part Three* opens with the *Systematic Index*, containing a list of themes particular to, or recurrent in, the thoughts of Quine. References to the works which deal with them are indicated by progressive numbers. Here reference numbers relating to unlocated works (which therefore, as already stated, have no abstracts) are not listed, unless their contents can be readily deduced from an explicit indication in the title or from the reading of connected works supplying sufficient detail which would be some substitute for direct consultation.

Next, the reader will find an *Index of Thinkers Connected to Quine*, those whose thought is directly comparable to Quine's or has been compared to it by other scholars. The pertinent works are identified by progressive numbers.

The *Authors Index* is followed, finally, by the *List of Quoted Journals*, complete with addresses and the reference numbers of the items. This offers the interested reader the chance to locate directly the required issue when it is difficult to obtain it from libraries or other institutions.

Moreover this would make much easier to find articles and so define research not from the starting point of the subject but from that of the specific periodical. (For example, when wishing to consider the influence of Quine through a debate promoted or analysed by the journal in question).

Believing that a bibliography must not only be a source of information *on* the work but also a guide *to* that work, I have tried to organise this volume by transforming it from a mere list of references into a useful instrument in the formation of lines of research, for subsequent enquiries both on a general level and also on specific subjects.

The examination of the output on Quine throws an interesting light on the period, the way in which contemporaries evaluated his thinking, the recognition he enjoyed and the criticism he received.

Equally interesting may be the discover of unexpected comparisons between Quine's thinking and that of other philosophers.

As far as the influence exerted by Quine on contemporary culture is concerned, the number of references in the *Systematic Index* clearly illustrates the importance of the respective categories in the overall philosophical work here considered.

The fact that the *Indexes* are correlated by means of reference numbers may be of more than secondary interest to those who require



a wider vision of the history of philosophical thought in this century, as it can offer them a reliable cross-section. One can, for example, suggest the possibility of investigating (by means of cross-referencing of authors, titles, years, replies, etc.) the wide geographical distribution of output, its numerical consistency and its subdivision into periods.

This guide may be effectively used by those who wish to approach Quine from the point of view of his following: thus it lends itself to interesting, and up to now unaccomplished, lines of research.

Finally, I would like to express my thanks to Prof. Corrado Mangione for the constant encouragement I have received from him and, in particular, for the generosity with which he has dedicated his time. Without his contribution this work would not have been possible.



PART ONE



## PUBLICATIONS OF WILLARD VAN ORMAN QUINE

### 1930

- Q 1. *Review of Nicod, Foundations of geometry and induction*, « American Mathematical Monthly », XXXVII, pp. 305-307.

### 1932

- Q 2. *A note on Nicod's postulate*, « Mind », XLI, pp. 345-350.

### 1933

- Q 3. *The logic of sequences*, « Summaries of theses 1932 » (Harvard), pp. 335-338.
- Q 4. *A theorem on the calculus of classes*, « Journal of London Mathematical Society », VIII, pp. 89-95.
- Q 5. *Review of Peirce, Collected Papers II*, « Isis », XIX, pp. 220-229.

### 1934

- Q 6. *A system of logistic*, Cambridge, Harvard, pp. XII + 204.
- Q 7. *A method of generating part of arithmetic without use of intuitive logic*, « Bulletin of American Mathematical Society », LX, pp. 753-761.  
Reprinted in Q 173.
- Q 8. *Ontological remarks on the propositional calculus*, « Mind », XLIII, pp. 472-476.  
Reprinted in Q 172.

- Q 9. *Report on Whitehead, Logical definitions of extension, class, and number*, « American Mathematical Monthly », XLI, pp. 129-131.

## 1935

- Q 10. *A unified calculus of propositions, classes, and relations*, « Bulletin of American Mathematical Society », XLI, p. 338.
- Q 11. *Review of Carnap, Logische Syntax der Sprache*, « Philosophical Review », XLIV, pp. 394-397.
- Q 12. *Review of Peirce, Collected Papers III-IV*, « Isis », XXII, pp. 285-297, 551-553.

## 1936

- Q 13. *Concepts of negative degree*, « Proceedings of National Academy of Sciences », XXII, pp. 40-45.
- Q 14. *Definition of substitution*, « Bulletin of American Mathematical Society », XLII, pp. 561-569.  
Reprinted in Q 173.
- Q 15. *On the axiom of reducibility*, « Mind », XLV, pp. 498-500.
- Q 16. *A reinterpretation of Schönfinkel's logical operators*, « Bulletin of American Mathematical Society », XLII, pp. 87-89.
- Q 17. *Set-theoretic foundations for logic*, « Journal of Symbolic Logic », I, pp. 45-57.  
Reprinted in Q 173.
- Q 18. *A theory of classes presupposing no canons of type*, « Proceedings of National Academy of Sciences », XXII, pp. 320-326.
- Q 19. *Toward a calculus of concepts*, « Journal of Symbolic Logic », I, pp. 2-25.
- Q 20. *Truth by convention*, in *Philosophical Essays for A. N. Whitehead*, O. H. Lee (ed.), New York, Longmans, pp. 90-124.  
Reprinted in Q 172.
- Q 21. *Review of García Baca, Introducción a la lógica moderna*, « Journal of Symbolic Logic », I, pp. 112-113.

- Q 22. *Review of Tarski, Grundzüge des Systemenkalküls, ibidem*, pp. 71-72.
- Q 23. *Review of Russell, On order in time, ibidem*, pp. 73-74.
- Q 24. *Short Reviews (under 400 words), ibidem*, pp. 43, 68, 113.

## 1937

- Q 25. *New Foundations for Mathematical Logic*, « American Mathematical Monthly », XLIV, pp. 70-80.  
Reprinted in Q 121.
- Q 26. *On derivability*, « Journal of Symbolic Logic », II, pp. 113-119.
- Q 27. *On Cantor's Theorem, ibidem*, pp. 120-124.
- Q 28. *Logic based on inclusion and abstraction, ibidem*, pp. 145-152.  
Reprinted in Q 173.
- Q 29. *Is logic a matter of words?*, « Journal of Philosophy », XXXIV, pp. 674.
- Q 30. *Review of Weinberg, Examination of logical positivism*, « Journal of Symbolic Logic », II, pp. 89-90.
- Q 31. *Review of Jeffreys, Scientific inference*, « Science », LXXXVI, p. 590.
- Q 32. *Review of Saarnio, Zur heterologischen Paradoxie*, « Journal of Symbolic Logic », II, p. 138.
- Q 33. *Review of Stone, Note on formal logic, ibidem*, pp. 174-175.
- Q 34. *Short Reviews, ibidem*, pp. 37, 46-47, 59, 83-84.

## 1938

- Q 35. *Completeness of the propositional calculus*, « Journal of Symbolic Logic », III, pp. 37-40.  
Reprinted in Q 173.
- Q 36. *On the theory of types, ibidem*, pp. 125-139.
- Q 37. *Review of Tarski, Einführung in die mathematische Logik*, « Bulletin of American Mathematical Society », XLIV, pp. 317-318.

- Q 38. *Review of Hilbert and Ackermann, Grundzüge der theoretischen Logik*, « Journal of Symbolic Logic », III, pp. 83-84.
- Q 39. *Review of Ushenko, Theory of Logic*, « Philosophical Review », XLVII, p. 94.
- Q 40. *Review of Chwistek and Hepter, New foundation of formal metamathematics*, « Journal of Symbolic Logic », III, pp. 120-121.
- Q 41. *Short Reviews, ibidem*, pp. 47-49, 56, 94, 121-122.

## 1939

- Q 42. *Designation and existence*, « Journal of Philosophy » XXXVI, pp. 701-709.
- Q 43. *Relations and reason*, « Technology Review », XLI, pp. 299-301, 324-332.
- Q 44. *A logistical approach to the ontological problem*, « Journal of Unified Science », IX, pp. 84-89. (preprints only).  
Reprinted in Q 172.
- Q 45. *Review of Hermes, Semiotik*, « Journal of Symbolic Logic », IV, pp. 87-88.
- Q 46. *Short Reviews, ibidem*, pp. 102, 125.

## 1940

- Q 47. *Mathematical logic*, New York, Norton, pp. XII + 344.  
Revised Edition, Harvard, 1951.
- Q 48. *Elimination of extra-logical postulates*, (with N. Goodman), « Journal of Symbolic Logic », V, pp. 104-109.
- Q 49. *Abstract of Mathematical logic*, « Year Book of American Philosophical Society », pp. 230-231.
- Q 50. *Review of Bröcker, Antinomien und Paradoxien*, « Journal of Symbolic Logic », V, p. 79.
- Q 51. *Review of Leśniewski, Einleitende Bemerkungen, ibidem*, pp. 83-84.



- Q 52. *Review of Church, Formulation of theory of types, ibidem*, pp. 114-115.
- Q 53. *Short Reviews, ibidem*, pp. 30, 71, 84, 157, 168-169.

## 1941

- Q 54. *Elementary Logic*, Boston, Ginn, pp. vi + 170.  
Revised Edition, Harvard, 1965.
- Q 55. *Element and number*, « Journal of Symbolic Logic », VI, pp. 135-149.  
Reprinted in Q 173.
- Q 56. *Russell's paradox and others*, « Technology Review », XLIV, pp. 16-18.
- Q 57. *Whitehead and the rise of modern logic*, in *Philosophy of A. N. Whitehead*, P. A. Schilpp (ed.), La Salle, Open Court, pp. 125-163.  
Reprinted in Q 173.
- Q 58. *Review of Russell, Inquiry into meaning and truth*, « Journal of Symbolic Logic », VI, pp. 29-30.
- Q 59. *Review of Serrus, Essai sur la signification de la logique, ibidem*, pp. 62-63.
- Q 60. *Review of da Silva, Elementos de Lógica Matemática, ibidem*, pp. 109-110.
- Q 61. *Review of Rosser, Independence of Quine's axioms, ibidem*, p. 163.

## 1942

- Q 62. *Reply to Professor Ushenko*, « Journal of Philosophy », XXXIX, pp. 68-71.
- Q 63. *On existence conditions for elements and classes*, « Journal of Symbolic Logic », VII, pp. 157-159.
- Q 64. *Short Review, ibidem*, pp. 44-45.

## 1945

- Q 65. *Notes on existence and necessity*, « Journal of Philosophy », XL, pp. 113-127.

## 1944

- Q 66. *O sentido da nova lógica*, São Paulo, Martins, pp. XII + 190.

## 1945

- Q 67. *On the logic of quantification*, « Journal of Symbolic Logic », X, pp. 1-12.

Reprinted in Q 173.

- Q 68. *On ordered pairs, ibidem*, pp. 95-97.

Reprinted in Q 173.

## 1946

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- Q 276. *Symbols*, in *Oxford companion to the mind*, R. Gregory (ed.), Clarendon Press.
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## PART TWO



## PUBLICATIONS ON WILLARD VAN ORMAN QUINE

1939

1. Rosser Barkley, *Definition by Induction in Quine's "New Foundations for Mathematical Logic"*, « The Journal of Symbolic Logic », IV, pp. 80-81.

In NF the axiom of infinity does not seem to be demonstrable while in the Q system proposed by Rosser (cfr. no. 2) non-stratified propositions are also demonstrated for induction. Definitions for induction would be possible apart from the conditions of stratification in the Q system.

2. Rosser Barkley, *On the Consistency of Quine's "New Foundations for Mathematical Logic"*, « The Journal of Symbolic Logic », IV, pp. 15-24.

A number of attempts to find a contradiction in NF are explained, working however on a stronger 'Q' system, obtained adding to Quine's a Kleene type rule ( $K\Omega$ ; cfr. Rosser, *Gödel theorems for non-constructive logics*, « JSL », II (1937), pp. 129-137). The characteristics of that system are discussed concluding that it is possible to avoid contradictions working on non-stratified relations.

1941

3. Berry George D. W., *On Quine's Axioms of Quantification*, « The Journal of Symbolic Logic », VI, pp. 23-27.

In Q47 Quine adopts all the assertions specified by five metatheorems (\*100-\*104) as axioms of quantification while a sixth (\*105) is used as a rule of inference. The possibility of elimination (\*101) is discussed.

4. Fitch Frederic B., *Closure and Quine's \* 101*, « The Journal of Symbolic Logic », VI, pp. 18-22.

Two alternatives are suggested to Quine's definition of 'closure' presenting advantages in the elimination of the metatheorem \*101 and in the fact that the closure is made independent of the alphabetical order of the variables.

5. Langford C. H., *Note on a Device of Quine and Goodman*, « The Journal of Symbolic Logic », VI, pp. 154-155.

In Q48 Quine and G. provide a procedure by which sets of extra-logical postulates must be reformulated to make them demonstrable. The examination of the procedure shifts the discussion onto a semantic level and onto the use of such postulates as the aim of the communication of information.

6. Rosser Barkley, *The Independence of Quine's Axioms \* 200 and \* 201*, « The Journal of Symbolic Logic », VI, pp. 96-97.

Referring is to the axioms expounded by Quine in Q47, the independence of \*200 is demonstrated and, with technical details, that of \*201 too, relative to the coherence of Quine's entire system.

#### 1942

7. Rosser Barkley, *The Burali-Forti Paradox*, « The Journal of Symbolic Logic », VII, pp. 1-17.

The derivation of the Burali-Forti paradox within the system proposed in Q47 is presented in detail.

8. Ushenko Andrew, *Dr. Quine's Theory of Truth-Functions*, « The Journal of Philosophy », XXXIX, pp. 64-67.

A note on the Quine's of logical notations based on the distinction between language and metalanguage. Cfr. Q62.

#### 1944

9. Hailperin Theodore, *A Set of Axioms for Logic*, « The Journal of Symbolic Logic », IX, pp. 1-19.

A brief description of NF is offered, discussing the metalogical rule R3', which asserts that all the formulae of a certain type are theorems. R3' is, in a certain sense, an infinite array of axioms, one for each stratified formula. It is demonstrated that the array can be substituted for a finite number. The demonstration derives R3' from new axioms showing that the latter, in their turn, can be derived from Quine's system.

## 1947

- \* 10. Carnap Rudolf, *Meaning and Necessity: A Study in Semantics and Modal Logic*, Chicago, University of Chicago Press.

Here the author proposes to develop a new method for the semantic analysis of meaning, and to dwell upon modal logic. In several parts of the book, the author directly refers to Quine's thought.

11. Lewy C., *Truth and Significance*, « Analysis », VIII, pp. 24-27.

This is the discussion of a paradox — which is, so to speak, dismantled — pointed out in Q81.

12. Wang Hao, *A Note on Quine's Principles of Quantification*, « The Journal of Symbolic Logic », XII, pp. 130-132.

Another discussion on the metatheorems of Q47 (Cfr. Berry, 1941, no. 3). Adopting the modified definition of closure proposed by Berry, substitution is proposed \*101-\*105 for four principles Qp1-Qp4.

## 1948

13. Hampshire Stuart, *Logical Form*, « The Proceedings of the Aristotelian Society », XLVIII, pp. 37-58.

The article discusses the method adopted in Q54 for classing assertions in logical types. According to the author, it's impossible to get in ordinary language the same kind of inference rules for assertions that can be found in symbolic system. It would be useful, therefore, to consider the logical use of statements more than the form of propositions.

14. Hampshire Stuart, *Subjunctive Conditionals*, « Analysis », IX, pp. 9-13.

Subjunctive conditionals are described as non-verifiable sentences that cannot be replaced with an assertion. Subjunctive conditionals are expressions of judgement, or 'interpretation of facts' which can be considered 'reasonable or unreasonable', while an assertion on the other hand, can be found 'true or false'.

- ° 15. Reichenbach Hans, *Reply to a Review*, « The Journal of Philosophy », XLV, pp. 464-467.

Cfr. Q86.

16. White Morton G., *On the Church-Frege Solution of the Paradox of Analysis*, « Philosophy and Phenomenological Research », IX, pp. 305-308.

Starting from Q65 about the distinction between the use of nouns as pure designations and other uses a comparison is made with Frege's distinction between the ordinary and oblique use of a noun. The aim is to verify the effectiveness of the distinction in resolving the paradox of the analysis of analytical judgements, which is here understated.

#### 1949

17. Bergmann Gustav, *Two Cornerstones of Empiricism*, « Synthese », VIII (1949-51), pp. 435-452.

The author accepts the Quine's historical analysis about the principles of empiricism, but he considers them as cornerstones rather than dogmas, due to their capability to resolve several philosophical problems.

18. Fitch Frederic B., *The Problem of the Morning Star and the Evening Star*, « Philosophy of Science », XVI, pp. 137-141.

To avoid the paradoxes connected with the terms 'evening star' and 'morning star' (Cfr. Q85), Quine follows Carnap's proposal of leaving out concept of identity from modal logic in favour of a concept of 'congruence' and of restricting the quantification in such a way that the variables change on 'individual concepts' rather than on individuals. The author discusses here this position, pointing out the presence of Platonism that Quine claims to oppose.

#### 1950

19. Feibleman James K., *Class Memberships and the Ontological Problem*, « Philosophy of Science », XVII, pp. 254-259.

Quine and Goodman's nominalism is examined from the point of view of an investigation of the problem of universals. According to the author, a really satisfactory logic cannot be determined only on the basis of postulations of existence but rather an intensional logic is indispensable starting from Lewis and Langford works (Cfr. C. Lewis and C. H. Langford, *Symbolic Logic*, Century, 1932).

20. Linsky Leonard, *On Using Inverted Commas*, « Methodos », II, pp. 232-236.

The article discusses some reasons for confusion in the use of inverted commas with reference to linguistic expressions and suggests a convention to restrict the use of these devices. Quine's point of view, as expressed in Q47, is considered.

21. Rosser Barkley - Wang Hao, *Non-Standard Models for Formal Logics*, « The Journal of Symbolic Logic », XV, pp. 113-129.



There is no standard model for NF and for no formal logic  $\omega$ -consistent can it be demonstrated in the logic itself that, if it is consistent it must have a standard model. The idea that the logic must have a standard model to be accepted as a mathematical structure seems to be a pallid version of the old concept that there exists an absolute mathematical truth.

22. Wang Hao, *A Formal System of Logic*, « The Journal of Symbolic Logic », XV, pp. 25-32.

A formal P system is proposed, different from the system of Q47 in that it introduces a restrictive condition in designing its own elements. If the weakest NF system is consistent so is P.

### 1951

23. Ayer Alfred J., *Symposium: On What There Is*, in *Freedom, Language and Reality*, « Aristotelian Society-Supplementary Volume », XXV, London, Harrison & Sons, pp. 137-148.

Quine's vision of ontology and ontological commitment is discussed, concentrating on abstract entities.

- ° 24. Black Max, *Comments on Preceding Paper of W. V. Quine*, « Proceedings of the American Academy of Arts and Sciences », LXXX, pp. 97-99.

Cfr. Q100.

25. Geach Peter Thomas, *Symposium: On What There Is*, in *Freedom, Language and Reality*, « Aristotelian Society-Supplementary Volume », XXV, London, Harrison & Sons, pp. 125-136.

Quine's ontological vision is disputed, particularly the point of view by which different ontologies can be equally correct, depending on free choice.

26. Martin Richard Milton, *On Inscriptions*, « Philosophy and Phenomenological Research », XI, pp. 535-540.

A number of aspects of the philosophy underlying the Goodman-Quine syntax (Cfr. Q77) are discussed, and a different treatment of 'inscriptions' is proposed, which avoids their metaphysical implications.

27. Mates Benson, *Analytic Sentences*, « Philosophical Review », LX, pp. 525-534.

The thoughts of Quine on the concept of 'analytical' are considered,

defending it as regards to new pragmatist notions considered frail and inadequate from a philosophical point of view.

28. Perkins Moreland - Singer Irving, *Analyticity*, « The Journal of Philosophy », XLVIII, pp. 485-497.

On the epistemological level, the analytical/synthetic distinction is un-supportable (even if this non-supportability is not connected to the problem of synonymy, according to the authors). However, on the scientific level the distinction can be maintained in terms of linguistic behaviour and use. The distinction is of kind and not purely of degree.

29. Warnock G. J., *Metaphysics in Logic*, « Proceedings of the Aristotelian Society », LI, pp. 197-222.

The article discusses the problem of elimination of abstract entities, examining the designatory use of expressions and existential quantification.

### 1952

30. Martin Richard Milton, *On 'Analytic'*, « Philosophical Studies », III, pp. 42-47.

The author tries to demonstrate that if, at first sight, Quine and White's position against the analytical/synthetic distinction seems to be directed against Carnap, who in his writings has sustained it with detailed arguments, in fact they do not are not invalidated, because they belong to a different level with different philosophical purpose.

31. Martin Richard Milton, *On Inscriptions and Concatenation*, « Philosophy and Phenomenological Research », XII, pp. 418-421.

A method is elaborated to remove syntax and semantics of the Platonic type, used by Tarski and Carnap, from the Quine-Goodman nominalist critique: maintaining itself within an extensional metalanguage and differently interpreting the concatenations ( $X \cap Y$ ).

32. Rosser Barkley, *The Axiom of Infinity in Quine's New Foundations*, « The Journal of Symbolic Logic », XVII, pp. 238-242.

The author analyses the systems proposed by Quine in *Mathematical Logic* (ML) and in *New Foundations* (NF) to which the axiom of infinity (AF) is added. It is demonstrated that  $NF + AF$  is stronger than ML and that although NF is essentially a part of ML and does not have a standard model, it is possible that ML has one.

33. Shaw-Kwei Moh, *A Note on the Theory of Quantification*, « The Journal of Symbolic Logic », XVII, pp. 243-244.

A short note in which, unlike Quine in Q67, it is stated that to extrapolate a polyadic theory from a monadic one, the ordinary Modus Ponens is sufficient.

### 1953

34. Geach Peter Thomas, *Quine on Classes and Properties*, « The Philosophical Review », LXII, pp. 409-412.

Quine's identification of property with classes is challenged. Examples are provided to demonstrate the necessity of keeping them distinct.

35. Gewirth Alan, *The Distinction Between Analytic and Synthetic Truths*, « The Journal of Philosophy », L, pp. 397-425.

A number of problems are discussed — the relationship between logic and natural science and the status of the analytical/synthetic distinction in artificial and natural languages — from the two-fold point of view of 'gradualism', that considers the analytical/synthetic distinction as a question of degree and not of kind and of its opposite. The article ends by looking forward to overcoming the rigidity of both positions in favour of a more flexible viewpoint, that will enrich the relevant philosophical thinking.

36. Henkin Leon, *On the Primitive Symbols of Quine's "Mathematical Logic"*, « Revue Philosophique de Louvain », LI, pp. 591-593.

It is possible to define the joined negation  $\downarrow$  and the relationship of belonging  $\in$  by means of a single binary predicate. For this it is necessary to extend the variables domain to the truth values V and F and to complete in consequence the interpretation rules of the constants to be defined.

37. Kaufman Arnold S., *The Analytic and the Synthetic. A Tenable Dualism*, « Philosophical Review », LXII, pp. 421-426.

Quine and White's point of view is discussed concluding that the analytical/synthetic distinction remains valid with the aim of a clear formulation of propositions.

38. Specker Ernst P., *The Axiom of Choice in Quine's New Foundations for Mathematical Logic*, « Proceedings of the National Academy of Sciences of the United States of America », XXXIX, pp. 972-975.

An attempt is made to refute the axiom of choice in NF. Since the axiom of choice is demonstrable for finite sets the axiom of infinity is acquired as a corollary.

39. Wang Hao, *What is an Individual?*, « Philosophical Review », LXII, pp. 413-420.

The author discusses Quine and Goodman's nominalist position. If the difficulties in determining the notion of 'individual' are real, then one has to suppose that Quine's criterion of using the values of variables, to decide the ontological commitment of a theory, is not as satisfactory as the traditional method of distinguishing systems according to whether they permit non-predicative definitions.

40. Wilson Neil L., *In Defense of Proper Names Against Descriptions*, « Philosophical Studies », IV, pp. 72-78.

As the title shows, the purpose of this short article is to present objections in considering proper nouns as abbreviated and dispensable descriptions. This is, above all, because the philosophical position of nominalism (which in this respect overcomes the problem by not nominalising the predicates) can be contested.

#### 1954

- 41. Benes Vaclav Edvard, *A Partial Model for Quine's "New Foundations"*, « The Journal of Symbolic Logic », XIX, pp. 197-200.

The discussion started by Hailperin (Cfr. 1944, no. 9) and Rosser (Cfr. 1952, no. 32) is taken up again and an attempt is made to construct a partial model for NF.

42. Bergmann Gustav, *Particularity and the New Nominalism*, « Methodos », VI, pp. 131-147.

This is a philosophical examination of nominalism, from the starting point of the consideration that what the nominalists call anti-Platonism is no more than a consequence of their anti-Aristotelianism. The discussion is particularly pointed at *Principia Mathematica*, Q47 and Q55.

43. Cartwright Richard L., *Ontology and the Theory of Meaning*, « Philosophy of Science », XXI, pp. 316-325.

The author intends to highlight what he regards as 'inadequacies' in the criterion of Quine's ontological commitment, and to indicate the direction by which a more correct criterion might be formulated. This direction turns towards intension, that is to say within the theory of meaning rather than of reference, even if an extensional interpretation of the former theory is accepted.

44. Crockett Campbell, *Contemporary Interpretations of the Pro-*

*blems of Universals*, « Philosophical Review », LXIII, pp. 241-249.

Quine's nominalism is discussed stating that Quine was unable to demonstrate that the controversy between Platonism and nominalism must be resolved in a pragmatic sense, deciding, that is, which language is more useful in communication and prediction.

45. Hallie Philip P., *A Note on Logical Connectives*, « Mind », LXIII, pp. 242-245.

The author responds in rather polemical tones to an article by C. H. Whiteley (*The Idea of Logical Form*, « Mind », 1951) and starts from a definition given in Q47 of 'logically true statement' to introduce a discussion on connectives.

46. Hofstadter Albert, *The Myth of the Whole: a Consideration of Quine's View of Knowledge*, « The Journal of Philosophy », LI, pp. 397-417.

An examination, above all based on the first two chapters of Q121, of the nature of Quine's approach to the theory of knowledge. Holistic pragmatism and arguments against the analytical/synthetic distinction and reductionism are thoroughly disputed.

47. Lejewski Czeslaw, *Logic and Existence*, « The British Journal for the Philosophy of Science », V, pp. 104-119.

The author examines two inferences that seem to refute the validity of existential generalisation and concludes that taking up a non-restricted interpretation it is possible to distinguish the notion of existence from the idea of quantification. Quine's work on the notion of existence is given as a point of reference throughout the article.

48. Poznanski E. I. J., *Hamabloqueth al analiti wesintéti*, « Iyyun », V, pp. 40-63.

This article deals with the controversy between Carnap and Quine over the question of analyticity.

49. Taylor Richard, *Disputes about Synonymy*, « Philosophical Review », LXIII, pp. 517-529.

These are notes on the debate over the concept of synonymy and the analytical/synthetic distinction. The problems pertinent to this debate are classified as being highly artificial. The article tries to demonstrate it by analysing the pragmatism and the criteria of similarity and difference in meaning.

- \* 50. Veatch Henry, *Realism and Nominalism Revisited*, Milwaukee, Marquette University Press.

51. Walsh W. H., *Analytic/Synthetic*, « Proceedings of the Aristotelian Society », LIV, pp. 77-96.

A parallel is drawn between the work of Quine and Waismann on the analytical/synthetic distinction.

52. Weitz Morris, *Analytic Statements*, « Mind », LXIII, pp. 487-494.

This article takes up the debate about the analytical/synthetic distinction and about the passage from non-logical to logical truths. Naturally, the argument widens out to consider the problems about synonymy.

### 1955

53. Aldrich Virgil C., *Mr. Quine on Meaning, Naming and Purporting to Name*, « Philosophical Studies », VI, pp. 17-26.

This article supports that is contradictory to make a distinction between meaning and denotation and than to refute that between analysis and synthesis, as Quine does, since the two couples are strongly linked. An attempt is also made to analyse Quine's thought, from a philosophical and sometimes psychological point of view.

- ° 54. Bergmann Gustav, *Prof. Quine on Analyticity*, « Mind », LXIV, pp. 254-258.

Cfr. Q124.

55. Götlind Erik, *Vacuous Variants and Truth by Convention*, « Theoria », XXI, pp. 1-24.

This article discusses the meaning of terms (such as 'vacuous', 'essential', 'vacuous variant') important as a determination of 'logical statement' as proposed in Q20. Secondly, it discusses whether the conventions themselves are enough to give truth values to a statement and it presents a lot of questions on this matter.

56. Hamlyn David W., *Quantification Variables and Pronouns*, « Analysis », XVI, pp. 33-35.

This is discussion of Q85 about the elimination of names and the use of bound variables. It criticises the assumption that it is possible to translate directly from the ordinary language, into logical formulae and vice-versa, by observing that the rules of formation of a logical calculus

do not necessarily correspond exactly to the grammatical rule of a natural language.

57. Orey Steven, *Formal Development of Ordinal Number Theory*, « The Journal of Symbolic Logic », XX, pp. 95-104.

A theory of ordinal numbers is developed for the system shown in Q47 and some alternative ways of reinforcing it are discussed taking account the work of J. B. Rosser (*Logic for Mathematicians*, 1953, McGraw-Hill). Then there is, in outline, an extension of NF different from Rosser one.

58. Smart John J. C., *Critical Notice on: From a Logical Point of View by Willard Van Orman Quine*, « Australasian Journal of Philosophy », XXXIII, pp. 45-56.

The contents of the book are outlined ending with a favourable comment.

59. Stanley Robert L., *Simplified Foundations for Mathematical Logic*, « The Journal of Symbolic Logic », XX, pp. 123-139.

An alternative system to NF is proposed, simpler but equally strong (it has all the theorems of NF) and consistent (in relation to NF) — it is made up by means of the natural deduction.

60. Strawson Peter F., *A Logician's Landscape*, « Philosophy », XXX, pp. 229-237.

This is an examination of Q121. Quine's position on referential opacity is contested, modal contexts and distinction between the theory of reference and that of meaning are also questioned.

61. Wilson Neil L., *Property Designation and Description*, « Philosophical Review », LXIV, pp. 389-404.

It is shown that the concept of 'non-extensional designation' proposed by the author can eliminate the difficulties raised by Quine against the notion of property.

### 1956

- ° 62. Cartwright Richard L., *Comments on Dr. Hochberg's Paper on "The Ontological Operator"*, « Philosophy of Science », XXIII, pp. 260-265.

This reply (Cfr. 1956, no. 65) is more critical of Hochberg's arguments than defensive of Quine's.

63. Dummett Michael, *Nominalism*, « The Philosophical Review », LXV, pp. 491-505.

In a wide-ranging discussion on nominalism, principally referring to the work of N. Goodman, Quine's position is mentioned which, according to the author, consents a better explanation of certain mechanisms.

64. Grice H. P. - Strawson P. F., *In Defense of a Dogma*, « The Philosophical Review », LXV, pp. 141-158.

Rather than defending the analytical/synthetic distinction, the authors set out to show that Quine, whilst on the one hand regards such a distinction as a philosophical error, on the other, makes a refutation rather than a criticism. Therefore he does not have the instruments to defend his thesis from an extremely clear formulation of the distinction that, according to the authors, can be simply found out considering the two words 'analytical' and 'synthetic' as they are commonly used in philosophical contexts.

65. Hochberg Herbert, *The Ontological Operator*, « Philosophy of Science », XXIII, pp. 250-259.

The author discusses the elimination of proper names carried out by Quine, converting them into descriptions and transforming them into predicates (e. g. from « Pegasus » to « it Pegasises »). Such a procedure is philosophically problematical, also because such terms remain in the language forming parts of sentences. The author, in a fairly detailed way, denounces the consequent levelling of metalanguage with object-language, of formal language with ordinary one and of the syntax role with the semantics one in Quine's philosophy.

66. Lambert Karel, *On Naming and Claiming*, « Philosophical Studies », VII, pp. 43-46.

A correction of Quine's definition of 'purely referential term' is proposed, introducing the notion of 'claiming' which allows for a great deal of elasticity.

67. Pasch Alan, *Empiricism: One "Dogma" or Two?*, « The Journal of Philosophy », LIII, pp. 302-311.

The author discusses Quine's affirmation according to which the two dogmas of empiricism are 'identical at the roots'. It shows, on the contrary, that the acceptance of reductionism would imply the acceptance of the analytical/synthetic distinction while the opposite is not true. It is possible to put forward the distinction without being a reductionist.



68. Richman Robert J., *Neo-Pragmatism*, « Methodos », VIII, pp. 35-45.

The empiricism without dogmas supported by Quine is here called 'neo-pragmatism'. While recognising the positive role exercised by the neo-pragmatism in the attempt to purify empiricism from every *a priori* element, its credibility is definitively refuted in favour of a less extreme position.

69. Rosser Barkley, *The Relative Strenght of Zermelo's Set Theory and Quine's New Foundations*, « Proceedings of the International Congress of Mathematicians » (Amsterdam, 1954), Amsterdam, North-Holland, pp. 289-294.

70. Rynin David, *The Dogma of Logical Pragmatism*, « Mind », LXV, pp. 379-391.

This is a pungent criticism of Q105, both of Quine's treatment of meaning and of holism.

71. Shih-Chao Liu, *On the Analytic and the Synthetic*, « Philosophical Review », LXV, pp. 218-228.

The need to maintain the analytical/synthetic distinction is upheld to allow us to carry out an investigation into empirical knowledge, its limitations, its means and its progress.

72. Smullyan Arthur F., *A Note on an Argument of Quine*, « Mind », LXV, pp. 255-258.

The author discusses Quine's comment in *Principia Mathematica* (Cfr. Q134), according to which if it would be possible to infer within the system of *Principia* the identity of the attributes from their logical equivalence, it would result the paradox that all the formally equivalent attributes would be identical.

73. Strawson Peter F., *Singular Terms, Ontology and Identity*, « Mind », LXV, pp. 433-454.

Quine's affirmation, according to which the whole category of singular terms is theoretically superfluous is here discussed. Firstly, the definition of singular terms themselves is examined, then the reasons and logical advantages that lead to their elimination. Quine's position derives from his nominalism, his hostility towards intensional notions and his preference for an ontology of concrete details. It's however pointed out an unconscious tendency towards Platonism, revealing itself the attempt to eliminate singular terms as superfluous or in the request of a simple concept of identity.

74. Viano Carlo Augusto, *Logica e filosofia in Willard Van Orman Quine*, « Rivista di Filosofia », XLVII, pp. 454-470.

Quine's work is examined with the purpose of understanding through it how can be articulated, at the moment, the relationships between logic and philosophical reflection. An overview from *New Foundations* to *On what there* and to *Two Dogmas* is the result.

75. Xenakis Jason, *The Logic of Fiction*, « Methodos », VIII, pp. 47-56.

In this article about narrative examining art and literature, Quine's view of the designatory capability of descriptions and proper names is briefly presented (the « Pegasus » example).

76. Xenakis Jason, *Sentence and Statement. Prof. Quine on Mr. Strawson*, « Analysis », XVI, pp. 91-93.

A review is analysed in which Quine criticises Strawson's distinction between 'sentence' and 'statement'. According to the author, Quine misunderstands since it's the same distinction that he himself draws between 'use' and 'mention'. It is concluded that meanings are not autonomous entities but consist of the use of the words. So to teach the use is to explain the meaning.

### 1957

- \* 77. Greenwood David, *Truth and Meaning*, New York, Philosophical Library.

In the chapter dedicated to the analysis of meaning in natural languages, Quine's extensionalist position is discussed.

78. Hochberg Herbert, *On Pegasizing*, « Philosophy and Phenomenological Research », XVII, pp. 551-554.

Quine's stated method for the elimination of proper names (having recourse to the existential quantifiers and to the predicates) is shown not to be definitive. Firstly, the fact that Quine recognises only one meaning of the term 'exist', thereby flattening out the peculiarly philosophical use in the existential quantifier and the ordinary use of the term, is contested. Secondly, it is shown that the problem of proper names is only re-proposed at predicate level ('there is something which pegasises' rather than 'Pegasus exists').

- ° 79. Hochberg Herbert, *Professor Quine, Pegasus and Dr. Cartwright*, « Philosophy of Science », XXIV, pp. 191-203.

Cfr. Hochberg, 1956, no. 65 e Cartwright, 1956, no. 62.

80. Strawson Peter F., *Propositions, Concepts and Logical Truths*, « The Philosophical Quarterly », VII, pp. 15-25.

This article sets out to provide evidence for the weakness of Quine's position put forward in Q105 through a characterisation of the notion of logical truth that itself refers to the notions (necessity and synonymy, for example) discredited by Quine.

### 1958

81. Alston William P., *Ontological Commitments*, « Philosophical Studies », IX, pp. 8-16.

The article considers the translation of linguistic expressions that contain existentials and it affirms that with such translations it is impossible to avoid ontological commitments. An example suggested by Morton White (a case of a translation that avoids ontological commitments) is examined, and it is concluded that if the translation is adequate then it has the same commitments as the original.

82. Church Alonzo, *Symposium: Ontological Commitment*, « The Journal of Philosophy », LV, pp. 1008-1014.

Quine's criteria by which an assertion containing a variable is ontologically committed at the range of the variable itself is taken up and corrected, showing that, for example, the ontological commitment is specifically associated with the existential quantifier rather than with bound variables in general.

- ° 83. Dolphin Vernon, *Mr. Hochberg, Mr. Quine and the Theory of Description*, « Philosophy and Phenomenological Research », XIX, pp. 246-247.

This is a defence of Q. with respect to Hochberg's criticisms. (Cfr. 1957, no. 78).

84. Epstein Joseph, *Quine's Gambit Accepted*, « The Journal of Philosophy », LV, pp. 673-683.

The article begins by taking up Q85, analysing it in its most characteristic passages and concludes finding the analytical/synthetic distinction still worthy of defence.

- \* 85. Fraenkel Abraham - Bar-Hillel Yehoshua, *Foundations of Set Theory*, Amsterdam, North-Holland.

The book contains an extensive explanation of many important problems concerning the set theory dealt with by various authors in the last 50 years. Naturally, Quine's important contribution is also described.

86. Myhill John, *Problems Arising in the Formalization of Intensional Logic*, « *Logique et Analyse* », I, pp. 74-83.

This article takes as a starting point the debate on intensional logics raised by Quine and Church. The position put forward by the two authors is analysed, bringing out their philosophical roots with the weak and strong aspects of their respective formalisations.

- \* 87. Pap Arthur, *Semantics and Necessary Truth. An Inquiry into the Foundations of Analytic Philosophy*, New Haven, Yale University Press.

In the second part (the concept of analytical truth in contemporary analytical philosophy) Quine's reflections on synonymy, logical truth and analyticity are illustrated.

- \* 88. Pasch Alan, *Experience and the Analytic. A Reconsideration of Empiricism*, Chicago, University of Chicago Press.

After having analysed the controversy on the distinction between the analytical and the synthetic, the author considers whether sensory data are the ultimate data of experience. The book is a 'survey' with a lot of references to classical empiricism and to neo-empiricism and it is a critical contribution to American analytical philosophy. Q105 is discussed along with the problems concerned with synonymy.

89. Rescher Nicholas, *Attributes Vs Classes in "Principia"*, « *Mind* », LXVII, pp. 254-257.

This is a brief but thorough discussion of the debate between Q. and Smullyan over the distinction between 'extensional property' (classes) and 'intensional property' (attributes or propositional functions).

Cfr. Smullyan, 1956, no. 72.

- ° 90. Robbins Beverly, *Ontology and the Hierarchy of Languages*, « *Philosophical Review* », LXVII, pp. 531-537.

Cfr. Cartwright, 1954, no. 43.

91. Scheffler Israel - Chomsky Noam, *What Is Said to Be*, « *Proceedings of the Aristotelian Society* », LIX (1958-1959), pp. 71-82.

This article discusses the criterion of ontological commitment, stressing its philosophical importance in the comparison with and the evaluation of rival theories where the concept of ontological assumption is absorbed into the notion of the truth of existential statements and this is, in turn, absorbed into the truth of all the statements of a theory.

## 1959

- ° 92. Anderson Alan Ross, *Church on Ontological Commitment*, « The Journal of Philosophy », LVI, pp. 448-451.  
Cfr. Church, 1958, no. 82.
93. Bennett Jonathan, *Analytic-Synthetic*, « Proceedings of the Aristotelian Society », LIX, pp. 163-188.  
The author sets out to contest Quine's position with regard to the analytical/synthetic distinction — offering arguments on the basis of which he intends to establish an important difference of kind between the viewpoint by which this can happen anyway.
94. Hintikka Jaakko, *Existential Presuppositions and Existential Commitments*, « The Journal of Philosophy », LVI, pp. 125-137.  
This article analyses and discusses Quine's criterion of ontological commitment showing how we may better evaluate existential commitments to discourse doing without the existential presuppositions of our logic.
95. Hochberg Herbert, *Of Mind and Myth*, « Methodos », XI, pp. 123-145.  
Through the analysis of the development of Quine's thought, the author attempts to help the understanding of his point of arrival (considering physical objects as ontological myths) seen as a consequence of initial positivist materialism mixed with holism — here defined as being of Hegel's stamp —, pragmatism, and a corrupt phenomenism reminiscent of Kant.
- ° 96. Kaminsky Jack, *Church on Ontological Commitment*, « The Journal of Philosophy », LVI, pp. 452-458.  
Cfr. Church, 1958, no. 82.
97. Lambert Karel, *Singular Terms and Truth*, « Philosophical Studies », X, pp. 1-5.  
Quine's theory of singular terms is discussed. For example, what is the criterion to establish when an assertion like: « Pegasus lives on Mars » is true or false? An attempt is made to solve the problem which does not seem to violate any of the criteria for assigning truth values to assertions.
98. Montague Richard - Kalish Donald, *That*, « Philosophical Studies », X, pp. 54-61.

An examination of the difficulties raising in designatory expressions in 'That-contexts'.

### 1960

99. Fitch Frederic B., *Some Logical Aspects of Reference and Existence*, « The Journal of Philosophy », LVII, pp. 640-646.

The author agrees with Q. that existence is not an attribute and that non-existent possible entities must be refuted, but denies that being means being the value of a bound variable. It is suggested that the concept of existence is applied to attributes, using adequate precautions to avoid contradiction through Russell's paradox.

100. Frankfurt Harry G., *Meaning, Truth and Pragmatism*, « The Philosophical Quarterly », X, pp. 171-176.

After an examination of Quine's point of view, the author points out an internal contradiction which can be resolved only by accepting a distinction between statements, resting on the analytical/synthetic distinction which Quine strongly criticised.

101. Marcus Ruth Barcan, *Extensionality*, « Mind », LXIX, pp. 55-62.

The author tries to confute the idea that the concept of extensionality is non-ambiguous. In fact, an examination of the relevant literature does not reveal any precisely defined theory of extensionality. Three fundamental problems are posed:

- 1) What are the principles of extensionality?
- 2) Which objects can be considered to be extensional?
- 3) Which formal system are extensional?

The author tries to reach a description of extensionality which may be useful in solving certain problems presented by the interpretation on intensional system. Quine is mentioned and commented on.

- ° 102. Martin Richard M., *On Church's Notion of Ontological Commitment*, « Philosophical Studies », XI, pp. 3-7.

Cfr. Church, 1958, no. 82. Naturally Quine's point of view is also discussed.

103. Mohanty J. N., *A Note on Modern Nominalism*, « The Philosophical Quarterly » (India), XXXII, pp. 237-244.

104. Pacifico Michele, *Introduzione a Q., Manuale di Logica* (italian ed. of *Methods of Logic*), Milano, Feltrinelli, pp. VII-XLII.

Initially, a picture of the main currents of contemporary linguistic phi-

osophy is given, then Quine's contribution to logical-philosophical research is examined, particularly in the light of his formative iter.

105. Poznanski E., *Controverse sur l'analyticité* (in polish), « *Studia Filozoficzne* », n. 4, pp. 118-148.

A discussion of Q105.

106. Roberts Louise Nisbet, *Supposition: A Modern Application*, « *The Journal of Philosophy* », LVII, pp. 173-181.

In carrying out a parallel analysis of medieval and modern logic, the author, departing from the writings of Quine (Q85) and Strawson, deals with the distinction between sentences and statements, meaning and supposition relative to the ontological commitment implied by the different philosophical positions.

107. Wolterstorff Nicholas, *Are Properties Meanings?*, « *The Journal of Philosophy* », LVII, pp. 277-280.

Arguing against Quine and Carnap, the author maintains that the identity of property and attributes is not determined by the meanings of the terms. In the traditional sense, then, property and attributes are not intensional entities.

### 1961

108. Bird G. H., *Analytic and Synthetic*, « *The Philosophical Quarterly* », XI, pp. 227-237.

The author contests the oft-affirmed equation of the synthetic/analytical and the empirical/a priori. The purpose of this essay is to show that certain arguments used by Quine to refuse the first distinction imply the refusal of the opposition between empirical and a priori; and goes on to say that such arguments tend to support more the disassociation of the two oppositions than the refusal of the analytical/synthetic distinction.

109. Goodman Nelson, *Condensation Versus Simplification*, « *Theoria* », XXVII, pp. 47-48.

This is a brief note about the reduction of general terms to single diadic terms proposed in Q147. The author denies that such a condensation can produce an actual increase of simplicity of vocabulary.

- \* 110. Hill Thomas English, *Contemporary Theories of Knowledge*, New York, Ronald Press.

An examination of idealism, neo-realism, pragmatism and the phenome-

nistic and physicalist analysis of language. Quine finds himself placed among the ranks of Bradley, Russell, Moore, Whitehead, Dewey, Lewis, Carnap, Reichenbach, Wittgenstein and others.

111. Presley C. F., *Quine's "Word and Object"*, « The Australasian Journal of Philosophy », XXXIX, pp. 175-190.

A discussion of the indeterminacy of translation thesis with Quine's considerations on ontology and the way in which all this is related to the theme of synonymy and analyticity.

112. Strawson Peter F., *Singular Terms and Predication*, « The Journal of Philosophy », LVIII, pp. 393-411.

The aim of this article is to throw light on Quine's distinction between singular and general terms in predicative position, i. e. on the general pattern of 'fx' predication.

113. Teichmann Jenny, *Propositions*, « Philosophical Review », LXX, pp. 500-517.

Departing from Quine's refusal of propositions as metaphysical entities, the reasons for this refusal are analysed. The article, however, means to support the possibility and utility of the notion of proposition.

114. Wells Rulon, *Word and Object*, « Review of Metaphysics », XIV, pp. 695-703.

The content of Quine's book is treated criticising its professed pragmatism and behaviourism moving from, let us say, metaphysical premises.

### 1962

- \* 115. Cohen L. Jonathan, *The Diversity of Meaning*, New York, Herder & Herder.

Throughout the book, Quine's work is treated and evaluated under different subject: from analyticity to referential opacity to stimulus-meaning.

116. Conway Pierre H., *The 'Barber' Paradox*, « Laval Theologique et Philosophique », XVIII, pp. 161-176.

A discussion of the 'barber' paradox and of Russell's correlated antinomy as seen by Quine.

117. Grünbaum Adolf, *The Falsifiability of Theories: Total or Partial? A Contemporary Evaluation of the Duhem-Quine Thesis*, « Synthese », XIV, pp. 17-34.



It is argued that Quine's formulation of Duhem's thesis is either banal or unsupportable from both logical and practical standpoints as regards scientific assertions.

118. Henkin Leon, *Nominalistic Analysis of Mathematical Language*, in Nagel, Suppes, Tarski (Eds.), *Logic, Methodology and Philosophy of Science*: Proceedings of the 1960 International Congress, Stanford, Stanford University Press, pp. 187-193.
- A discussion of the work of Goodman-Quine which shows the difficulty in obtaining a nominalistic interpretation for particular mathematical statements.
- \* 119. Hintikka Jaakko, *Knowledge and Belief. An Introduction to the Logic of the Two Notions*, Ithaca, Cornell University Press.
- The book constitutes a virtually complete panorama of answers to the problem, posed long ago by the Greeks, about the difference between knowing and believing that something is true. Quine's position is considered relative to the problem of quantification in opaque contexts.
120. Lieb Irwin C., *Word and Object*, « International Philosophical Quarterly », II, pp. 92-109.
- A broad and detailed review of Quine's book. Although Quine is praised for having stimulated important discussion in the logic field, some internal weak points are brought out which compromise the very structure of many arguments (general/singular terms, stimulus-meaning, etc.).
- ° 121. Marcus Ruth Barcan et al., *Discussion on the Paper of Ruth B. Marcus*, « Synthese », XIV, pp. 132-143.
- Cfr. Marcus, *Modalities and Intensional Languages*, « Synthese », XIII (1961), pp. 303-322.
122. Martin Richard M., *Existential Quantification and the "Regimentation" of Ordinary Language*, « Mind », LXXI, pp. 525-529.
- Quine's position on quantifiers is criticised raising some questions about the interdependence of logic and ordinary language.
123. Martin Richard M., *On Denotation and Ontic Commitment*, « Philosophical Studies », XIII, pp. 35-39.
- A discussion of the connection between Quine's criterion of ontological commitment and semantics considered as based on denotation. Quine's criterion is corrected thus: we are ontologically committed towards objects

on which variables of semantic metalanguage used to formulate the interpretation vary.

124. Rescher Nicholas, *The Revolt against Process*, « The Journal of Philosophy », LIX, pp. 410-417.

The starting point is Strawson's *Individuals* which is seen as being based on an unacceptable premise, i. e. that dependence/ identifiability constitutes a criterion of ontological priority.

125. Scott Dana, *Quine's Individuals*, in Nagel, Suppes, Tarski (Eds.), *Logic, Methodology and Philosophy of Science: Proceedings of the 1960 International Congress*, Stanford, Stanford University Press, pp. 111-115.

A contribution to the discussion about Individuals within NF.

- ° 126. Severens Richard, *Psychological Contexts*, « The Journal of Philosophy », LIX, pp. 95-100.

A critical comment of Q137 dealing, in particular, with the way of treating a certain type of psychological context extensionally.

### 1963

127. Götlind Erik, *Stimulus Meaning. Some Problems in Connection with a Definition by Quine*, « Theoria », XXIX, pp. 93-114.

A discussion of the notion of stimulus-meaning in relation to the dispositions to assent and dissent.

128. Kémeny John G., *Analyticity versus Fuzziness*, « Synthese », XV, pp. 57-80.

On the base of the distinction between ordinary and formalised language and their relative characteristics and possibilities, the author analyses the philosophical debate of the last ten years which, generally, revolves around the problem of analyticity. Quine's position on this matter is examined in this light.

129. Lambert Karel, *Explaining away Singular Non-existence Statements*, « Dialogue », I, pp. 381-389.

130. Rogers Robert, *A Survey of Formal Semantics*, « Synthese », XV, pp. 17-56.

Within a wider discussion of semantics, a paragraph is dedicated to an exposition of Quine's point of view on ontology.

131. Sommers Fred, *Meaning Relations and the Analytic*, « The Journal of Philosophy », LX, pp. 524-533.

In his criticism of the analytical/synthetic distinction, Quine distinguishes two classes of analytical assertions: 1) Those which are logically true 2) Those which rely on extralogical relationships. Here, the same criticism which Quine makes of 2) is made of 1). It is shown that in the hands of Quine they have the same destiny and that the 'escape from intension' can become an escape from presupposed levels for any application of logical and linguistic rules.

132. Sommers Fred, *Types and Ontology*, « Philosophical Review », LXXII, pp. 327-363.

Within a general discussion of the 'types' applied to natural language, Quine is mentioned with regard to ontology and the use of the transitivity rule as a method for settling ambiguities dues to existentials.

#### 1964

133. Ganguly S. N., *Some Reflections on Synonymity*, « The Journal of the Indian Academy of Philosophy », III, pp. 72-79.

134. Martin Richard M., *The Philosophic Import of Virtual Classes*, « The Journal of Philosophy », LXI, pp. 377-387.

Departing from Q156, this is a discussion of virtual classes and their properties. Their interesting characteristics are concentrated on not only as regards their use in mathematics but also in philosophical reflection.

135. Nielsen Harry A., *The Bearer of Ontological Commitment*, « Notre Dame Journal of Formal Logic », V, pp. 133-138.

The criterion of ontological commitment is discussed moving from Q121 to Q147 in an attempt to identify the way in which it makes sense to say that the discourse is ontologically committed.

136. Orey Steven, *New Foundations and the Axiom of Counting*, « Duke Mathematical Journal », XXXI, pp. 655-660.

137. Potter Karl H., *Negation Names and Nothing*, « Philosophical Studies », XV, pp. 49-57.

A global consideration of a number of problems raised by Quine, such as ontological commitment, empty universes and negative predicates.

138. Silvers Stuart, *Some Comments on Quine's Analysis of Simplicity*, « Philosophy of Science », XXXI, pp. 59-61.

The article discusses Quine's conception of the simplicity of a theory as put forward in Q147. According to the author, simplicity is confused with other notions, e. g. that of evidence and that of strenght and weakness of a theory.

## 1965

139. Barrett Robert, *Quine Synonymy and Logical Truth*, « Philosophy of Science », XXXII, pp. 361-367.

Quine's attack on the distinction between analytical and synthetic does not seem to be sufficiently thorough. According to Quine, the notion of analyticity is linked to two fundamental notions: logical truth and synonymy. Quine criticises only the second of these two concepts, however. The author's purpose is to demonstrate that the concept of logical truth can be subjected to a criticism analogous to that about synonymy.

- ° 140. Cartwright Helen M., *Heraclitus and the Bath Water*, « The Philosophical Review », LXXIV, pp. 466-485.

Cfr. Q173.

- ° 141. Chapman J. M. - Butler R. J., *On Quine's 'So-called Paradox'*, « Mind », LXXIV, pp. 424-425.

Cfr. Q123.

142. Cheng Chung-Ying - Resnik Michael D., *Ontic Commitment and the Empty Universe*, « The Journal of Philosophy », LXII, pp. 359-363.

In standard quantification, the validity of a pattern such as: ( $\exists x (F x \vee \sim F x)$ ) is defined on non-empty universes. So logic seems to force us into affirmations of existence. To avoid these objections, it has been suggested that Quine's criterion for ontological commitment should be modified. This article sets out to demonstrate that the problem is not as serious as it may seem in as much as the exclusion of empty universes from the standard definition of validity in quantification does not imply ontological commitment to specific objects.

143. Downes Chamicey, *On Husserl's Approach to Necessary Truth*, « Monist », XLIX, pp. 87-106.

This article examines some aspects of Husserl's use of *a priori* in relation to some of Carnap's and Quine's work concerning necessary truth. It is argued that Husserl's position is substantially similar to the considerations which emerge from the controversies between Carnap and Quine.

144. Moravcsik J. M. E., *The Analytic and the Nonempirical*, « The Journal of Philosophy », LXII, pp. 415-428.

An exposition of various attempts to clarify analyticity (Donnellan, Putnam, Quine) showing their weak points.

145. Rao A Pampapathy, *Is 'The Morning Star is the Evening Star' a Synthetic Sentence?*, « The Visvabharati Journal of Philosophy », II, pp. 98-106.

146. Stegmüller Wolfgang, *Die Äquivalenz des klassischen und intuitionistischen Ableitungsbegriffs im Gentzen-Quine-Kalkül und in Kleenes Kalkül H.*, « Archiv für mathematische Logik und Grundlagenforschung », VIII, pp. 3-27.

147. Stenius Erik, *Begreppen 'Analytisk' och 'Syntetisk'*, « Ajatus », XXVII, pp. 97-122.

148. Wilson Fred, *Implicit Definition Once Again*, « The Journal of Philosophy », LXII, pp. 364-373.

The affirmation that non-interpreted axioms 'implicitly define' the primitive descriptive signs contained in them, could only be based on the belief that a fairly close analogy exists between a defined sign and a sign which occurs as primitive in an axiomatic system. First it is shown that the two so-called types of 'definition' differ greatly: Quine has recently set himself up as a defender of 'implicit definition' — his real purpose is to attack the analytical/synthetic distinction) and he maintains that, for any scientific theory he can find an axiomatic development whose truths follow on deductively from arithmetical ones. Subsequently, some distinctions between the two theories thus obtained are shown to invalidate Quine's argument.

149. Wilson Patrick, *Quine on Translation*, « Inquiry », VIII, pp. 190-211.

Quine's indeterminacy thesis is contested, and it is maintained, among other things, that the extension of terms can be empirically determined apart from the presence of stimulus-meanings. Certain aspects of the thesis, moreover, appear incongruous with respect to Quine's previous position on language.

#### 1966

150. Chandler Hugh S., *Essence and Accident*, « Analysis », XXVI, pp. 185-188.

Quine maintains that it is not possible to distinguish between essential and accidental properties of an individual object. However, according to the author, this distinction is possible and he tries to provide an alternative concept to Quine's with the aim of making a clearer distinction between the two types of property. In formulating this new concept, the author calls on traditional scholarship and particularly on St. Anselm.

151. Cooper Neil, *Ontological Commitment*, « Monist », L, pp. 125-129.

Quine's criterion of ontological commitment is examined and rejected as inadequate to distinguish genuine ontological commitments from false ones. The notion of 'semantic ascent' is also discussed.

152. Crittenden Charles, *Fictional Existence*, « American Philosophical Quarterly », III, pp. 317-321.

Within a discussion of reference to non-existent objects, Quine's position is described.

153. Dazzi Nino, *Introduzione a Q., Il problema del significato* (Italian ed. of *From a Logical Point of View*), Roma, Astrolabio-Ubaldini, pp. VII-XI.

The coordinates of Quine's work are marked synthetically: neo-positivism, pragmatism and symbolic logic. Moreover the original features that belong to Quine's works and characterize them are pointed out.

- \* 154. Føllesdal Dagfinn, *Referential Opacity and Modal Logic*, Universitetsforlaget.

Within a wide discussion of the problems related to referential opacity of modal contexts, Quine's position on the subject is used as a stimulus for discussion.

155. Goe George, *A Reconstruction of Formal Logic*, « Notre Dame Journal of Formal Logic », VII, pp. 129-157. (Corrections, *ibidem*, p. 158).

The system of quantification in Q47 can be modified to demonstrate \*119 with a method different to that discovered by Berry. In a second time a correction notes that the reasons originally offered for the preference of the modified system are wrong. (Cfr. Goe, 1968, no. 183).

156. Hintikka Jaakko, *Studies in the Logic of Existence and Necessity*, « Monist », L, pp. 55-76.

Within a discussion on the relationship between existence and necessity

a reformulation of the quantification rules is suggested which would introduce conditions of existence for the quantified objects. This thesis is also compared with Russell's theory of defined descriptions and with Quine's suggestion of transforming constants into predicates.

157. Rao A Pampapathy, *Formalization and the Ontological Issue*, « The Visvabharati Journal of Philosophy », II, pp. 99-104.

158. Scott G. E., *Quine, God, and Modality*, « Monist », L, pp. 77-86.

A logically valid formulation is given of Anselm's ontological argument for the existence of God, using modal and quantified logic to describe a class of predicates, including the predicate G (which stands for 'something for which nothing greater can be imagined'). This type of operation is compared with the problems raised by Quine regarding referential opacity introduced by the use of 'necessary' and regarding the fact that the quantification on predicates containing 'necessary' destroys the extensional character of our logic.

159. Sleigh Jr. R. C., *A Note on an Argument of Quine's*, « Philosophical Studies », XVII, pp. 91-93.

Quine tries to trace a distinction between a transparent and an opaque meaning of belief, according to which the terms included in sentences would be purely referential or not. The author tries to clarify this distinction, highlighting a crucial point.

160. Staal J. F., *Analitycity*, « Foundations of Language », II, pp. 67-93.

Katz's and Quine's positions on analyticity and logical truths are compared. The author agrees with Quine in denying the validity of analyticity.

161. Veca Salvatore, *Note su Quine*, « Aut Aut », n. 95, pp. 29-51.

A critical examination of Q105 and Q85 is made, aimed at clarifying in their various aspects the notions of ontology and ontological commitment.

- ° 162. Wisdom William A., *Potterization, Palmerizing and Pegasus*, « Philosophical Studies », XVII, pp. 19-20.

Cfr. Potter, 1964, no. 137.

### 1967

163. Cartwright Richard L., *Classes and Attributes*, « Nous », I, pp. 231-241.

The method by which in various writings Quine approached the connections and differences between 'classes' and 'attributes' is examined. In particular, the author disputes that the use of the categories extensional and intensional can in some way throw light on the classes/attributes contrast.

164. Davis Steven, *Translational Indeterminacy and Private Worlds*, « Philosophical Studies », XVIII, pp. 38-45.

The author demonstrates that the thesis of indeterminacy of translation is either without significance or inconsistent. He analyses the relationship between this thesis and the doctrine of 'private worlds', considering it as the intralinguistic version of indeterminacy. The fundamental problem raised by both theories consists of behaviourist criteria which the linguist must adopt, since a difference in the analytical hypotheses is a difference in ontology and so in the worlds — conceptual or not — which they express.

165. Giannoni Carlo, *Quine, Grünbaum and the Duhemian Thesis*, « Noûs », I, pp. 283-297.

Quine, in *Two Dogmas* puts forward a radically conventionalist thesis. Grünbaum (cfr. *Philosophical problems of Space and Time*), puts himself at the other extreme with his position about the nature of geometric space. In an intermediate position, in relation to physics, Duhemian conventionalism is attested that the author defends as a non-banal example of semantic conventionalism.

166. Harman Gilbert, *Quine on Meaning and Existence*, I, « Review of Metaphysics », XXI, pp. 124-151.

In Part One of this broad survey, Quine's position with relation to meaning is described and defended. In Part Two, ontology and epistemology are examined.

167. Ihde Don, *Some Parallels between Analysis and Phenomenology*, « Philosophy and Phenomenological Research », XXVII, pp. 577-586.

Analogies are drawn between the thinking of Paul Ricoeur and Quine relative to language and experience. For both authors, the distinction between linguistic and non-linguistic phenomena, and between words and their reference, must be linguistically set. This is the problem of hermeneutics and Ricoeur seems to support Quine in seeing in the so-called 'semantic ascent' the privileged means of acquiring a philosophical perspective on the problem of language.

168. Katz Jerrold J., *Some Remarks on Quine on Analyticity*, « The Journal of Philosophy », LXIV, pp. 36-52.



The article attempts to indicate a direction in which it would still be possible to maintain the analytical-synthetic distinction, demonstrating that Quine's arguments are not conclusive.

- \* 169. Linsky Leonard, *Referring*, London, Routledge & Kegan.  
In one of the chapters, Quine's position on referential opacity is discussed.
170. Parsons Terence, *Grades of Essentialism in Quantified Modal Logic*, « *Noûs* », I, pp. 181-191.  
The problem raised by Quine of the compromising of quantified modal logic by Aristotelian essentialism is discussed. It is maintained that greater or lesser degrees of essentialism exist according to the different types of predicates considered as essential and that the main body of modal logics is involved in essentialism at a very weak level.
171. Rosenberg Jay F., *Synonymy and the Epistemology of Linguistics*, « *Inquiry* », X, pp. 405-420.  
It is argued that the Quine's indeterminacy is not peculiar to translation but is present in all empirical research and that Quine's arguments are contradictory deriving from a rather confused view of the matter.
172. Schulz K. J., *Wie sind analytische Satze A Priori möglich*, « *Kantstudien* », LVIII, pp. 499-519.
173. Smart J. J. C., *Critical Notices on: "The Ways of Paradox and Other Essays" and "Selected Logic Papers"*, « *Australasian Journal of Philosophy* », XLV, pp. 92-104.  
In examining these two works, the author gives a positive account of both Quine's philosophical and logical works.
174. Strawson Peter F., *Paradoxes, Posits and Propositions*, « *The Philosophical Review* », LXXVI, pp. 214-219.  
Q172 is considered in detail.

### 1968

175. Berry George, *Logic with Platonism*, « *Synthese* », XIX, pp. 216-249.

The author tries to demonstrate that the great logical systems, far from being ontologically uncommitted, require interpretations which, in overcoming nominalism and conceptualism, are inspired by a platonic metaphysics, and it is on this level that the author finds NF preferable to

other systems. Then he develops a revised version and uses it to explain traditional platonic theses.

176. Black Edward, *Aristotle's "Essentialism" and Quine's Cycling Mathematician*, « Monist », LII, pp. 288-297.

177. Cheng Chung-Ying, *Eliminability of Singular Terms Reconsidered*, « Foundations of Language », III, pp. 282-295.

The question of the elimination of singular terms is reconsidered in the light of the distinction between use and symbolisation of language. Quine's position is examined, as is Strawson's criticism, demonstrating the strength of the former and the weak points of the latter.

178. Chihara Charles S., *Our Ontological Commitment to Universals*, « Noûs », II, pp. 25-46.

According to the author, Quine slips up on platonic positions in spite of affirming the non-existence of universals. The vagueness of the criterion of ontological commitment is criticised and an analogy between Quine's arguments and those of a platonic type is demonstrated. Finally a number of possible ways of avoiding platonic conclusions are suggested.

179. Chomsky Noam, *Quine's Empirical Assumptions*, « Synthese », XIX, pp. 53-68.

The considerations developed in the first chapters of Q147 about the language nature and acquisition are discussed, in relation to the general structure of behaviourist psychology and empiricism.

180. Davidson Donald, *On Saying That*, « Synthese », XIX, pp. 130-146.

An analysis of reported speech is made in which the 'that' of, for example, 'Galileo said that ...' is seen as a demonstrative reference to an expression which follows on immediately. This analysis, discussed in different terms in *Word and Object*, does not prevent the recursive characterisation of a Tarski predicate of truth.

181. Føllesdal Dagfinn, *Quine on Modality*, « Synthese », XIX, pp. 147-157.

Quine's thesis, according to which it is impossible to quantify in referentially opaque contexts is accepted. It is demonstrated that modal construction can be referentially transparent and extensionally opaque and it is just this combination which Quine means by essentialism. The author agrees with Quine in saying that quantified modal logic commits to essentialism.

182. Geach Peter T., *Quine's Syntactical Insights*, « Synthese », XIX, pp. 118-129.

Various positions characteristic of Quine are examined, for example: the consideration of proper names as abbreviated defined descriptions; the assimilation of pronouns to bound variables and the elimination of complex designations via definition.

183. Goe George, *Modifications of Quine's ML and Inclusive Quantification Systems*, « The Journal of Symbolic Logic », XXXIII, pp. 39-42.

This article renews discussion (Cfr. Goe 1966, no. 155) and presents in detail the demonstration of \*119 in the modified system. It is also demonstrated that in a subsequent modification of the inclusive system it is advantageous to prohibit vacuous quantification, as has already been noted.

184. Harman Gilbert, *An Introduction to Translation and Meaning, Chapter Two of "Word and Object"*, « Synthese », XIX, pp. 14-26.

Indeterminacy of translation thesis is explained in analogy with the thesis on the translation of the number theory in the set theory. The psychological/behaviourist basis is stressed and a number of objections are examined, concluding that Quine is right even though no detailed explanation of this is given.

185. Hinman Peter G., Kim Jaegwon, Stich Stephen P., *Logical Truth Revisited*, « The Journal of Philosophy », LXV, pp. 495-500.

With reference to Q20, the authors confirm that the principle by which the classification of a statement as logical truth depends only on the interpretation of its logical components is central to the notion of logical truth. According to Quine, it depends on the interpretation of both logical and non-logical components as well as on the wealth of extra-logical apparatus available in language.

186. Hintikka Jaakko, *Behavioral Criteria of Radical Translation*, « Synthese », XIX, pp. 69-81.

The article criticises Quine's identification of the part of language that makes sense in terms of its conditions-stimulus with the part that is empirically conditioned and verifiable. As counter-examples, 'language games' for quantifiers are proposed. They permit the empirical recognition of quantifiers without being characterisable in terms of stimulus-meaning. The translation of propositional connectives is also discussed in relation to these new 'games'.

187. Jensen Ronald Björn, *On the Consistency of a Slight (?) Modification of Quine's "New Foundations"*, « Synthese », XIX, pp. 250-263.

An NFU system is proposed NF + 'urelements' — non-sets or empty set) demonstrating that it is coherent, weaker than NF and that it remains coherent after the addition of the axiom of choice, although it is shown that this axiom can be confuted in NF.

188. Kaplan David, *Quantifying In*, « Synthese », XIX, pp. 178-214.

A number of problems are discussed connected to the analysis of oblique contexts. Frege's method is compared with Quine's and a number of useful new notions on the analysis of the forms of quantification in these contexts are introduced.

- ° 189. Katz Jerrold J., *Unpalatable Recipes for Buttering Parsnips*, « The Journal of Philosophy », LXV, pp. 29-45.

Cfr. Q175 e Katz, 1967, no. 168.

190. Leonelli Michele, *Un argomento invalido di Quine*, « Annali della Scuola Normale Superiore di Pisa », Classe di Lettere e Filosofia, (37), pp. 195-196.

A short note in which an argument of Quine's in *Word and Object* relative to opacity and referential transparency is shown to be invalid.

191. Margolis Joseph, *Quine on Observationality and Translation*, « Foundations of Language », IV, pp. 128-137.

An attempt is made to demonstrate that indeterminacy of translation thesis oscillates between two incompatible points of view: one according to which the translation depends on the stimulus-meaning and another where it depends on analytical hypotheses. Of these two approaches, the more peculiar one is indefensible, in that the stimulus-synonymy must be considered a form of ordinary synonymy; the second eliminates the threat of a radical indeterminacy of translation.

192. Mondadori Fabrizio, *Quine e l'empirismo logico*, « Rivista Critica di Storia della Filosofia », XXIII, pp. 435-460.

The article examines both the critical and constructive aspects of the work of Quine, seen as an attempt to draw attention to the presumed basis of two doctrines which characterise logical empiricism: the distinction between analytical and synthetic and the linguistic interpretation of ontological problems.

193. Murphey Murray G., *Kant's Children: the Cambridge Pragmatists*, « Transactions of the Charles S. Peirce Society », IV, pp. 3-33.
- \* 194. Owens Joseph, *An Interpretation of Existence*, Milwaukee, Bruce.
195. Parrini Paolo, *Lo studio del riferimento in W. V. O. Quine*, « Rivista di Filosofia », LIX, pp. 438-466.  
A thorough examination of Quine's contribution to the study of reference.
- ° 196. Peterson Philip L., *Translation and Synonymy, Rosenberg on Quine*, « Inquiry », XI, pp. 410-414.  
Cfr. Rosenberg, 1967, no. 171.
197. Sayward Charles, *Propositions and Eternal Sentences*, « Mind », LXXVII, pp. 537-542.  
Quine's position relative to opaque or transparent contexts of reference is examined.
198. Sellars Wilfrid, *Some Problems about Belief*, « Synthese », XIX, pp. 158-177.  
The problem of the logical status of belief sentences is considered and the article discusses the position of Quine relative to the distinction between opaque and transparent contexts explained in *Word and Object*. The difference between Quine's position and that of Hintikka on the same problem is underlined. (Cfr. Sellars, *Reply to Quine*, in « Synthese », XXVI, pp. 122-145).
199. Smart J. J. C., *Quine's Philosophy of Science*, « Synthese », XIX, pp. 3-13.  
Quine's position on the philosophy of science, as it can be deduced from certain passages in Q147 is here presented. It is stressed that Quine does not make any great gap between science and philosophy or mathematics or common sense: mathematical entities are seen as theoretical postulates like electrons; epistemology is seen as a branch of biology. There follows a brief discussion of Quine's view that an extensional language is suitable for science.
200. Stenius Erik, *Beginning with Ordinary Things*, « Synthese », XIX, pp. 27-52.  
This is a detailed examination of the various problems touched on by Q147. The author adopts a very critical point of view, even though

he accepts the possibility that certain aspects of Quine's philosophy may have been misunderstood.

201. Stroud Barry, *Conventionalism and the Indeterminacy of Translation*, « Synthese », XIX, pp. 82-96.

The connection between the indeterminacy of translation and the immunity of logic from revision is examined, together with the problem of logical truths that are safeguarded by conventionalism against all observable behaviour.

202. Vermazen Bruce, *Consistency and Underdetermination*, « Philosophy and Phenomenological Research », XXVIII (1967-68), pp. 403-409.

Quine's vision of science as a force field whose boundary conditions are experience and the thesis of revisability of the logical laws in the presence of recalcitrant experience are discussed.

#### 1969

203. Anscombe G. E. M., *Causality and Extensionality*, « The Journal of Philosophy », LXVI, pp. 152-159.

Quine's position on truth-functionality of referentially transparent contexts is discussed.

204. Bacon John, *Ontological Commitment and Free Logic*, « Monist », LIII, pp. 310-319.

Bergman and Quine's semantic criteria of existence as systems of so-called free logic, pose the problem of deontology. Bergman does not tell us which descriptive constants to include in our language and Quine does not tell us what type of item would be suitable for the range of variables that can be bound. Perhaps the interesting analogy between extants and facts could throw light on the concept of existence.

205. Berlinski David - Gallin Daniel, *Quine's Definition of Logical Truth*, « Noûs », III, pp. 111-128.

Quine's definition of logical truth is here discussed, first considered in the context of arithmetic, then in the set theory. Some objections raised by Hinman, Kim and Stich (cfr. 1968, no. 185) are considered.

206. Bradley M. C., *How Never to Know What You Mean*, « The Journal of Philosophy », LXVI, pp. 119-124.

The article argues that a *reductio ad absurdum* of the thesis of the indeterminacy of translation, that Quine considers only to reject it (cfr.

Q179) is the last of its consequences, amongst which is counted the fact that no one can ever, in any sense, know what is intended when he explains language.

- \* 207. Davidson D. - Hintikka J. (Eds.), *Words and Objections. Essays on the Work of W. V. Quine*, Dordrecht, D. Reidel Publishing Company.

This is a collection of essays, the most part of which had already appeared in the journal « Synthese » in 1968, followed by Quine's replies and his bibliography.

208. Dorrrough Douglas C., *A Note on Primary and Secondary Sincategoremata*, « Foundations of Language », V, pp. 285-288.

Quine's technique for distinguishing the sincategorematical use of adjectives is set down within the closely grammatical context showing how it can be extended to establish a syntactic hierarchy in a given language.

209. Giannoni Carlo, *A Defence of Logical Conventionalism*, « Ratio », XI, pp. 89-101.

Quine's logical conventionalism is criticised and a form of conventionalism is proposed with the following elements: 1) Linguistic conventions are no more than logical rules of inference of the natural language. 2) The only intralinguistic meaning of logical connectives is that given completely by the logical rules of inference. 3) There is a new definition of truth for statements that lead from true premises only to true conclusions. 4) There is a new definition of logical truth coextensive with the usual definition — a proposition is true and remains true under all the reinterpretations — without therefore reducing logical truths to contingent propositions.

210. Gochet Paul, *The Problem of the Ontological Status of Propositions and the Theory of Meaning*, « Logique et Analyse », XII, pp. 189-197.

This is an attempt to reconcile Quine's holism with the atomistic aspects of Katz and Fodor's generative semantics, developing the distinction between various types of context. The relationship between platonism and nominalism is examined. It is shown that Frege's dichotomy between sense and reference depends upon his empiricism and that Carnap's assimilation of false statements into complex non-exemplified predicates obscures the distinction between reference and predication.

211. Grandy Richard E., *On What There Need Not Be*, « The Journal of Philosophy », LXVI, pp. 806-812.

This article faces the problem of non-necessary entities and Quine's

proposal for ontological reform aimed to making such entities disappear through the elimination and the reduction. Furthermore the relationship between Quine's proposal and the Löwenheim-Skolem theorem is analysed.

212. Grice H. P., *Vacuous Names*, in no. 207, pp. 118-145.

This article, in the book dedicated to Quine, does not discuss directly Q147 but tries to explore possible alternatives to the idea of singular terms and names eliminability.

213. Grishin V.; *Consistency of a Fragment of Quine's NF System*, « Soviet Mathematics - Doklady », X, pp. 1387-1390.

214. Harris Jr. James F., *Quine on Analyticity and Logical Truth*, « The Southern Journal of Philosophy », VII, pp. 249-255.

It is shown that the same arguments used by Quine against analyticity can also be used against logical truth. The two notions stand or fall together.

215. Henson C. Ward, *Finite Sets in Quine's "New Foundations"*, « The Journal of Symbolic Logic », XXXIV, pp. 589-596.

Some axiomatic systems of the set theory relative to NF are considered. It is shown that the results may be applied to every extension of NF whose axioms are stratified statements, and to consistent subsystem of NF.

216. Jubien Michael, *Two Kinds of Reduction*, « The Journal of Philosophy », LXVI, pp. 533-541.

This article expounds the notion of ontological reduction with reference to the Löwenheim-Skolem theorem. There are two types of reduction which can be thought of as ontological, and only one of these is correlated to the theorem. It is maintained that the belief that the theorem justifies the adoption of an ontology constituted only by wholes has its roots in the confusion between the two types of reduction and is seen as untenable.

- \* 217. Kaminsky Jack, *Language and Ontology*, Carbondale S., Illinois University Press.

This is an introduction to the study of the ontological implications of language. The works of Wittgenstein, Frege, Russell, Carnap, Popper, Strawson, Quine and Geach attract critical comment.



218. Kearns John T., *Two Views of Variables*, « Notre Dame Journal of Formal Logic », X, pp. 163-180.

Russell and Quine consider variables as autonomous referential expressions and so from this point of view the quantification in the fundamental mechanism to indicate ontological commitments. Frege and Lesniewski consider the variables as replacements for constant expressions and this leads to the view of the quantifiers as examples of substitution of quantified expressions. According to the author this second view is preferable.

- ° 219. Kirk Robert, *Quine's Indeterminacy Thesis*, « Mind », LXXVIII, pp. 607-608.

Cfr. Kirk, no. 220 and Q182.

220. Kirk Robert, *Translation and Indeterminacy*, « Mind », LXXVIII, pp. 321-341.

The author wants to confute the thesis of the indeterminacy of translation. On the one hand the latter is limited by the presence of stimulus-analytic propositions, on the other no analytic hypothesis is necessary to find the intelligibility of propositions. As the lack of agreement about translation between speakers of different languages would be reflected in the relationships, then such disagreement would reveal the lack of a collective conformation in constraint supposed as objective. On the basis of these considerations the thesis is considered false.

221. Linsky Leonard, *Reference, Essentialism and Modality*, « The Journal of Philosophy », LXVI, pp. 687-700.

The article presents Quine's arguments against quantified modal logic. The principal consideration is that from the point of view of the semantics of the classical theory of quantification, there is no sense in quantifying in referentially opaque contexts. Some ways of overcoming Quine's criticism are considered: Frege's recourse to intensions as values of the variables of quantified modal logic; Smullyan and Fitch's recourse to descriptions and the recourse to R. Marcus's substitutional quantification. In the author's opinion only Kripke's semantics justifies Quine's affirmation, according to which quantified modal logic implies essentialism.

222. Margolis Joseph, *Ontology and 'Red' and 'Soluble'*, « Mind », LXXVIII, pp. 240-246.

Light is thrown upon some weak points of Quine's argument in Q85 and Q147, in relation to the nature of ontology that emerges from them.

- \* 223. Martin Richard M., *Belief, Existence and Meaning*, New York, New York University Press.

224. Parsons Terence, *Essentialism and Quantified Modal Logic*, « The Philosophical Review », LXXVIII, pp. 35-52.

Essentialism, in its various forms, is not implied by any contingently true modal proposition: on the other hand quantified modal logic is committed with the significativity of essentialism. This type of commitment could be rendered innocuous by asking that essentialism be rendered logically false: some consequences of assuming such a position are here examined.

- \* 225. Passmore John, *Philosophy in the Last Decade*, Sydney, Sydney University Press.

226. Sengupta Pradip Kumar, *Johnson and Quine on 'Can the Implicative Be ever Used as Premise'?*, « The Visvabharati Journal of Philosophy », V, pp. 61-67.

227. Smith John E., *The Reflexive Turn, the Linguistic Turn, and the Pragmatic Outcome*, « Monist », LIII, pp. 588-605.

An attempt to find the leit-motiv of the development of critical philosophy — beginning with the 'reflexive tendency' (Locke, Kant) passing on to the 'linguistic tendency' (Ayer, Carnap etc.) and finishing up with the affirmation of Quine and others for whom pragmatism is inevitable. It is concluded that there can be no neutral critical philosophy.

- ° 228. Thornton M. T., *Rundle on Referential Opacity*, « Analysis », XXIX, pp. 125-128.

See Butler R. J. (Ed.) *Analytical Philosophy*, Oxford 1965, which, amongst other things, pauses to consider Quine's thought on referential opacity.

229. Wedeking Gary, *Duhem, Quine and Grünbaum on Falsification*, « Philosophy of Science », XXXVI, pp. 375-380.

The author says that Grünbaum (Cfr. 1962, no. 117) misrepresented Duhem's argument against the possibility of falsifying a hypothesis in physics and that Duhem's conclusion follows on from the premise of inductive uncertainty, which Grünbaum himself would accept. Duhem's thesis is then distinct from Quine's conventionalist theory, according to which every proposition in a system can be maintained in the face of recalcitrant experiences supplying adequate adjustments in the rest of the system. Grünbaum's approach to Quine's theory is then discussed.

230. Zemach Eddy M., *Reference and Belief*, « Analysis », XXX, pp. 11-15.

In as much as coreferential terms are interchangeable *salva veritate* in

belief contexts, the author tries to refute some demonstrations (Quine's included) of their non-referential use.

### 1970

231. Bell J. M., *Opacity and Identity*, « Analysis », XXXI, pp. 19-24.  
In joining the debate over the theory of reference, the author distinguishes two modes of reference for definite descriptions, drawing on Strawson and Donnellan and using this distinction to criticise Quine's theory.
232. Black Max, *Comments on Quine's Paper*, in Kiefer H. E. - Munitz M. K. (Eds.), *Language, Belief and Metaphysics*, Albany, State University of NY Press, pp. 19-24.  
This is a comment of Q196.
233. Butrick Richard, *Quine on the 'Is' in 'Is Analytic'*, « Mind », LXXIX, pp. 261-264.  
According to the author, Quine is wrong in treating 'Is analytic' as a declarative predicate, that is as a predicate whose extension is a function of its intension. On the contrary, its role could remain unchanged even if its extension is varied.
234. Clarke Jr D. S., *Mass Terms as Subjects*, « Philosophical Studies », XXI, pp. 25-28.  
This is a criticism of Quine's treatment of mass terms (water, gold etc.) in Q147. Rather than considering them as singular terms referring to each object, they are seen as general terms, used as subjects of sentences.
- 234a. Coret J., *Sur les cas stratifiés du schéma de remplacement*, « Comptes Rendus de l'Académie des Sciences de Paris », (série A), CCLXXI, pp. 57-60.
235. Ferguson A. Thomas, *Quine, Carnap and Wittgenstein: Analyticity and Logical Compulsion*, « Dialogue » (Phi Sigma Tau), XII, pp. 1-15.
236. Gladkikh J. G., *Les Logiques exemptes de prémisses existentielles*, (in russian), « Voprosy Filosofii », n. 3, pp. 108-119.  
Two ways of approaching the concept of existence in logic are put under examination: that which denies that existence is a predicate and that according to which it is. The discussion is particularly concerned with Quine's position.

- \* 237. Gross Barry R., *Analytic Philosophy. An Historical Introduction*, New York, Pegasus.

In a brief chapter, Quine's conception of ontological commitment and the analytical/synthetic distinction are dealt with.

238. Hesse Mary, *Dubem, Quine and a New Empiricism*, in *Knowledge and Necessity*, London, Mc Millan.

239. Hintikka Jaakko, *The Semantics of Modal Notions and the Indeterminacy of Ontology*, « Synthese », XXI, pp. 408-424.

Amongst others, Quine's arguments on non-actualised possibles and ontological relativity are discussed.

240. Hooker C. A., *Demonstratives, Definite Descriptions, and the Elimination of Singular Terms*, « The Journal of Philosophy », LXVII, pp. 951-960.

The possibility of eliminating singular terms, supported by Quine, is discussed showing that a large part of his program of elimination hinges on the role of spatial-temporal parameters in definite descriptions. However, the singular terms that mark these parameters may be eliminated from definite descriptions only at the price of adopting unconvincing philosophical theses.

241. Humphries B. M., *Indeterminacy of Translation and Theory*, « The Journal of Philosophy », LXVII, pp. 167-178.

Numerous interpretations of Quine's thought regarding indeterminacy and underdetermination are here discussed; some of them are unsatisfactory in that they are banal or not coherent with other parts of Quine's thought, thus showing the need of further clarification of the thesis of indeterminacy and also showing suitable starting points.

242. Kauber Peter, *The Development of the New-Pragmatic Theory of the A Priori*, « Kinesis », III, pp. 9-33.

The article traces the development of the neopragmatist theory from its roots (C. I. Lewis) to Quine, Carnap and White.

243. Kutschera Franz von, *Gebrauch und Bedeutung exemplarisch eingeführter Praedikate*, « Philosophisches Jahrbuch », LXXVII, pp. 355-377.

Having as point of reference the thought of Quine and Wittgenstein, the author sets out to make clear how it might be possible to determine the sense of a predicate by way of examples of its use.

244. Landesman Charles, *Scepticism about Meaning: Quine's Thesis of Indeterminacy*, « Australasian Journal of Philosophy », XLVIII, pp. 320-337.

This is a detailed discussion of Quine's thesis. At the end the author recognises the difficulty of counterposing a plausible alternative to Quine's vision, especially making from mentalist premises.

- ° 245. Martin Edwin Jr., *Harman on Quine on Existence*, « Noûs », IV, pp. 201-206.

Cfr. Harman, 1967, no. 166.

246. Mondadori Fabrizio, *Introduzione a Q., Parola e Oggetto*, (italian ed. of *Word and Object*), Milano, Mondadori, pp. VII-XLVIII.

After having outlined the 'precedents' of *Word and Object* the author analyses the thesis of indeterminacy and the behaviourist theory of meaning, mentioning at the end a logical grammar derived from Quine's criticism of intensions.

- \* 247. Olsen R. (Ed.), *Scandinavian Studies in Philosophy*, Baltimore, Johns Hopkins Press.

248. Parsons Terence, *Various Extensional Notions of Ontological Commitment*, « Philosophical Studies », XXI, pp. 65-74.

Numerous different characterisations of the ontological commitment criterion, expunged from Quine's writings, are here discussed. Each of them is valued with respect to its conforming to an intuitive notion of 'what a theory says there is'.

249. Putnam Hilary, *Is Semantics Possible?*, « Metaphilosophy », I, pp. 187-201.

The author puts forward the problem of the limited progress made by the semantic theory of natural languages as against the enormous development reached by the syntactic theories thanks to generative grammar. He mentions Quine's doubtful position with regard to the possibility of semantic theory being put forward as an object of research. Quine's pessimism could be avoided if it would be possible to demonstrate the correctness of an empirical hypothesis that took a cue from the same notion as Quine's stimulus-meaning and that consisted in considering the use of each word as acceptance of a theory, the so-called 'stereotype' regarding the reference of such a word.

250. Ruyer Bernard, *Un cas pendable. Sur un paradoxe de la vérité et du mensonge*, « Revue Philosophique de la France et de l'Étranger », VC, pp. 145-154.

A discussion of the paradox of the condemned man. Cfr. Q123.

251. Sharvy Richard, *Truth-Functionality and Referential Opacity*, « Philosophical Studies », XXI, pp. 5-9.

Quine's position, which the author finds surprising, on the connection between truth-functionality and referential opacity seems to destroy any hope of finding a referentially transparent construction of logical operators. Non truth-functional logical operators do exist, which have a philosophical interest due to the fact that they seem to generate referentially opaque contexts. There is the difficulty that, to attribute *de re* properties to objects there must be a way of constructing these operators as referentially transparent, otherwise the most one can do is to attribute *de dicto* properties to objects under certain descriptions.

252. Simpson R. L., *Quine on Ambiguity*, « Analysis », XXX, pp. 124-125.

Quine says that a term is ambiguous if, and only if, it can be clearly true or clearly false in relation to the same thing according to the different interpretations of the expression containing the term. It is shown that none of Quine's examples of non-ambiguous terms really stand up if subjected to different tests.

253. Stich Stephen P., *Dissonant Notes on the Theory of Reference*, « Noûs », IV, pp. 385-397.

A discussion of the distinction between the theory of meaning and the theory of reference, which shows that the arguments Quine advances to support the second theory sometimes conflict with others arguments relating to the first.

254. Tuomela Raimo, *Meaning and Behavior*, « Ajatus », XXXII, pp. 67-95.

255. Ziff Paul, *A Response to "Stimulus Meaning"*, « The Philosophical Review », LXXIX, pp. 63-74.

A slating of Quine's notion of stimulus-meaning based on a refusal of the possibility of correlating statements and stimulations and thus refuting too a causal description of linguistic behaviour.

## 1971

256. Basu Dilip Kumar, *Quine on Logical Truth*, « The Southern Journal of Philosophy », IX, pp. 341-343.

Quine's definition of logical truth relates it to the vocabulary and grammar of the language proposition belong to, and can, therefore, fail to include mathematical truths which are true in an infinite universe. The vacuous variants of a statement do not substitute all the subclasses of the universe as extensions of vacuous occurrences. So a statement which is valid in an infinite universe and which, according to Quine's definition, is true, might not be true for subclasses beyond the range of the language to which the statement belongs.

- ° 257. Becker Edward F., *Indeterminacy Defended*, « Philosophical Studies », XXII, pp. 1-9.

Cfr. Davis, 1967, no. 164.

258. Brodeur Jean-Paul, *Faits, phrases et propositions*, « Dialogue », X, pp. 673-689.

The author exposes the debate between Quine, who has brought into question the existence of proposition conceived of as being distinct from the statements which express them, and the supporters of the opposite stance. Here, the proposition is defined as a synthesis of concepts.

259. Browning Douglas, *The Subject-matter of Metaphysics*, « The Southwestern Journal of Philosophy », II, pp. 103-115.

Establishing the object of metaphysics is made to depend on the accepted theory of reference.

260. Burkholder L., *The Determinist Principle as Synthetic and A Priori*, « Kinesis », IV, pp. 43-57.

261. Candlish Stewart, *The Inexplicability of Identity*, « Australasian Journal of Philosophy », XLIX, pp. 23-37.

The article deals with the problem of the identity of indiscernibles. In this context Quine's work is considered with regard to referentially opaque contexts.

262. Cauty John T., *Elementary Logic without Referential Quantification*, « Notre Dame Journal of Formal Logic », XII, pp. 441-446.

It is shown that using a logical theory which maintains all the principles of classical quantification and which is stronger than what Quine calls

'the virtual theory of classes' (Cfr. Q156), it is possible to avoid not only a commitment to the existence of classes but also to the existence of individuals.

263. Delaney Cornelius F., *Recent Work on American Philosophy*, « The New Scholasticism », XLV, pp. 457-477.

The article points out the continuity of contemporary American philosophy with classical philosophy, concentrating on certain problems peculiar to the American tradition, from Peirce and James to Sellars and Quine.

264. Foss Laurence, *Quine and Translational Indeterminacy*, « Notre Dame Journal of Formal Logic », XII, pp. 195-202.

Although it is obvious that Quine wants to distinguish stimulus-synonymy of occasion sentences from the ordinary one, he does not provide us with any suitable criteria. The author means to provide an interpretation key by making a distinction between meaning analysis conducted at declarative level and that conducted at a higher, theoretical level. The indeterminacy of translation, on the other hand, provides the epistemological basis for Quine's acceptance of the philosophy of scientific realism.

265. Gauthier Yvon, *Logique, mathématiques et philosophie des mathématiques*, « Dialogue », X, pp. 243-275.

- \* 266. Giannoni Carlo Borromeo, *Conventionalism in Logic. A Study in the Linguistic Foundation of Logical Reasoning*, The Hague, Mouton.

The author's purpose is to construct a comprehensive and coherent theory of the nature of logical truths and of the notions of logical validity and necessity. In particular, he defends logical conventionalism. Q20 is discussed.

267. Hooker C. A., *Quine on the Referential Functions of Bound Variables and Quantifiers*, « Mind », LXXX, pp. 481-496.

A careful examination of Quine's writings reveals three distinct and mutually incompatible theses in relation to the preferential function of bound variables and quantifiers. These theses emerge from the distinct roles of proper nouns and personal pronouns in natural languages.

- \* 268. Katz Jerrold J., *The Underlying Reality of Language and Its Philosophical Import*, New York, Harper & Row.

An exposition of Quine's thought in relation to the analytical/synthetic distinction.



269. Lacey Hugh M., *Quine on the Logic and Ontology of Time*, « *Australasian Journal of Philosophy* », XLIX, pp. 47-67.

The aim of the essay is to clarify which types of spatial-temporal entities belong to Quine's ontology. Certain logical problems are examined and Quine's solutions are compared to Prior's. Moreover, through Geach's position the author makes explicit Quine's ontology in relation to which he does not adopt any precise stance.

270. Lambert A. C. - Shaw P. D., *Quine on Meaning and Translation*, « *Mind* », LXXX, pp. 109-113.

Indeterminacy of translation thesis is exposed and discussed.

271. Levin Michael E., *Length Relativity*, « *The Journal of Philosophy* », LXVIII, pp. 164-174.

If Quine is right about ontological relativity, then nobody can say how long a rabbit is. A rabbit which is 3.42 inches long is also a rabbit 24,54 centimetres long. If these two 'alternative hypotheses of translation' are equivalent, then so are alternative ontological hypotheses. Quine is ironically mentioned and it is suggested that, for Quine, alternative ontologies are nothing more than alternative conventions.

272. Levy Edwin, *Competing Radical Translations: Examples, Limitations and Implications*, in *Boston Studies in the Philosophy of Science*, VIII, Buck R. C. and Cohen R. S. (Eds.), PSA 1970, in Memory of Rudolf Carnap, Dordrecht, D. Reidel, pp. 590-605.

After having proposed an example that involves underdetermined physical theories, the author applies it to a situation of radical translation, with the purpose of to demonstrate that the indeterminacy of translation is fundamentally different from that of physical theories, and of to undermine its theoretical premises.

273. Margolis Joseph, *Proper Names, Truth-Value Gaps, and Paraphrastic Programs*, « *American Philosophical Quarterly* », VIII, pp. 197-200.

Faced with the problem of attributing a truth value to propositions containing nouns devoid of reference, Quine makes a paraphrase of such nouns through predicative expressions which do not create problems of truth-functional evaluation. According to the author, such a method does not resolve the problem but rather raises unresolvable ambiguities.

- \* 274. Martin Richard M., *Logic, Language and Metaphysics*, New York, New York University Press.

One chapter is dedicated to exposition of some contemporary theories of meaning, including those of Davidson, Hintikka and Quine.

275. Mason M. S., *The Logical Structure of a Proposition of Law*, « Jurimetrics Journal », II, pp. 99-122.

Quine's system (Cfr. Q6) is applied to the analysis of the structure of a legal assertion. A method of inference for new, valid, legal assertions is also described.

276. Montero Moliner Fernando, *El análisis del lenguaje y la reducción eidética*, « Convivium », XXXIV, pp. 5-22.

277. Mullick Mohini, *Rules of Logic and What There Is*, « The Visvabharati Journal of Philosophy », VIII, pp. 1-6.

278. Myers C. Mason, *Ontological Cryptophobia*, « Philosophy and Phenomenological Research », XXXII, pp. 219-234.

Quine's refusal of non-existent possible objects (Q85) is contested replying to each objection without unnecessary reifications. In particular, it is argued that possibility cannot be considered as something purely mental. The concept of reality is then examined to determine in what sense a possibility can be real in a philosophically interesting way.

279. Parrini Paolo, *Da Quine a Katz*, (I), « Rivista Critica di Storia della Filosofia », XXVI, pp. 306-330.

An overview which is both an exposition and a critique of the most significant aspects of Quine's thought.

280. Parsons Charles D., *Ontology and Mathematics*, « The Philosophical Review », LXXX, pp. 151-176.

The ontological commitment of constructive theories in mathematics is discussed. Contrary to Quine's opinion, in dealing with arithmetic, it is necessary to consider ontologies other than those based on classical quantified logic. It is then shown how the presence of stronger concepts in constructive mathematics does not require an enriched ontology with intensional entities but rather additional predicates, for example truth predicates. The set theory is interpreted in the same way.

281. Post John F., *Paradox in Critical Rationalism and Related Theories*, « Philosophical Forum », III, pp. 27-61.

Within a wider discussion of critical rationalism (CR) the author shows that Quine's epistemology rises above the sort of criticism to which CR and correlated theories are subjected. This is because Quine, for

well known reasons. abandons analyticity. The author agrees with Quine's result, but not with his premises.

282. Poznanski E. I. J., *La logique philosophique de Quine*, (in hebrew), « Iyyun », XXII, pp. 67-76.

A critique of Q195.

283. Reeves Alan, *Referential Opacity*, « Australasian Journal of Philosophy », XLIX, pp. 271-289.

Quine's definitions of 'purely referential position' and 'referential opacity' in terms of a substitution criterion are too simple in that they do not permit distinctions needed to the aim of going deeper into the analysis of certain concepts. Increased complexity is also required in the definitions of extensional context and truth-functional context. Some examples are discussed in their general implications.

284. Scott Dana, *On Engendering an Illusion of Understanding*, « The Journal of Philosophy », LXVIII, pp. 787-807.

The question raised by Quine of whether modal logic is the result of a confusion between use and mention is discussed. There is an informal description of some simple results of the proof theory that show how systems such as S4 can be seen as formalisations of deduction-theory.

- ° 285. Sedey Daniel, *How Quine Eliminates Demonstratives*, « The Journal of Philosophy », LXVIII, pp. 409-412.

Cfr. Hooker, 1970, no. 240.

286. Shirley Edward S., *Stimulus Meaning and Indeterminacy of Translation*, « The Southern Journal of Philosophy », IX, pp. 417-422.

It is maintained that the notion of stimulus-meaning contrasts with the indeterminacy of translation thesis. This is because while, according to the first, the linguist starts from the correlation of stimulus-meanings of the observation sentences in the two languages, the second implies that in the case of two speakers, if each of them finds the other's answer ever intelligible, then there is no further problem of meaning similarity among observation sentences.

287. Tharp Leslie H., *Ontological Reduction*, « The Journal of Philosophy », LXVIII, pp. 151-164.

The article means to investigate the notions of ontological reduction and ontological economy, polemising with the theses about the matter sustained in Q161 and in Q179, which are considered to be unsatisfactory.

The criticism is then extended to take in the whole programme of ontological reduction which, in the author's opinion, is not well set-off.

288. Thomason Jacqueline Miller, *Ontological Relativity and the Inscrutability of Reference*, « Philosophical Studies », XXII, pp. 50-56.

This is a discussion of objectual and substitutional interpretations of quantifiers. These are seen as an attempt on Quine's part to modify his theory of ontological commitment in such a way as to prevent his thesis of the indeterminacy of translation, when applied to general terms of a language, from implying the senselessness of reference..

289. Wallace John, *A Query on Radical Translation*, « The Journal of Philosophy », LXVIII, pp. 143-151.

An attempt to trace a theory of radical translation departing from Quine's theses, which tries to obviate its weak points by connecting it to psychological and epistemological problems.

290. Wilder Hugh T., *Lewis and Quine on Private Meanings and Subjectivism*, « Canadian Journal of Philosophy », I, pp. 25-44.

The article examines some analogies between the theory of meaning developed by Lewis in *Mind and the World Order*, and the theory in Q147 and, in particular, between the predication of private worlds which is implied by Lewis' theory and Quine's predication in the indeterminacy of translation thesis. The analogy tends to show that both the theories support some aspects of the subjectivist position given by Scheffler in *Science and Subjectivity*.

291. Zemach Eddy M., *Epistemic Opacity*, « Logique et Analyse », XIV, pp. 803-810.

Having formulated the problem of the opacity of contexts governed by epistemic operators, the author examines Quine's demonstration that some epistemic contexts are referentially opaque and finds it invalid.

#### 1972

- ° 292. Barnes Kenneth T., *Hintikka's Argument for the Need for Quantifying into Opaque Contexts*, « Philosophical Studies », XXIII, pp. 385-392.

Cfr. Hintikka, 1962, no. 119.

293. Bosch Jorge, *The Examination Paradox and Formal Prediction*, « Logique et Analyse », XV, pp. 505-525.

Cfr. Q123.

294. Brody Baruch A., *De re and de dicto Interpretations of Modal Logic or a Return to an Aristotelean Essentialism*, « *Philosophia* » (Israel), II, pp. 117-136.

295. Bromley Eric D., *Suggestions on Analytic Sentences*, « *Agora* », II, pp. 33-40.

An examination of the way in which the problem of analyticity has been dealt with in the past. According to the author, 'a priori' and 'analytical' have independent connotations. He shows how analytical sentences are similar to definitions and how the concept of identity characterises that of definition and hence the analyticity. Finally, he presents Quine's objections to the analytical/synthetic distinction.

296. Burdick Howard, *On Necessity de dicto*, « *Philosophia* » (Israel), II, pp. 85-115.

The article intends to show that a system of quantified modal logic in which all the modal statements are explicable in terms of analyticity is possible. Carnap's system of *Meaning and Necessity* is modified taking account of Quine's objections.

297. Burge Tyler, *Truth and Mass Terms*, « *The Journal of Philosophy* », LXIX, pp. 263-283.

It is argued that mass terms play the logical role of predicates context they occur. There follows a discussion about the relationship between the problem of identifying the entities to which mass terms are applied and that of identifying their logical form.

298. Castaneda Hector-Neri, *Thinking and the Structure of the World*, « *Critica* », VI, pp. 43-86.

In dealing with the problem of referential opacity, an ontological system is developed which is proposed as a unified theory of reference and individuation. Such a system can resolve a number of philosophical problems such as: the nature of existence, the different types of predication, the contrast between identity and numerous uniformity relationships and quantification in psychological contexts. It also contains a new theory of proper names and definite descriptions.

299. Cummins Robert - Gottlieb Dale, *On an Argument for Truth-Functionality*, « *American Philosophical Quarterly* », IX, pp. 265-270.

This is a criticism of Quine's argument that a referentially transparent context in which logically equivalent statements can be substituted *salva veritate* is truth-functional. A logical error in this argument is exposed and the argument is reformulated.

300. Deledalle Gerard, *Présence du Pragmatisme*, « Revue Internationale de Philosophie », XXVI, pp. 21-41.  
An overview of the history of American pragmatism from Peirce to C. I. Lewis, Morris, Quine and Sellars.
301. Esplugues J. Sanmartin, *Sobre la Consistencia de las "New Foundations for Mathematical Logic"*, « Teorema », pp. 71-89.
302. Evans Charles, *Salvaging Necessary Truth*, « The Journal of Critical Analysis », IV, pp. 24-32.  
The notion of necessary truth is defended against Quine's criticism of analyticity.
303. Galvan Sergio, *Difficoltà di una semantica puramente estensionale dei sistemi formali*, « Rivista di Filosofia Neo-Scolastica », LXIV, pp. 213-238.  
Quine's and Carnap's theses on the analytical-synthetic distinction are here analysed. It is proposed, in opposition to their shared pragmatism an acceptance of the ontological importance of the intensions, that is to say the irreducibility of intensions to extensions. Attention is then turned to the problem of synonymy and to meaning postulates.
304. Gaskin D. A., *The Analytic-Synthetic Controversy*, « Australasian Journal of Philosophy », L, pp. 107-123.  
Quine's position with respect to the definition of analyticity and synonymy and his holism are illustrated.
- \* 305. Geach Peter Thomas, *Logic Matters*, Oxford, Blackwell.  
Numerous articles about the author are here reprinted, in some of which Quine's thought is considered.
306. Giedymin Jerzy, *Quine's Philosophical Naturalism*, « The British Journal for the Philosophy of Science », XXIII, pp. 45-55.  
Quine's reasons for supporting a naturalized epistemology consist, amongst other things, in considering knowledge, mind and meaning as part of the world to which they relate. The objection here is that no well defined methodological line could be based on this point of view. Furthermore the role of behaviourist psychology in the study of knowledge acquisition is here discussed.
307. Goble L. F., *Necessity and Identity*, « Canadian Journal of Philosophy », II, pp. 55-71.  
The problems raised by Quine regarding modal logic: in particular the

interconnections between modality, quantifiers, and identity, are analysed. A fundamental point is Quine's principle of substitution between coreferential expressions, that produces, within quantified modal logic, certain paradoxes in contexts in which defined descriptions recur. The article tries to outline solutions to these paradoxes.

- \* 308. Gochet Paul, *Esquisse d'une théorie nominaliste de la proposition*, Paris, A. Colin (cfr. translated and largely revised version, 1980, n. 777).

Quine's criterion of ontological commitment, his nominalism and extensionalism are critically set forth in some detail within a wide ranging and detailed debate.

309. Gochet Paul, *Sur la sémantique de la logique épistémique (Frege, Quine, Hintikka)*, « International Logic Review », III, pp. 50-63.

The article compares epistemic logics regarding the problems posed by the reasonings in which the same variable figures simultaneously in an opaque and in an extensional context.

- 309a. Grishin V., *Concerning some fragments of Quine's NF system to one of its fragments*, (in russian), « Issledovania po matematicheskoy lingvistikke, matematicheskoy logike i informativnyy jazykam », pp. 200-212.

310. Grishin V., *The equivalence of Quine's NF system to one of its fragments*, (in russian), « Nauchnotekhnicheskaya Informatsiya », I, pp. 22-24.

- \* 311. Harrison Bernard, *Meaning and Structure. An Essay in the Philosophy of Language*, New York, Harper.

The article proposes the development of a systematic theory of the nature of the conventions governing the semantics of natural language. It discusses, in the light of philosophy and psycholinguistics, the basic notions (such as synonymy) and sets this against the empiricist theory of language.

312. Hill Christopher S., *Gavagai*, « Analysis », XXXII, pp. 68-75.

This is a discussion of the methods used by linguists in translation. According to Quine, the linguist can't distinguish objectively between referential quantification and a substitutional simulation. Here it is said that he can however recognise logical similarities between statements and demonstrations of the two languages under consideration. From this the linguist passes on to consider the predicates of identity. It

seems that essentially Quine's techniques may be used to determine whether an exotic people shares our concept of identity. When certain assumptions are satisfied, the linguist may discover the extension of 'gavagai'.

- 312a. Hinnion R., *Sur les modèles de NF*, « Comptes Rendus de l'Académie des Sciences de Paris », (serie A), CCLXXV, p. 567.
313. Hodges Michael P., *Quine on "Ontological Commitment"*, « Philosophical Studies », XXIII, pp. 105-110.  
 Quine's criterion for ontological commitment is analysed and appears as the condensation of three separate criteria. Each of which, when put under criticism, is found to be inadequate, either because it is vague, restrictive or illspecified.
314. Hsu Sung-Peng, *Belief, Knowledge and the Personal*, « Philosophical Review » (Taiwan), pp. 95-100.
- ° 315. Hyslop A., *Kirk on Quine on Bilingualism*, « Mind », LXXXI, pp. 271-272.  
 Cfr. Kirk, 1969, no. 220.
316. Jubien Michael, *The Intensionality of Ontological Commitment*, « Noûs », VI, pp. 378-387.  
 The author wants to show that the criterion of ontological commitment consistent in the definition of a binary relationship between theory and things is inadequate or intensional, in sharp contrast to Quine's purposes. Such intensionality has been sustained by Cartwright (cfr. 1954, no. 43) and Scheffler and Chomsky (cfr. 1958, no. 91).
317. Kalin Martin G., *Quine's Response to the Dualism of Kant and Carnap. A Case of Abortive Hegelianism*, « Philosophy Today », XVI, pp. 180-192.  
 The author sets out to show that Quine's objections to Carnap (e.g. the analytical-synthetic distinction and the division of knowledge into formal and material components) are similar to Hegel's criticism of Kant. What's more the article affirms that Quine's criticism is not very sound in as much as he allows modified versions of the distinctions that he has attacked as unsupportable.
- \* 318. Katz Jerrold J., *Semantic Theory*, New York, Harper & Row.  
 The author wants to develop a rationalist and intensional theory of semantics that demonstrates the scientific profundity of concepts such



as sense, meaning, synonymy, analyticity, etc. He pauses to consider Quine's thought relating to analyticity and referential opacity.

319. King-Farlow John, *Two Dogmas of Linguistic Empiricism*, « Dialogue », XI, pp. 325-336.

320. Koehler Conrad J., *Quine on the Ontological Controversies*, « Revue Internationale de Philosophie », XXVI, pp. 111-129.

The problems connected with the analytical-synthetic distinction and with ontology are discussed, in an attempt of focus on Quine's position on reductionism and pragmatism.

321. Koehler Conrad J., *Quine's Criteria of Ontological Commitment*, « Logique et Analyse », XV, pp. 593-605.

Quine's criterion of ontological commitment is discussed, maintaining amongst other things that the ontological controversies have less to do with the problem of bound variables and their values than Quine thinks.

322. Kueng Guido, *The World as Noema and as Referent*, « The Journal of the British Society for Phenomenology », III, pp. 15-26.

The semantic structure of philosophies of language (Russell, Carnap, Goodman, Quine) and Husserl's phenomenology have a common origin in a type of Frege-like semantics. Both the movements of thought distinguishes between ontology and metaphysics, understood as the plane of the articulated discourse universes or noematic worlds and the plane of unarticulated reality.

323. Largeault Jean, *De la vérité logique d'après W. V. Quine*, « Archives de Philosophie », XXXV, pp. 591-609.

The article pauses to examine Q54 and Q195 chapter by chapter.

324. Laycok Henry, *Some Questions of Ontology*, « The Philosophical Review », LXXXI, pp. 3-42.

The article wants to describe the nature of mass terms and how they may be based on the notions of substance and matter. With reference to Quine and Strawson it is said that the understanding of the notion of matter is blocked by the acceptance of the particular/universal (or singular/general) dichotomy.

325. Linsky Leonard, *Referential Opacity*, « Revue Internationale de Philosophie », XXVI, pp. 130-148.

With respect to referential opacity — Quine's position is described first

and then that of other authors (Smullyan, Marcus, Føllesdal) highlighting common points and divergences.

326. Linsky Leonard, *Two Concepts of Quantification*, « Noûs », VI, pp. 224-239.

In a discussion of the ontological commitment of quantifiers, Quine's position is considered amongst others.

327. Loar Brian, *Reference and Propositional Attitudes*, « The Philosophical Review », LXXXI, pp. 43-62.

Contrary to Quine and Frege's ideas, some singular terms in belief contexts have normal reference but do not allow *salva veritate* substitutes of coreferential terms. Singular terms can partially determine the conditions under which a statement is true of a sequence of referents.

328. Machina Kenton F., *Kant, Quine and Human Experience*, « The Philosophical Review », LXXXI, pp. 484-497.

The thought of the two authors on analyticity is compared, as on synthetic *a priori* judgements and on the different conceptions of experience.

329. Moline Jon, *Quine on Dispositions and Subvisible Structures*, *Mind* », LXXXI, pp. 131-137.

Different ways of considering dispositions (neurological conditions, conventional attitudes, etc.) are discussed as is their ontological weight. Quine's point of view with regard to this is examined.

330. Mouloud N., *Quine et la critique de la proposition*, « Revue Internationale de Philosophie », XXVI, pp. 63-85.

Quine's position with regard to intensions, the analytical-synthetic distinction and opaque contexts is discussed in some detail.

331. Nerlich Graham, *A Scrutiny of Reference*, « Canadian Journal of Philosophy », I, pp. 315-326.

The inscrutability of reference emerges not from behaviourist dogma, but from the consideration of language as a social art and so what determines the reference must be intersubjectively observable. The response to the stimulus gives criteria for translation that leave us incapable of fixing the refernce unambiguously.

- \* 332. Nordenstam Tore, *Empiricism and the Analytic-Synthetic Distinction*, Oslo, Universitetsforlaget.

The first four chapters give a panorama of the first ten years of the debate provoked by the attack of Quine, White and Goodman on ana-

lyticity and the fifth chapter, « Logic, Linguistics and Philosophy » shows the developments of the last decade.

- ° 333. Oakley I. T., *On an Account of Our Analyticity Judgements*, « Australasian Journal of Philosophy », L, pp. 124-130.  
Cfr. Gasking, 1972, no. 304.

334. Panagiotou Nancy, *Intensional Concepts in Natural Language: the Results of Carnap's Behavioral Methodology*, « Dialogue » (Phi Sigma Tau), XV, pp. 1-7.

335. Parrini Paolo, *Da Quine a Katz*, (II), « Rivista Critica di Storia della Filosofia », XXVII, pp. 35-74.

The work pauses critically on the thesis of the indeterminacy of translation and on the analyticity/synonymy problem, before passing on to consider analyticity from Katz' stance and comparing the position of the two authors on this theme.

336. Parrini Paolo, *Di alcuni problemi di filosofia della logica*, « Rivista di Filosofia », LXIII, pp. 187-212.

Through an analysis of Q195, the article sets out to enucleate the thesis put forward by Quine on some problems of the philosophy of logic. It confutes, showing internal inconsistencies, Quine's critique of analyticity and other intensional notions. It throws light on the non-analyticity of some statements of the quantification theory and of the statements of the classes theory.

337. Rechten Lisbeth, *The Subject-Predicate Distinction Revisited*, « Philosophical Linguistics », IV, pp. 70-97.

338. Rorty Richard, *Indeterminacy of Translation and of Truth*, « Synthese », XXIII, pp. 443-462.

Quine's arguments on indeterminacy (the fact that two incompatible theories can equally give an account of the same data rest on a doubtful distinction between constituent laws and regulating heuristic principles. The ordinary parameters that guide linguists in the organisation of lexicon are, for Quine, without foundation and they are not generalisations that can turn out to be useful even for foreign language.

339. Rorty Richard, *The World Well Lost*, « The Journal of Philosophy », LXIX, pp. 649-665.

Quine's attack on analyticity makes the distinction between necessity and contingency lose value and this leads to the abandonment of the notion of conceptual structure and in consequence the notion of truth

as a correspondence with reality, all this resulting in a Deweyan naturalism belonging to historicism.

340. Rosenberg Jay F., *What's Happening in Philosophy of Language Today. A Metaphysician's-eye View*, « American Philosophical Quarterly », IX, pp. 101-106.

The article affirms that from a metaphysical point of view a large part of modern philosophy of language is a version of Peirce's pragmatism. Within this view, amongst others, Quine's theses of the indeterminacy of translation and ontological relativity are considered.

341. Schick Karl, *Indeterminacy of Translation*, « The Journal of Philosophy », LXIX, pp. 818-832.

The author finds the thesis of indeterminacy insufficiently supported and refutes Quine's paradigm of translation because it erroneously supposes that a language is a set of dispositions that function in response to various stimuli. Translation is indeterminate, but such indeterminacy, far from being incompatible with the existence of intensional entities, presupposes them.

342. Schuldenfrei Richard, *Quine in Perspective*, « The Journal of Philosophy », LXIX, pp. 5-16.

The article examines Quine's principal arguments against meaning, and values these arguments in the light of his concept of evidence. Quine's position is described as an anticartesian materialism.

343. Schwartz Robert, *Paradox and Projection*, « Philosophy of Science », XXXIX, pp. 245-248.

The author discusses, maintaining it as incorrect, the solution given by Quine and others, to the raven paradox proposing however an alternative use for it.

344. Sharvy Richard, *Three Types of Referential Opacity*, « Philosophy of Science », XXXIX, pp. 153-161.

While developing an autonomous argument on referential opacity, the author uses Quine's work as constant point of reference.

345. Squadrito Kathy, *Locke, Quine and Natural Kinds*, « The Modern Schoolman », XLIX, pp. 135-143.

The discussion is more historical than critical. It contrasts Locke's ontological and epistemological affirmations regarding the classification of natural objects with those recently advanced by Quine. The thesis of the two authors cannot be reduced to a negation of natural kinds.

- \* 346. Stanilaud Hilary, *Universals*, New York, Anchor Books.
347. Stich Stephen P., *Grammar, Psychology and Indeterminacy*, « The Journal of Philosophy », LXIX, pp 799-818.  
An attempt to describe the nature of generative grammar theory (Chomsky) and the relationship between such a theory, its objects and the speakers of the language concerned. An argument is also developed of indeterminacy for grammars.
- \* 348. Tartaglia Philip, *Problems in the Construction of a Theory of Natural Language*, The Hague, Mouton.  
Though not dealing directly with Quine, this volume discusses some important attitudes, amongst them holism and behaviourism, without neglecting a comparison with the positions of other authors on the same themes.
349. Thompson Manley, *Quine and the Inscrutability of Reference*, « Revue Internationale de Philosophie », XXVI, pp. 42-62.  
Through an analysis of Q179 and Q204 the author tries to show how the inscrutability of reference emerges as a key concept in the development of Quine's thesis for which knowledge is never wholly determined by non-verbal stimuli.
350. Turek Charles, *A Note on Quine's Synonymy*, « The Journal of Critical Analysis », IV, pp. 85-86.  
The criterion of interchangeability or coextensivity is not so limited as Quine thinks, because he only looks at terms, not at words. Neither of the two expressions 'creature with a kidney' or 'creature with a heart' is a word. The words 'equiangular' and 'equilateral' are not necessarily counter-examples since there is a logical connection between the two.
351. Vuillemin Jules, *Logical Flaws on Philosophical Problems: on Russell's "Principia Mathematica"*, « Revue Internationale de Philosophie », XXVI, pp. 534-556.  
Though concentrating on the work of Russell, in which is shows up certain weaknesses, the article illustrates Quine's position on the same themes; the theory of types, quantification, the axiom of infinity and the axiom of reducibility.
352. Wallace John, *Belief and Satisfaction*, « Noûs », VI, pp. 85-95.  
This article suggests that what Quine names opaque belief may only be a special case of transparent belief. The connection between the

two types of belief would be analogous to the Tarskian reduction of truth to satisfaction.

353. Welding S. O., *Russell's Theory of Definite Descriptions as Opposed to Quine's Singular Terms*, « *Revue Internationale de Philosophie* », XXVI, pp. 513-533.

For Russell proper names are generally descriptions. Quine conceives of both descriptive expressions and non-descriptive expressions as singular terms, meant to indicate one and only one object. His considerations seem to be based on a specific argument for which the reformulation of an expression or an assertion may be useful to explain — to interpret — its logical characteristics.

354. White Nicholas P., *Origins of Aristotle's Essentialism*, « *Review of Metaphysics* », XXVI, pp. 57-85.

In outlining Aristotelian essentialism, the initial point of reference is the Quine's definition, showing however that such definition is faulted and showing up the many differences between the two thinkers' points of view.

355. Wilder Hugh T., *Quine on Natural Kinds*, « *Australasian Journal of Philosophy* », L, pp. 263-270.

The article discusses Q186 affirming that Quine's analyses are insufficient to support the thesis by which the notion of kind will be analysed in terms of every branch of science or of logic when these will reach a certain level of development. Quine's affirmation thus has little foundation.

356. Willard Dallas, *The Paradox of Logical Psychologism: Husserl's Way Out*, « *American Philosophical Quarterly* », IX, pp. 94-100.

In the context of an examination of Husserl's revision of the concept of proposition and of the weight that it carries within the philosophy of language and logic, Quine's position, as expressed in Q92, is taken into consideration.

357. Williams C. J. F. *Referential Opacity and False Belief in the "Theaetetus"*, « *Philosophical Quarterly* », XXII, pp. 289-302.

The author intends to make an unusual parallel between Plato's ideas on belief as put forward in *Theaetetus* and Quine's attitude with regard to referential opacity, as seen in Q121 and Q147.

358. Wiredu J. E., *A Note on Modal Quantification, Ontology and the Indenumerably Infinite*, « *Analysis* », XXXII, pp. 187-191.

Substitutional quantification is defended so the value of the variables is simply substitutable from constants. Quine's principal objection is that, since nouns are numerable whilst real numbers are non-numerable, there are more objects than nouns and substitution is inadequate. The author holds that Quine causes confusion in wanting to establish a one to one correspondance between nouns and real numbers.

359. Woolhouse R. S., *Or*, « Second Order », I, pp. 26-38.
360. Young Julian, *Rabbits*, « Philosophical Studies », XXIII, pp. 170-185.

After having outlined the thesis of the indeterminacy of translation the author puts forward the incoherence of two aspects of the thesis itself; that according to which indeterminacy depends on the fact that, like translation of a sentence emitted in a foreign language we can obtain in our language different phrases which are semantically equivalent, and that according to which propositions are not endowed with meaning.

#### 1973

361. Ayer Alfred J., *On a Supposed Antinomy*, « Mind », LXXXII, pp. 125-126.
- This is a brief comment on the paradox of the execution (cfr. Q172). Quine's approach is criticised.
- ° 362. Blum Alex, *On Epistemic Opacity*, « Logique et Analyse », XVI, pp. 379-380.
- Cfr. Zemach, 1971, no. 291.
363. Boffa M., *Entre NF et NFU*, « Comptes Rendus de l'Académie des Sciences de Paris », CCLXXVII, pp. 821-822.
364. Browning Douglas, *Quine and the Ontological Enterprise*, « Review of metaphysics », XXVI, pp. 492-510.
- The gaps found in the characterisation of the criterion of ontological commitment presented by Quine serve to illuminate an important and rarely discussed task of ontology, i. e. its designatory task. Such a criterion of ontological designation is here shown and contrasted with Quine's.
- \* 365. Chihara Charles S., *Ontology and the Vicious-circle Principle*, London, Cornell University Press.

The volume tackles the theme of Platonism in mathematics. As for

Quine the author takes up one of his previous essays as point of departure (cfr. 1968, no. 177) and is here repropounded in greater depth.

366. Davidson Donald, *On the Very Idea of a Conceptual Scheme*, « Proceedings and Addresses of the American Philosophical Association », XLVII (1973-74), pp. 5-20.

367. Deckert Marion, *Quine, Strawson and Logical Truth*, « Philosophical Studies », XXIV, pp. 52-56.

Strawson has criticised Quine's notion of logical truth to demonstrate that the definition depends fundamentally on an intensional notion, that of meaning. However, if Quine could avail himself of an adequate notion of 'context' in extensional semantics, it is easy to refute Strawson's critique.

- \* 368. Dummett Michael, *Frege: Philosophy of Language*, London, Duckworth.

Within the book a space is given over to Quine, above all for the discussion of the theory of meaning of Q105 and Q147.

369. English Jane, *Underdetermination: Craig and Ramsey*, « The Journal of Philosophy », LXX, pp. 453-462.

Quine's proposition of underdetermination of scientific theories is criticised and compared with the positions of Craig and Ramsey, which invalidate it, at least in part.

370. Field Hartry, *Theory Change and the Indeterminacy of Reference*, « The Journal of Philosophy », LXX, pp. 462-481.

Many scientific terms are referentially indeterminate. There are statements with perfectly determined truth values which contain referentially indeterminate nouns and predicates. Thus semantics needs to be revised, Quine is mentioned, and his opinion that scientific terms are without meaning only intertheoretically, but maintain it within the conceptual framework they belong to, is contested. The author claims instead that the meaning reference relationship in certain situations are not well defined and need to be generalised, maintaining, however, their objective character of connection between extralinguistic terms and objects.

371. Føllesdal Dagfinn, *Indeterminacy of Translation and Under-Determination of the Theory of Nature*, « Dialectica », XXVII, pp. 289-301.

The thesis of indeterminacy is explained and analysed claiming that it follows directly from Quine's empiricism. Two arguments (verification



and the use of analytical hypotheses) are both discussed, and, in conclusion, the validity of Quine's thesis is confirmed.

372. Fotinis A. P., *A Critical Evaluation of Universals in Nominalism*, « *Philosophia* » (Athens), III, pp. 382-404.

The article explains the solution provided by nominalism to the problem of universal as it is handled in Hobbes and reaffirmed in Quine and Goodman.

373. Galvan Sergio, *Considerazioni sulla distinzione tra proposizioni analitiche e proposizioni sintetiche*, « *Rivista di Filosofia Neo-Scolastica* », LXV, pp. 726-745.

The author wishes to critically consider the problem of the nature of analytical propositions, following Quine's analyses but distancing himself from their results. He accepts, in effect, the distinction between the two types of proposition and intensions.

374. Gardner M. R., *Apparent Conflicts between Quine's Indeterminacy Thesis and his Philosophy of Science*, « *British Journal for the Philosophy of Science* », XXIV, pp. 381-393.

Quine maintains that translation is underdetermined by verbal behaviour and that to pose the question of correct translation has no sense. Chomsky objected that Quine refused to draw the corresponding conclusion by which a physical theory is generally underdetermined by possible of actual data that sustain it and cannot be true of false. Quine's reply is based on physicalism which is criticised by the author.

375. Grandy Richard, *Reference, Meaning and Belief*, « *The Journal of Philosophy* », LXX, pp. 439-452.

This is an analysis of the general parameters which determine the acceptance or rejection of translations and a discussion of the consequences of such restrictions for the philosophy of language. There is an examination of Quine's « principle of charity », according to which we choose as *designatum* the object that makes the largest possible number of assertions true (charity is essential in the case of observation sentences and logical truths), and a contrasting « principle of humanity » is proposed which places as a pragmatic limit to translation the condition that the model of relationships between beliefs, desires and the world should be as similar as possible to our own.

376. Greenlee Douglas, *Relativity without Inscrutability*, « *Philosophy and Phenomenological Research* », XXXIII, pp. 574-578.

Three corrective comments are offered to Quine's thesis on the relativity

of references, demonstrating how it is possible to preserve it from inscrutability.

377. Grishin V., *An Investigation of Some Versions of Quine's System*, (in russian), « Nauchnotekhnicheskaya Informatsiya », V, pp. 34-37.
378. Harris Jr. James F., *Dogmas of "Two Dogmas"*, « The Southern Journal of Philosophy », XI, pp. 285-289.
- Quine maintains that a pragmatism in which no statement is immune from revision is preferable to an empiricism which depends on the two dogmas (reduction and analytical/synthetic). Here the author contests that the process of revision of statements based on contrary experiences and the redistribution of truth values to statements in the system are dogmatically dependent, as is empiricism, because to do what Quine says we need some principles — dogmas — accepted as analytical and not subject to revision in that theory in which the revaluation and redistribution take place.
379. Henson C. Ward, *Permutation Methods Applied to Quine's "New Foundations"*, « The Journal of Symbolic Logic », XXXVIII, pp. 69-76.
- The discussion started by Scott (cfr. 1962, no. 125) is taken up on the application in NF of a permutation method to demonstrate relative coherence. Here the method is applied to an extension of NF with invariant axioms.
380. Henson C. Ward, *Type-Raising Operations on Cardinal and Ordinal Numbers in Quine's "New Foundations"*, « The Journal of Symbolic Logic », XXXVIII, pp. 59-68.
- A number of methods are developed of demonstrating in NF that do not have counterparts elsewhere (cfr. Specker, 1953, no. 38).
- <sup>c</sup> 381. Hintikka Jaakko, *Transparent Knowledge once Again*, « Philosophical Studies », XXIV, pp. 125-127.
- The reply to the note by R. Z. Parks (cfr. « Philosophical Studies », XXIII [1972], pp. 74-75) on the criticisms of Hintikka with regard to Quine's position on transparent contexts.
382. Jaggar Alison, *On One of the Reasons for the Indeterminacy of Translation*, « Philosophy and Phenomenological Research », XXXIV, pp. 257-265.

The author demonstrates that Quine's approach to analytical hypotheses

is incoherent with his approach to hypotheses of physical science and no reason is provided for this difference in treatment. Thus Quine's position is derived from a distinction between theory and observation which cannot be substantiated and it is demonstrated that the argument of underdetermination does not offer a basis for the indeterminacy of translation.

383. Kirk Robert, *Underdetermination of Theory and Indeterminacy of Translation*, « *Analysis* », XXXIII, pp. 195-201.

It is argued that indeterminacy of translation does not depend on underdetermination of physical theories.

384. Leeds Stephen, *How to Think About Reference*, « *The Journal of Philosophy* », LXX, pp. 485-503.

The author wants to describe the consequences of the thesis of indeterminacy for the notions of reference and belief. Q179 is examined and an alternative vision of reference is proposed. The article concludes by affirming that considering reference a relationship between words and objects, and belief a relationship between people and propositions, the thesis demonstrates how our choice in these relationships is inevitably arbitrary.

385. Margolis Joseph, *Behaviorism and Alien Languages*, « *Philosophia* », III, pp. 413-427.

Quine's behaviourist description of an unknown language learning is explained and is found untenable when set alongside Quine's description of what a linguist's job is. Stimulus meaning is analysed, the disposition to assent and dissent, etc.

386. Martin Jr. Edwin, *The Intentionality of Observation*, « *Canadian Journal of Philosophy* », III, pp. 121-129.

Quine maintains that intensional phenomena (beliefs, desires, expectations) would be insufficient for the knowledge of the other people's, and he replaces them with observation. The author, however, shows that sometimes the same features of intensionality and indeterminacy are present.

387. Miller Barry, *Change in a Four-Dimensionalist Universe*, « *Philosophical Papers* », II, pp. 84-88.

388. Morton Adam, *Denying the Doctrine and Changing the Subject*, « *The Journal of Philosophy* », LXX, pp. 503-510.

Quine's point of view of so-called logical deviance is disputed. For the

author the assumption, « change of logic, change of subject », is not valid.

389. Moulines Ulises, *Lo Analítico y lo Sintético: Dualismo Admissible*, « Teorema », III, pp. 89-97.
- \* 390. Murphey Murray G., *Our Knowledge of the Historical Past*, Indianapolis, Bobbs-Merrill.  
 This is an analysis of the philosophical validity of historical knowledge. It details with Quine in the context of the examination of the logical structure of historical explanations and of the ontological status, and truth conditions in historical interpretations.
391. Nerlich Graham, *Pragmatically Necessary Statements*, « Noûs », VII, pp. 247-268.  
 According to Quine, logical truths are necessary assertions not in an absolute sense, but relative to their usefulness in our theory of the world. This position is denounced as falsely pragmatist.
- \* 392. Peterson Philip L., *Concepts and Language. An Essay in Generative Semantics and the Philosophy of Language*, The Hague, Mouton.  
 The author explains and defends the type of conceptualism expressed in semantic theories (interpretative or generative) with a generative-transformational approach to linguistic description. The realism based on Frege's notion of concept, in which universals are identified with linguistic meanings, is considered compatible with recent results of linguistic descriptions and defensible against philosophical objections such as Quine's.
- ° 393. Reeves Alan, *Concerning Rabbits*, « Philosophical Studies », XXIV, pp. 314-324.  
 Cfr. Landsman, 1970, no. 244 e Young, 1972, no. 360.
394. Reeves Alan, *In Defence of a Simple Solution*, « Australasian Journal of Philosophy », LI, pp. 17-38.  
 Russell's theory of definite descriptions is defended against the criticisms of Linsky, Føllesdal and Quine.
395. Rivero Maris-Luisa, *Antecedents of Contemporary Logical and Linguistic Analysis in Scholastic Logic*, « Foundations of Language », X, pp. 55-64.  
 The scholastic *de re/de dicto* distinction and Quine's opaque and transparent sense of psychological predicates are compared linguistically.

396. Rudner Richard, *Some Essays at Objectivity*, « Philosophic Exchange », I, pp. 115-135.
- ° 397. Sharvy Richard, *Reply to Widerker*, « Philosophia », III, pp. 453-455.  
Cfr. Widerker, 1973, no. 402.
398. Sheenan P. J., *Quine on Revision. A Critique*, « Australasian Journal of Philosophy », LI, pp. 95-104.  
Quine's position on analyticity is discussed and in particular the assumption by which no statement is immune from revision. The author finds these positions either banal or unfounded.
399. Sleinis E. E., *Quine on Analyticity*, « Philosophy », XLVIII, pp. 79-84.  
The author wishes to demonstrate that Quine's arguments against the analytical/synthetic distinction are not fitting with his description of language.
400. Spassov Dobrin, *Willard Quine et la "Philosophie de la Logique"*, (in russian), « Voprosy Filosofii », n. 7, pp. 101-108. (english trans. in « Soviet Studies in Philosophy », XIII [1974], pp. 86-99).  
Quine's work is presented, and number of characteristic aspects of it are discussed.
401. Teller Paul R., *On Quine's Relativity of Ontology*, « Canadian Journal of Philosophy », III, pp. 295-302.  
The author disputes that ontological relativity could provide a basis for indeterminacy of translation. The two arguments are independent.
- ° 402. Widerker David, *A Note on Sharvy*, « Philosophia », III, pp. 449-452.  
Cfr. Sharvy, 1970, no. 251.
403. Wiredu J. E., *Logic and Ontology* (I), « Second Order », II, pp. 71-82. Idem (II), *Ibidem*, pp. 21-38.

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404. Beatty Harry, *Behaviourism, Mentalism and Quine's Indeterminacy Thesis*, « Philosophical Studies », XXVI, pp. 97-100.

It is maintained that Quine's behaviourist formulation in the thesis of indeterminacy is insufficiently clear and lends itself to various types of criticism. For example, in so far as the arguments used depend on arbitrary restrictions on the criteria of behavioural evidence. This leads to considerate the problem of the semantic knowledge of the speaker, and thus the relationship with mentalist theories.

405. Biela Andrzej, *Structural Incompleteness of the Quine's Formalization of the Classical Predicate Calculus*, « Reports on Mathematical Logic », pp. 3-7.

The problem of structural completeness of a logical system is formulated in the same way as the question regarding derivability in the system of all the structural rules. It is well known that the predicates calculus or the first order reinforced by the substitution rule for atomic predicates is structurally complete. The aim here is to demonstrate that Quine's formalisation of this calculus (also reinforced by the above mentioned rules of substitution) is structurally incomplete.

406. Broughton L. M., *Quine and Two Dogmas of Empiricism*, « International Logic Review », V, pp. 41-50.

The author wishes to demonstrate that although Quine establishes that the concepts of analyticity, synonymy and necessity form an intensional circle, this circle is not a vicious one, nor is it devoid of meaning. The article by Grice and Strawson (cfr. 1965, no. 64) is commented on.

407. Byrd Michael E., *Must we Quantify into Opaque Contexts?*, « Philosophical Studies », XXVI, pp. 401-409.

Hintikka (cfr. 1962, no. 119) rejects Quine's thesis according to which quantification is only possible in transparent epistemic contexts, in that to adequately represent some statements quantification in opaque contexts is necessary. According to the author this conclusion is incorrect and hits at only a small part of Quine's theory, which can anyway be defended by using, among others, the same method adopted by Hintikka to defend his own theories from Sleight's criticism (see Sleight, R., 'A note on an argument of Hintikka's', in « Philosophical Studies », XVIII (1968), pp. 12-14).

408. Carney J. D. - Straaten van Zak, *Translational Indeterminacy and Substitutional Quantifiers*, « Foundations of Language », XI, pp. 533-541.

The thesis of indeterminacy is rejected and a language is described in which it would be possible to behaviouristically determine its elements and explain how experiences are identified. It is concluded that behaviouristically that which is intuitively assumed as the intension of terms can also be determined.

409. Carr Spencer, *Opacity and Indefinite Terms*, « Philosophical Studies », XXVI, pp. 39-49.

In Q147, Quine discusses the occurrence of indefinite terms in certain positions. An extension of Quine's definition is suggested so as to give meaning to indefinite terms occurring in referential and non-referential positions. In general Quine is criticised.

- 410. Caton Charles E., *God for Quine's Sake*, « The Journal of Philosophy », LXXI, pp. 748-749.

Cfr. Post, 1974, no. 445.

411. Cheng Chung-Ying, *On Referentiality and Its Conditions*, « Notre Dame Journal of Formal Logic », XV, pp. 245-264.

The thesis of the indeterminacy of translation is reduceable to the thesis of ontological relativity. Given a language, justifiable rules of correct translations which exclude incompatible translations could exist, just as justifiable rules of ontic references that exclude ontological relativity could exist. It is further demonstrated that the conditions of reference in a language are based on metamathematical properties like incompleteness and nonformalisability.

412. Chipman Lauchlan, *A Hole in Quine's Holism*, « Philosophical Papers », III, pp. 46-47.

One of Quine's theses is that no sentence is immune from revision. Is this thesis immune from revision? If it is, it is false. If it is not, the existence of some sentence immune from revision must be possible, and thus it must make sense to suppose that there is at least one completely universable sentence. Quine excludes this possibility, but his holism is thus self-contradictory.

- 413. Chomsky Noam - Katz Jerrold J., *What the Linguist is Talking About*, « The Journal of Philosophy », LXXI, pp. 347-367.

Cfr. Stich, 1972, no. 347.

- 413a. Church Alonzo, *Set Theory with a Universal Set*, in *Proceedings of Symposia in Pure Mathematics*, XXV, (Proceedings of the Tarski Symposium), pp. 297-308.

414. Darmstadter Howard, *Indeterminacy of Translation and Indeterminacy of Belief*, « Philosophical Studies », XXVI, pp. 229-237.

The connections between Quine's thesis of indeterminacy and the com-

mon notion of belief are highlighted. Our need to infer the actions of others from their professions of beliefs makes the situation described by Quine unstable, since the people in a given situation can predict in a far less accurate way than people outside the given situation.

415. Davidson Donald, *Belief and the Basis of Meaning*, « Synthese », XXVII, pp. 309-323.

A theory of radical interpretation provides the meaning of all the sentences of a language and can be verified from the available evidence for those who do not understand the language. However, that evidence does not include detailed information regarding the belief and intentions of the speaker and therefore the theory must simultaneously interpret the utterances of speakers and specify their beliefs.

- ° 416. Davidson Donald, *Replies to David Lewis and W. V. Quine*, « Synthese », XXVII, pp. 345-349.

These are replies to comments that Lewis (*ibidem*, pp. 331-334) and Quine (*ibidem*, pp. 325-329) made to Davidson (cfr. no. 416).

417. Dummett Michael, *The Significance of Quine's Indeterminacy Thesis*, « Synthese », XXVII, pp. 351-397.

The theoretical path by which Quine arrives at the indeterminacy of translation is demonstrated and discussed together with the underdetermination of theories. The latter appears to be the only reason offered by Quine which can corroborate his theses. (see also Dummett, *Reply to W. V. Quine*, *ibidem*, pp. 413-416).

418. Feibleman James K., *Professor Quine and Real Classes*, « Notre Dame Journal of Formal Logic », XV, pp. 207-234.

Symbolic logic is committed to the theory of real classes, even if nominalism has sometimes prevailed. An example can be identified in Quine's works, who studied with Whitehead but was influenced by Carnap and Goodman, both nominalists. This work tries to illustrate the result, that is Quine's vacillation on the theory of classes.

419. Field Hartry, *Quine and the Correspondence Theory*, « The Philosophical Review », LXXXIII, pp. 200-228.

The theory illustrated by the author explains truth in terms of various correspondence relationships between words and the extralinguistic world. In Q179 Quine affirms that correspondence theories are impossible, and this is equivalent to the thesis of relative reference, here judged to be incoherent.



420. Gottlieb Dale, *Foundations of Logical Theory*, « American Philosophical Quarterly », XI, pp. 337-343.

Quine's definition of logical truth is discussed and found to be incorrect and philosophically useless.

421. Gottlieb Dale, *Reference and Ontology*, « The Journal of Philosophy », LXXI, pp. 587-599.

Since quantifiers can be interpreted in a substitutional way, truth and logical form together do not determine ontology. The objections of Wallace, Parsons and Quine (cfr. chapter III of Q213) are considered. The opportunity for a criterion of identity for referential interpretations of singular terms and predicate is discussed.

422. Hadley Robert, *Quine and Strawson on Logical Theory*, « Analysis », XXXIV, pp. 207-208.

Quine has criticised Strawson for having founded his logical theory on certain modal concepts that Quine finds vague. Such criticism is unjustified because Quine's definition of logical truth is inadequate unless reformulated in modal language. It is shown that every judgement by which a statement expresses a logical truth, presupposes preceding intuitions of necessity and validity and these are both modal concepts.

- ° 423. Harman Gilbert, *Comment on Michael Dummett*, « Synthese », XXVII, pp. 401-404.

Cfr. 1974, no. 418.

- ° 424. Heidelberger Herbert, *Kaplan on Quine and Suspension of Judgment*, « The Journal of Philosophical Logic », III, pp. 441-443.

Cfr. Kaplan, 1968, no. 188.

425. Hellman Gcoffrey, *The New Riddle of Radical Translation*, « Philosophy of Science », XLI, pp. 227-246.

The article sets out to present a theory of radical translation; obviously Quine's work is mentioned as a point of reference, sometimes shared, sometimes contested.

- 425a. Hinnion R., *Trois résultats concernant les ensembles fortement cantoriciens dans les "New Foundations" de Quine*, « Comptes Rendus de l'Académie des Sciences de Paris », (série A), CCLXXIX, pp. 41-44.

426. Katz Jerrold J. - Nagel Richard I., *Meaning Postulates and Semantic Theory*, « Foundations of Language », XI, pp. 311-340.  
Within a wide ranging discussion that brings in other themes Quine's position on intensions, analyticity, etc. is compared to that of Carnap.
427. Katz Jerrold J., *Where Things Now Stand with the Analytic-Synthetic Distinction*, « Synthese », XXVIII, pp. 283-319.  
It is shown how all Quine's reflections are founded on empiricist assumptions which are part of Bloomfield's taxonomical linguistics and therefore are in contrast with Chomsky's position on linguistics. Quine's version of empiricism, given by Harman, is then examined and criticised.
428. Kielkopf Charles F., *Quine and Ullian's Janus-faced Observation Sentences*, « ITA Humanidades », X, pp. 237-252.  
The aim of this article is to defend and develop Quine's thesis on observation sentences, as sketched out in the second chapter of Q194.
429. Lackey Douglas, *Russell Anticipation of Quine's Criterion*, « Russell: Journal of the Bertrand Russell Archives » (1974-75), pp. 27-30.  
An assertion in an unpublished manuscript by Russell of 1906 is here analysed. It would seem to anticipate the criterion of ontological commitment proposed by Quine in 1939. The attitudes of Quine and Russell in this respect are then compared.
430. Lake John, *Ordered Pairs and Cardinality in New Foundations*, « Notre Dame Journal of Formal Logic », XV, pp. 481-484.  
In NF the fact that the two sets have or don't have the same cardinality depends on which definition or the ordered pair is used to define the functions. A method of extension for NF to avoid this problem is outlined and it is shown that in this extension some defects of NF disappear.
431. Lambert Karel, *Predication and Extensionality*, « The Journal of Philosophical Logic », III, pp. 255-264.  
Predication unites a general term and a singular term in such a way as to form a statement that is true (or false) to the extent to which the general term is true (or false) with respect to the object, if there is one, which the singular term refers to. It is said here that this theory is not extensional and it is discussed in the light of Quine's position.
432. Loux M. J. e Solomon W. D., *Quine on the Inscrutability and*

*Relativity of Reference*, « Notre Dame Journal of Formal Logic », XV, pp. 16-24.

This article deals with the inscrutability of reference and ontological relativity, pointing out the philosophical context from which such a doctrine emerges, then contesting them, however.

433. Lycan William G., *Could Propositions Explain Anything?*, « Canadian Journal of Philosophy », III, pp. 427-434.

Harman (cfr. 1967, no. 166) attributes to Quine the opinion that theories of language that quantify on propositions fail in as much as they don't take account of very important linguistic phenomena. The author doesn't want to argue whether such a position is actually attributable to Quine, but maintains that the aforesaid theories, even if they don't constitute adequate explanations of many phenomena, are endowed with a certain amount of evidence.

- ° 434. Lycan William G., *Eternal Sentences Again*, « Philosophical Studies », XXVI, pp. 411-418.

Cfr. Sayward, 1968, no. 197.

435. Lycan William G. *The Extensionality of Cause, Space and Time*, « Mind », LXXXI, pp. 498-511.

According to a well known argument, every statement with logical operators which allows *salva veritate* substitution of singular coreferential terms and the substitution of logically equivalent statements, also permits the substitution of materially equivalent statements. Church, Quine, Davidson and others have invoked this argument for various purposes, but here its validity is contested.

436. Marconi Diego, *Quine e le "logiche devianti"*, « Filosofia », XXV, pp. 37-60 (I); pp. 135-152 (II).

Quine's theory of the obviacy of elementary logic is criticised, describing its incapacity to discriminate between obviacy and truth. It deals with Quine's theory from his criticism of conventionalism in Q20. The idea that the meanings of logical words may be incorporated into common use is untenable. It can only be demonstrated if we accept as correct only orthodox logic. In the second part Juhos and Durr's interpretation of the truth-functional negation is dealt with, as is Ayer's refutation to Juhos's, Wittgenstein's concept of contradiction and some recent discussions on the principle of excluded middle in polyvalent logics.

437. Markis Dimitrios K., *Bedeutung und Übersetzung: Quine und das Problem der Übersetzungstheorie*, (in greek), « Philosophía », IV, pp. 77-119.

438. Martin Jr. E. - Smith D. W., *On the Nature and Relevance of Indeterminacy*, « Foundations of Language », XII, pp. 49-71.

Quine maintains that the totality of possible evidence determines more than translation of a given language and therefore there is no fact to decide if it is right or wrong. The thesis of indeterminacy is discussed in close analogy with the correlated considerations of Peirce and it is pointed out that for Quine translation is indeterminate if, and only if, empirical theory is so in general. It is confirmed, however, that nothing authorises Quine to refute meanings and that his obstinacy finds its roots elsewhere rather than in indeterminacy.

439. Morick Harold, *Observation and Subjectivity in Quine*, « Canadian Journal of Philosophy », Suppl. I, pp. 109-127.

According to Quine we have to, in the interest of science, resist the old tendency to associate observation sentences with a subjective sensory fact, because observation sentences are the only objective and independent control of scientific theories. On this basis he has developed a behaviourist definition of an observation sentence with the aim of dissipating the subjectivism that surrounds the notion of observation. Here, however, it is contested that his work has accomplished its aim.

440. Morscher Edgar, *Ontology as a Normative Science*, « The Journal of Philosophical Logic », III, pp. 285-289.

The debate between Quine and Carnap over ontology is described. It is proposed that we assume for 'ontological problem' to mean only external questions, in Carnap's interpretation, thus ontology must deal with the adequacy, utility, simplicity, etc. of the linguistic forms and structures. In this way ontology becomes practical, definable as a 'normative science'.

- \* 441. Munitz Milton K., *Existence and Logic*, New York, New York University Press.

It is proposed that the legitimate use of 'exists' be confined to cases in which we refer to individuals existing as part of the spatial-temporal world. It begins with an historical discussion of the problem of existence in Parmenide and Aristotle, then onto the contemporary philosophies of language: Frege, Russell, Quine and Strawson.

- ° 442. Parsons Charles, *On Translating Logic*, « Synthese », XXVII, pp. 405-411.

Cfr. Dummett, 1974, no. 418 and Morton, 1973, no. 388.

443. Patton Thomas E., *Is Transparent Belief 'Intolerably Odd'?*, « Dialogue », XIII, pp. 647-655.

Quine's concept of language and the distinction posed between opaque and transparent contexts of belief are discussed.

443a. Petry A., *A propos des individus dans les "New Foundations" de Quine*, « Comptes Rendus de l'Academie des Sciences de Paris » (serie A), CCLXXIX, pp. 623-624.

\* 444. Plantinga Alvin, *The Nature of Necessity*, Oxford, Clarendon Press.

The notion of *de re* modality is shown and defended, widening the discussion to include problems regarding possible worlds, the existence of non-actualised objects, negative existential propositions. The problem of ontology is then faced and at the end Quine's objections to quantified modal logic are examined, with the relative debate on the matter by Hintikka, Smullyan, Marcus and Parsons.

445. Post John F., *New Foundations for Philosophical Theology: Quine with God*, « The Journal of Philosophy », LXXI, pp. 736-748.

The author tries to draw from Quine's ontological theory an adequate foundation for contemporary theology, because given the present situation of the philosophy of religion, Quine's naturalism appears to the author the only adequate base.

446. Putnam Hilary, *The Refutation of Conventionalism*, « Noûs », VIII, pp. 25-40.

The author proposes to establish an analogy between the conventionalism of Quine's theory of radical translation and that of the theory of the nature of geometry put forward by Reichenbach and criticised by Grünbaum. The analogy would consist in the structure of arguments of the two theories, that intend to provide a set of conditions to specify the extension of the notions used. Such conventionalism is refuted as a disguised form of essentialism.

447. Rechten Lisbeth - Todd William, *Propositional Attitudes and Self-Reference*, « Philosophia » (Israel), IV, pp. 271-295.

An attempt to complete an adequate analysis of sentences that describe beliefs, intentions or expectations and, combine philosophical and linguistic considerations, indicating some ways in which the work of philosophers and linguists may be mutually useful. It suggests, what's more, the possibility of a semantics that might be more independent of ontological commitment than is often thought possible.

- ° 448. Reeve John, *Wiredu and Objects: Some Objections*, « Second Order », III, pp. 29-37.  
Cfr. 1973, no. 403.
449. Resnik Michael D., *A Note on Interpreting Theories*, « Noûs », VIII, pp. 289-294.  
Quine's formulation according to which the ontology of a theory is a proper subset of the domain of his interpretation is applied to the problem of interpreting the set theory.
450. Root Michael D., *Quine's Methodological Reflections*, « Metaphilosophy », V, pp. 36-50.  
According to Chomsky and his followers, language is a finite set of rules that we apply and to which we subject ourselves without explicitly formulating them. Quine criticises such a position, affirming that explanations that use the notion « implicit rule-guide » are methodologically weak. The author contests Quine's objections, maintaining that they may equally be raised against every inductively uncertain hypothesis and that this can bring into discussion also the indeterminacy thesis.
- \* 451. Rosenberg Jay F., *Linguistic Representation*, Boston, D. Reidel Publishing Company.  
The author wants to develop a general representation theory. His attention is turned to Quine's attempt to place a priori limits to linguistic research, with his thesis of the indeterminacy of translation and the inscrutability of reference. He expresses his disagreement.
452. Sagal Paul T., *Dewey and the Dogmas of Empiricism*, « Metaphilosophy », V, pp. 333-339.  
Quine's interpretation of Dewey's naturalism is discussed, emphasising the elements which unite the two thinkers. Quine's debt to Dewey with regard to that undogmatic empiricism twin of naturalism, that both profess, is pointed out too.
453. Sagal Paul T., *Quine's Qualms about Quantification*, « The Southern Journal of Philosophy », XII, pp. 231-237.
- \* 454. SEVERENSIS Richard H. (Ed.), *Ontological Commitment*, Athens, University of Georgia Press.
- ° 455. Venketsamy S., *Chapman and Butler on Quine's "So-called Paradox"*, « Philosophical Papers », III, pp. 51-53.  
Cfr. 1965, no. 141.

456. Weston T. S., *Theories whose Quantification Cannot Be Substitutional*, « Noûs », VIII, pp. 361-369.

Following Quine's suggestion, the author throws light on the existence of theories that can demonstrate about themselves that their quantification cannot be interpreted in a substitutional way. Among these we find Zermelo-Fraenkel's set theory, formulated in a language that contains infinite individual constants and functions.

457. Wiredu J. E., *Logic and Ontology III: Abstract Entities and the Analysis of Designation*, « Second Order », III, pp. 33-52.

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458. Agassi Joseph - Sagal Paul T., *The Problem of Universals*, « Philosophical Studies », XXVIII, pp. 289-294.

The nominalist position is examined from a Democritean point of view, then from a Platonic one and finally from Quine's point of view.

- ° 459. Arnaud Richard B., *A Note on "Belief and Satisfaction"*, « Noûs », IX, pp. 421-425.

Cfr. Wallace, 1972, no. 352.

460. Aune Bruce, *Quine on Translation and Reference*, « Philosophical Studies », XXVII, pp. 221-236.

It is affirmed that the indeterminacy of translation implies that of reference and that accepting the first means accepting the second.

461. Baldwin Thomas, *Quantification, Modality and Indirect Speech*, in *Meaning, Reference and Necessity: New Studies in Semantics*, Blackburn S. (Ed.), Cambridge, Cambridge University Press, pp. 56-108.

The problem of the interpretation of referential operators and quantifiers in opaque contexts is approached.

462. Bartlett Steven, *Phenomenology of the Implicit*, « Dialectica », XXIX, pp. 173-188.

An alternative approach to some problems of transcendental philosophy is suggested. In particular the preconditions of reference implied by the phenomenological distinction between implicit experience and explicit reflection are considered.

463. Becker Edward, *Pure Reference: Linsky's Criticisms of Quine*, « Philosophia » (Israel), V, pp. 477-488.

Linsky (cfr. 1967, no. 169) puts forward some objections to Quine's treatment of referential opacity. According to the author, Quine can be defended from such objections, showing how they are the result of a misunderstanding of some subtleties of Quine's theory.

464. Beneyto Rafael, *El Análisis Veritativo-Funcional de Quine: Computación de un Algoritmo Lógico*, « Teorema », Mono, pp. 1-42.

465. Bennett Jonathan, *Stimulus, Response, Meaning*, « American Philosophical Quarterly », IX, pp. 55-88.

This is a critical examination of the attempts to define the meaning of a sentence related to the stimuli with respect to which the utterance of the sentence would be a response related to the behaviour seen as a response to the utterance of the sentence. Quine's use of the concept of stimulus and response is judged better than that of other authors, but still open to criticism.

- ° 466. Bernays Paul, *Zu der Abhandlung von Raymond L. Weiss "Historicism and Science. Thoughts on Quine"*, « Dialectica », XXIX, pp. 167-172.

Cfr. 1975, no. 547.

467. Bittner Rüdiger, *Zu Quines These der ontologischen Relativität*, « Neue Hefte für Philosophie », n. 8, pp. 51-64.

468. Blackburn Simon, *The Identity of Propositions*, in *Meaning, Reference and Necessity: New Studies in Semantics*, Blackburn S. (Ed.), Cambridge, Cambridge University Press, pp. 182-205.

Quine's pessimism, relatively to indeterminacy, is here contested even if the author recognises that the meaning notion hasn't got all the properties attributed to it in the post-Frege semantic tradition.

469. Blasco Josef L., *Compromiso Ontico y Relatividad Ontológica*, « Teorema », Mono, pp. 131-146.

470. Boffa M., *Sets Equipollent to their Power Set in NF*, « The Journal of Symbolic Logic », XL, pp. 149-150.

A class of property is defined, according to which if it is demonstrable in NF that the property is valid for a universe 'V' then it is demonstrable in NF that it is valid for every set equipollent to its power set.

- 470a. Boffa M. - Crabbé M., *Les théorèmes 3-stratifiés de NF<sub>3</sub>*,



« Comptes Rendus de l'Académie des Sciences de Paris », (série A), CCLXXX, pp. 1657-1658.

471. Boolos George S., *On Second-Order Logic*, « The Journal of Philosophy », LXXII, pp. 509-527.

The relationships between logic of the second order, that of the first order and the set theory are discussed, determining the characteristic of each one. Quine's position is considered: he presents reasons, commonly held decisive, for not attributing the status of authentic logic to the second order logic. It is, therefore, exactly in opposition to this position that the author wants to stand.

472. Boorse Christopher, *The Origins of the Indeterminacy Thesis*, « The Journal of Philosophy », LXXII, pp. 369-387.

According to the author the indeterminacy thesis derives from Quine's adhesion to semantic positivism, in which the meaning of a sentence is fulfilled by its denotation. As positivism is reputed to be incoherent with Quine's holistic epistemology, the indeterminacy thesis doesn't appear to be supported by convincing argument.

473. Borowski E. J., *Diachronic Identity as Relative Identity*, « Philosophical Quarterly », XXV, pp. 271-276.

A 'pragmatic' identity is distinguished regarding the identification of stages, or parts of an object extended spatially-temporally, and a 'Leibnizian' identity, showing that in ordinary use there may be ambiguity of reference between stages and continuums. The recognition of this twin ontology reconciles Geach's considerations on the search for criteria which might reunite the parts into a whole and Quine's on the narrow, Leibnizian identity of these wholes.

474. Boudot Maurice, *L'identité des possibles*, « Revue de Métaphysique et de Morale », LXXX, pp. 329-345.

According to Quine, conditions of identity among non-actualised possibles are indeterminable and it therefore has to be excluded that singular terms can refer to them. This thesis, which obliges us not to admit into ontology anything other than permanent entities does not really help us in simplifying the problems of the theory of reference.

- ° 475. Bradley M. C., *Kirk on Indeterminacy of Translation*, « Analysis », XXXVI, pp. 18-22.

.Cfr. 1973, no. 383.

476. Brand Myles, *On Philosophical Definitions*, « Philosophy and Phenomenological Research », XXXVI, pp. 151-172.  
A report of Quine's critique of the analytical/synthetic distinction.
477. Bunge Mario, *¿Hay Proposiciones?*, « Teorema », Mono, pp. 53-68.
478. Byrd Michael, *On Incoherent Quantification in Languages without Constants*, « Logique et Analyse », XVIII, pp. 155-169.  
Quine's argument which holds that quantification is incoherent in quantified modal logic depends on the lack of substitutivity of identicals for names and descriptions in certain modal contexts. Moreover, if incoherent quantification depended essentially on the presence of names then, when these were eliminated, it would cease to be a problem.
479. Castaneda Hector-Neri, *Identity and Modality*, « Philosophia » (Israel), V, pp. 141-150.
- \* 480. Chomsky Noam, *Reflections on Language*, New York, Random House.  
The first part is about the nature of human cognitive competence and the mechanisms which come into play in the language learning. The second part recapitulates the themes of the first defending the author's position against a number of criticisms voiced in the previous ten years. Quine is mentioned in reference to certain methodological aspects of linguistics and with regard to the problem of translation and the language learning.
481. Coffa J. Alberto, *Dos Concepciones de la Elucidación Filosófica*, « Critica », VII, pp. 43-67.  
According to Quine, explaining consists in substituting the *explicandum* with clearer and more precise expressions, as regards utility in a given context. According to Tarski and Kreisel, explanation cannot be set apart from the analysis of the *explicandum*. Carnap seems to have wavered between these two extremes. This article concentrates on the effects that these points of view have on our conception of what it means to resolve a scientific, mathematical or philosophical problem.
482. Craig E. J., *The Problem of Necessary Truth*, in *Meaning, Reference and Necessity: New Studies in Semantics*, Blackburn S. (Ed.), Cambridge, Cambridge University Press, pp. 1-31.  
An examination of the relationship between necessary truth and meaning, which stresses the point that neither conventionalism nor Quine's theses are sufficient explanation of the inevitability of necessary truths.

483. Dudman V. H., *Schematic Letters and Variables*, « Analysis », XXXVI, pp. 10-12.

Dummett maintained that Quine's distinction between schematic letters and individual variables is ontologically useless. Here it is said that, as it is by no means obvious that a semantic model should involve the association of each entity with predicates or statements, Quine's distinction is valid.

484. Enç Berent, *Necessary Properties and Linnean Essentialism*, « Canadian Journal of Philosophy », V, pp. 83-102.

Quine's arguments have provoked a defence of essentialism as a respectable metaphysical theory and of modal logics in general as coherent theories. The article tries to demonstrate that the type of essentialism refuted by Quine is, indeed, unsupportable but that such a conclusion does not imply any commitment towards conventionalist positions and, above all, does not involve the thesis that the only coherent type of necessity is the *de dicto* one.

485. Esplugues J. Sanmartin, *Las "New Foundations" y el axioma de Elección*, « Teorema », Mono, pp. 121-130.

486. Evans Gareth, *Identity and Predication*, « The Journal of Philosophy », LXXII, pp. 343-363.

A discussion of the indeterminacy of the theory of meaning in regard, in particular, to the apparatus of reference and Quine's arguments about inscrutability.

487. Falanga Maria, *Epistemologia ed empirismo*, « Annali della Facoltà di Lettere e Filosofia dell'Università degli Studi di Bari », XVIII, pp. 137-198.

An essay on the problems about the relationship between science and empiricism. Contributions by Popper and Feyerabend are discussed and Quine's *Two Dogmas* is dealt with.

488. Field Hartry, *Conventionalism and Instrumentalism in Semantics*, « Noûs », IX, pp. 375-405.

According to the usual interpretation of the thesis of indeterminacy, it is a form of conventionalism relating to semantics, which seems to imply an instrumentalist conception by which affirmations regarding the referents of individual terms are merely instruments to predict the way in which emissions will be used. However, conventionalism does not really have such consequences. A non-conventionalist interpretation of Quine is proposed; if it turned out to be valid then an antirealist conception of semantics or some other unpleasant consequence would result.

489. Fischer-Servi Gisèle, *I modelli di Kripke e le obiezioni di Quine*, « Rivista di Filosofia », LXVII, pp. 177-198.

Quine's criticism to quantified modal logic and connected essentialism are defended in this article against replies like Smullyan's which attempt to save the transparency of modal contexts. Use is made of the powerful instrument represented by the formalisation of semantics for modal calculus designed by Kripke.

490. Friedman H. R., *The Ontic Status of Linguistic Entities*, « Foundations of Language », XIII, pp. 73-94.

The ontological status of the words and sentences of a natural language can be characterised as depending on descriptive predicates which are necessary to take adequate account of its characteristics. Three metalanguages are identified whose essential predicates characterise, respectively, material, immaterial and mixed entities (the latter contains descriptive predicates present in both the preceding languages). In particular, the idea of treating linguistic entities as material objects is found to be invalid.

491. Friedman Michael, *Physicalism and the Indeterminacy of Translation*, « Noûs », IX, pp. 353-374.

Two forms of the indeterminacy thesis are identified: an epistemological one, which concerns the relation and choice between different manuals of translation, and an ontological one, which concerns the relationship between the manuals and the totality of fact. The author tries to re-evaluate the second aspect maintaining that Quine failed to demonstrate the underdetermination of translation in relation to physical theories. Quine's physicalism can be accepted without one's having to accept his thesis too. This is a way of releasing the conflict between Quine and the anti-physicalist semantic tradition which can be found in Frege, Church and Carnap.

492. Gaifman Haim, *Ontology and Conceptual Frameworks*, (I), « Erkenntnis », IX, pp. 329-353.

An ontological commitment is proposed which would be directed not so much towards the objects of the theory as towards the conceptual frameworks underlying the theory. Quine's position is, of course, discussed. (The second part of the article — in which there are no references to Quine — appeared in « Erkenntnis », X [1976], pp. 21-85).

- ° 493. Gallie Roger D., *Substitutionalism and Substitutional Quantification*, « Analysis », XXXV, pp. 97-101.

Cfr. L. J. Cohen, *Roger Gallie and Substitutional Quantification*, « Analysis », XXXIV (1974), pp. 69-73.

494. Garrido M., *El principio de indeterminación en la semántica de Quine*, « Teorema », Mono, pp. 43-52.

495. Geuss Raymond, *Quine und die Unbestimmtheit der Ontologie*, « Neue Hefte für Philosophie » n. 8, pp. 34-50.

496. Glymour Clark, *Relevant Evidence*, « The Journal of Philosophy », LXXII, pp. 403-426.

The observation sentences of a given language can act as theory checks. The author wants to show how such evidence can test only some hypotheses and not others. Simplicity, underdetermination and holism are discussed.

497. Haack Susan, « *Alternative* » in « *Alternative Logic* », in *Meaning, Reference and Necessity: New Studies in Semantics*, Blackburn S. (Ed.), Cambridge, Cambridge University Press, pp. 32-55.

The author means to demonstrate the inexistence of vetoes in considering the existence, in various languages, of logical truths alternative to those adopted by us.

\* 498. Hacking Ian, *Why Does Language Matter to Philosophy?*, Cambridge, Cambridge University Press.

In showing the evolution of philosophers' interest in problems of language from the seventeenth century to the present day, Quine is mentioned with regard to translation.

499. Harding S. G., *Making Sense of Observation Sentences*, « Ratio », XVII, pp. 65-71.

What are observation sentences?. This question has afflicted recent philosophy from the Viennese circle to the Quine's writings, who gives two descriptions of observation sentences. In the context of his causal description of linguistic behaviour he describes sentences which have stimulus-meaning but not reference, while within his theory of evidence he speaks of periphrastic statements which have reference but not determined meaning.

\* 500. Hintikka Jaakko, *The Intentions of Intentionality and Other New Models for Modalities*, Boston, D. Reidel Publishing Company.

One chapter takes up the problem of the possibility of using referential notions (quantification and identity) combined with modal notions in the strict sense of the word (necessity and possibility), and with pro-

positional attitudes (beliefs). A dialogue form was expressly chosen (Q. answers criticism) to reproduce the debate on the argument in the real way in which it happened.

501. Hochberg Herbert, *Mapping, Meaning and Metaphysics*, « Philosophica » XVI pp. 7-29.

502. Hockney Donald, *The Bifurcation of Scientific Theories and Indeterminacy of Translation*, « Philosophy of Science », XLII, pp. 411-427.

The indeterminacy thesis is illustrated and it is shown that it is not limited to difficulties peculiar to so-called radical translation. An alternative consideration to Quine's on the nature and content of linguistics is proposed which retains coherence with Quine's assumptions on the extent of science and which does not involve notions of analyticity and synonymy refuted by Quine.

503. Hooker C. A., *Remarks on the Principle of the Identity of Indiscernibles*, « Southwestern Journal of Philosophy », VI, pp. 129-153.

A discussion of the relationship between the principle of the identity of indiscernibles and other principles (e. g. the elimination of singular terms) discussing the opportunity of a systematic metaphysics which would incorporate the above mentioned principle. A good deal of space is given over to the modern logical formulation of the principle and its role in Quine's philosophy.

504. Hudson James L., *The Universe of Discourse*, « Critica », VII, pp. 41-68.

A critical discussion of the status of the empty universe and, in general in logic, of discourse universes. The discussion concerns Quine's position on the matter.

505. Hugly Philip - Sayward Charles, *Quine's Way Out*, « Analysis », XXXVI, pp. 28-37.

A discussion of the philosophical importance of Quine's proposal for a solution of semantic paradoxes, by means of an arithmeticised version of the principle of non-circularity, in relation, mainly, to Tarski's thesis on the incoherence of natural languages.

506. Katz Jerrold J., *The Dilemma between Orthodoxy and Identity*, « Philosophia » (Israel), V, pp. 287-298.

- \* 507. King-Farlow John - Shiner Roger (Eds.), *New Essays in the*

*Philosophy of Mind*, Guelph Ontario, Canadian Association Publishing in Philosophy.

507a. Lake J., *Comparing Type Theory and Set Theory*, « Zeitschrift für Mathematische Logik und Grundlagen der Mathematik », XXI, pp. 355-356.

508. Largeault Jean, *L'ontologie relativiste de W. V. Quine*, « Archives de Philosophie », XXXVIII, pp. 459-476.

The six essays in Q185 are considered. There is an insistence on the inscrutability of reference as the impossibility of empirical evidence for the reference of the words we use.

509. Leblanc Hugues, *Queries on Truth-Conditions*, « Dialogue », XIV, pp. 410-419.

510. Leiber Justin, *Philosophical Aspects of Recent Work in Linguistics*, « The Philosophical Forum », VI, pp. 343-365.

Quine's procedure for the identification of sentences (assent/dissent etc.) is discussed and contested above all for the importance exercised by psychology in the matter.

511. Lenhardt Wayne A., *Propositions and Adverbial Modifiers*, « Dialogue », XIV, pp. 513-516.

512. Levin Michael E., *Quine on Analyticity in L*, « Mind », LXXXIV, pp. 114-118.

Quine's criticisms of the definition of 'analytical' as 'analytical in L' à la Carnap, are applied with equal force to Russell's definition of 'number' as 'a number of some sets'. While analyticity in L cannot be a notion extensible to L', so being a number of A — being the set of isomorphic sets to A — is not extensible to B. At the most, being analytical in a language means occupying a certain type of role which is specified in a non-circular way. But there is nothing about sentences which makes them suitable for that role.

513. Levin Michael E., *Relativity, Spatial and Ontological*, « Nouûs », IX pp. 243-267.

The article sets out to drastically reduce the importance of the thesis of ontological relativity by pointing out how one of the explanations proposed by Quine (the analogy of the relativity of reference with the relativity of physical space) is really rather ambiguous.

514. Lopez Dos Santos L. H., *Quine e dos Dogmas do Empirismo*, « Discurso », V, pp. 61-72.
- ° 515. Mackenzie J. D., *The Exportation of Proper Names*, « Australasian Journal of Philosophy », LIII, pp. 191-203.  
Cfr. Kaplan, 1968, no. 188.
516. Malherbe Jean-François, *Termes théoriques et référence*, « Archives de Philosophie », XXXVIII, pp. 201-217.  
The article sets out to consider the change of perspective brought about by the change in the way of seeing the meaning of theoretical terms from Wittgenstein to Quine and Searle. At the contrary, it is considered philosophically opportune to give up a principally ontological view point (what is the reference of theoretical terms?) to turn, to a more pragmatic vision (what is the use of theoretical terms for scientific work?).
517. Marcus Ruth Barcan, *Dispensing with Possibilia*, « Proceedings and Addresses of the American Philosophical Association », XLIX, pp. 39-51.
518. Margolis Joseph, *The Planets are Nine in Number*, « Canadian Journal of Philosophy », IV, pp. 459-465.  
An attempt to show that Quine's description of the operator opacity relies on misunderstanding and that however is possible to give a correct reading in which the necessity operator acts in a transparent way.
519. McKay Thomas J., *Essentialism in Quantified Modal Logic*, « The Journal of Philosophical Logic », IV, pp. 423-438.  
An examination, in the light of Kripke's semantics, of Quine's thesis according to which quantified modal logic involves essentialism. It is shown that, despite Parsons demonstration that essentialist models do exist for modal theories, there are important aspects for which quantified modal logic involves those commitments about which Quine has spoken.
520. Miller Dolores, *Linsky on Quine*, « Auslegung », III, pp. 37-50.  
Linsky (cfr. no. 169) contests Quine's notion of referential opacity showing that pure reference is not a necessary condition for substitutivity but he fails to convince us that it is even a sufficient condition. There follows a discussion of other possible criteria for opacity or the transparency of reference.



521. Mosterin Jesus, *Sobre teorías físicas y teorías matemáticas*, « Teorema », Mono, pp. 69-88.
522. Mouloud N., *Le sens dans la logique contemporaine et les aspects problématiques de la sémantique*, in *Les langages, le sens et l'histoire*, Colloque International de l'Université de Lille III, 1972, Paris, Editions Universitaires, pp. 93-106.  
Included in an overall study of semantic ideas, Quine's and Goodman's contributions are examined.
523. Olsen Richard E., *On Truth by Convention*, « Philosophy Research Archives », I, n. 1030.
524. Ortony Andrew, *Why Metaphors Are Necessary and Not Just Nice*, « Education Theory », XXV, pp. 45-53.
525. Pak T., *Semantics and Grammar. A Review of Recent Theories*, (II), « Semiotica », XIII, pp. 41-96.  
Positions of Chomsky, Strawson and Quine are pointed out.
- \* 526. Pearce Glenn - Maynard Patrick (Eds.), *Conceptual Change*, Dordrecht, D. Reidel Publishing Company.  
A collection of essays on the philosophical extent of the notion of change of conceptual framework for epistemology, semantics and the belief theory. Quine is mentioned in relation to the translation problem and logical deviance.
527. Pelletier Francis J. - King-Farlow John, *Relations: Turning Russell's Other Flank*, « The Southern Journal of Philosophy », XIII, pp. 359-367.
- 527a. Pétry A., *Sur l'incomparabilité de certains cardinaux dans les "New Foundations" de Quine*, « Comptes Rendus de l'Académie des Sciences de Paris », (série A), CCLXXXI, pp. 673-675.
528. Quesada Raul, *Identidad y Relatividad*, « Teorema », Mono, pp. 89-106.
529. Quesada Raul, *Sujetos, predicados y nombres propios*, « Dia-  
noia », XXI, pp. 103-120.  
Some aspects of the subject/predicate distinction in relation to the eli-

mination of proper names are examined. Strawson's position as set out in *Individuals* is examined as is Quine's position on the matter.

- ° 530. Richards Tom, *Chipman on Quine's Holism*, « Philosophical Papers », IV, pp. 8-11.

Cfr. 1974, no. 412.

531. Rodríguez Marín J., *Opacidad referencial en contextos deónticos*, « Teorema », Mono, pp. 107-120.

532. Santambrogio Marco, *Introduzione a Q., I modi del paradosso e altri saggi*, (italian ed. of *The Ways of Paradox and Other Essays*), Milano, Mondadori, pp. 9-71.

In setting out Quine's thought the author considers it from the standpoint of a refutation of linguistic atomism and of an organicistic conception of language. He tries to demonstrate how some conclusions, if applied to the philosophy of mathematics or science, have a reductive character.

533. Sayward Charles, *The Province of Logic*, « Analysis », XXXVI, pp. 47-48.

Strawson has characterised logic in terms of analyticity. Quine has criticised him and offered an alternative in terms of truth and logical vocabulary. It has been upheld, however, that Quine's description tacitly uses analyticity. The author intends here to show that such an affirmation is mistaken.

543. Schlee Charles, *Linsky, Quine, and Substitutivity*, « Auslegung », III, pp. 29-36.

The article evaluates Linsky's criticism (cfr. no. 169) of the principle of substitutivity. Three formulations of this principle are distinguished: the first two, based on Q121, effectively lay themselves open to criticism of Linsky; the third, however, sets out in Q147, gets away from the criticism and offers an adequate analysis of the principle.

535. Shoemaker Sidney, *Phenomenal Similarity*, « Critica », VII, pp. 3-37.

Within a wide-ranging analysis of the theory of similarity Quine's position is also set out, looking back to Q186.

536. Simpson Thomas M., *Análisis y eliminación. Una módica defensa de Quine*, « Critica », VII, pp. 69-83.

The *explicandum* has various degrees of vagueness and there is no way

of establishing the exact limits of its correct application, even if certain criteria of adequacy were made explicit. However, for Quine, the *explicatum* preserves the applicability of the *explicandum* in contexts that are worth being maintained.

- ° 537. Smith Peter, *Kirk on Quine's Reasons for Indeterminacy of Translation*, « Philosophical Studies », XXVII, pp. 427-431.  
Cfr. 1973, no. 383.

- \* 538. Speck Josef von (Ed.), *Grundprobleme der grossen Philosophen. Philosophie der Gegenwart, III: Moore, Goodman, Quine, Ryle, Strawson, Austin*, Göttingen, Vandenhoeck und Ruprecht.

- \* 539. Steiner Mark, *Mathematical Knowledge*, London, Cornell University Press.

The epistemological consequences of logicism are examined and Quine's position on this is evaluated.

540. Stevenson John, *Aristotle and the Principle of Contradiction as a Law of Thought*, « The Personalist », LVI, pp. 403-413.

541. Stich Stephen P., *Logical Form and Natural Language*, « Philosophical Studies », XXVIII, pp. 397-418.

With reference to the problem of the logical form of statements in the natural language, the author sets out to discuss the so-called 'Quinean Programme', that consists of two fundamental points: the thesis that logical truths are simply a sort of empirical generalisation, a thesis going back to J. S. Mill; and the idea that ordinary language is inadequate for logical aims, a position going back to Frege.

542. Swiggart Peter, *Quine's Logic and the Class Paradox*, « Mind », LXXXIV, pp. 321-337.

This is a discussion of the set theory put forward in Q25 and Q47.

543. Titiev Robert J., *Sentences, Semantics, Stimuli and Quine*, « Teoria », XLI, pp. 1-10.

The problem constituted by the semantic analysis of synonymy between sentences and by the relationship between synonymy and the disposition of speakers, is sketched out by Carnap. The most precise analysis traceable in the literature on the subject, however, is that of Quine in Q147, based on the theories of observation sentences and stimulus-meaning. The author intends to analyse and criticise this theory, showing that

some observation sentences, in their common meaning, are associated with stimulus-meaning that cannot take account of synonymy.

544. Turlea Marin, *Quine on the Logical Truth and the Mathematical Truth*, « Philosophie et Logique », XIX, pp. 87-94.

545. Vuillement Jules, *Quine's Concept of Stimulus Meaning*, « Philosophic Exchange », II, pp. 5-13.

An attempt to analyse stimulus-meaning critically. Quine's definition permits an independent interpretation of every occasional sentence in as much as the meaning must not be dependent on the presence of the meant thing. Stimulus meaning is levelled down to a direct association of a stimulus and an assent, and a compensated association of a contrary stimulus and a dissent. The analysis throws doubt on the simplified and behaviourist interpretation offered in Q179.

546. Vuillemin Jules, *Le "platonisme" dans la première philosophie de Russell et le "principe d'abstraction"*, « Dialogue », XIV, pp. 222-240.

Two types of ontological commitment are discussed: Quine's theory in which to be is to be the value of a variable, and Russell's according to which a relationship proves an abstract order, that is not reducible to an intrinsic property of individuals. This point of view is presented in relation to conceptualism and to Church's theorem. Quine's theory is presented in relation to realism and Gödel's theorem.

547. Weiss Raymond L., *Historicism and Science: Thoughts on Quine*, « Dialectica », XXIX, pp. 157-165.

It is stated that Quine tends unknowingly towards historicism, in as much as he tries to conform epistemology to the presuppositions of contemporary science, which is subject to constant modifications. But as Quine, as a positivist, dogmatically accepts the authority of modern science, several conflicts between his nascent historicism and his residual positivism arise.

548. Wilder Hugh, *Quine's Arguments for the Indeterminacy of Translation*, « Philosophy Research Archives », I, n. 1011.

Four of Quine's arguments for the thesis of indeterminacy are critically analysed. The underdetermination of physical theory, the inscrutability of terms, the conjunction of Peirce's notion of meaning and Duhem's thesis on the interrelationships of sentences and the faith put by linguists in sets of analytical hypotheses. The author maintains that none of these arguments can uphold the thesis in a valid way.

549. Wiredu J. E., *Logic and Ontology IV: Meanings, Referents and Objects*, « Second Order », IV, pp. 25-43.

550. Wolfram Sybil, *Quine, Statements and "Necessarily True"*, « Philosophical Quarterly », XXV, pp. 230-246.

The author, contesting Quine, holds that nothing impedes the redefinition of necessary truths as assertions that *can* be expressed by analytical statements and that such redefinition conforms to Quine's demand that necessary truths be expressible by non-analytical statements. What's more, 'analytic' and 'necessarily true' must be predicates of different types of items (sentences and statements).

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\* 551. Bennett Jonathan, *Linguistic Behaviour*, Cambridge, Cambridge University Press.

This article presents a consideration of language as a system of communicative behaviour. Quine is mentioned in relation to the indeterminacy of translation thesis.

552. Bradley M. C., *Quine's Arguments for the Indeterminacy Thesis*, « Australasian Journal of Philosophy », LIV, pp. 24-49.

The author affirms that, in spite of a considerable literature on the subject, Quine's arguments for his own thesis have not been yet adequately analysed, and he tries to remedy this. He discusses the argument of underdetermination of observed theory and those reasonings according to which the totality of behaviour underdetermines the foreign language analysis and the hypothesis concerning the meaning of terms. These deeper analysis, however, emphasize some weakness in Quine's position.

553. Brink Chris, *Quine's Set Theory and the Definition of Satisfaction*, « Philosophical Papers », V, pp. 11-18.

In Quine's set theory an individual is identical in an element sequence having that individual as single component. This obscures the fact that the notion of the satisfaction of an open statement with a variable through a sequence is an extension of the notion of the satisfaction of such a statement through an individual. The distinction between the two notions is important on the level of quantified statements.

554. Butler Clark, *On the Impossibility of Metaphysics without Ontology*, « Metaphilosophy », VII, pp. 116-132.

The article tries to defend ontologically defined metaphysics against more

recent conceptualist and linguistic definitions. The positions of Quine, Strawson, Kant, S. Anselmo and Russell are set out and discussed.

- \* 555. Campbell Keith, *Metaphysics. An Introduction*, Encino, Dickenson Publishing.

In the third part of the volume the ontological problem is faced, discussing the extensionality principle and the problem or paraphrasing modal constructions assuming Quine's canonic notation. Quine's criterion for ontological commitment is also discussed.

556. Carr Spencer, *The Explication of Dispositions*, « The Journal of Critical Analysis », VI, pp. 47-54.

Quine's considerations of semantic ascent, regimentation and ontological commitment are discussed. The author goes on to defend Quine from Moline's criticisms (cfr. 1972, no. 329).

557. Champlin S. T., *Quine's Judge*, « Philosophical Studies », XXIX, pp. 349-352.

Quine's solution to the paradox of the execution is here examined.

558. Churchland Patricia Smith, *How Quine Perceives Perceptual Similarity*, « Canadian Journal of Philosophy », VI, pp. 251-256.

This article looks at the attempt in Q213 to show up the problems regarding the notion of perceptual similarity. According to Quine, such notion is essential in a learning theory and, behaviourist that he is, he refutes the mentalist dimension of the notion, seeking to modify it to increase its explanatory usefulness. The author examines this position and emphasizes its weak points.

- 558a. Cocchiarella N. B., *A note on the definition of identity in Quine's "New Foundations"*, « Zeitschrift für mathematische Logik und Grundlagen der Mathematik », XXII, pp. 195-197.

559. Code Alan, *Aristotle's Response to Quine's Objections to Modal Logic*, « The Journal of Philosophical Logic », V, pp. 159-186.

Some of Quine's objections to modal logic can be applied to the notions used to describe temporal change and it is affirmed that Aristotle's predecessors had already formulated similar problems for the temporal puzzles so generated. (Cfr. Aristotele, *Physics*, A7. Analysis of the elements of change). Aristotle's position involves concepts that lend themselves readily to the sort of semantic analysis recently developed relating to modalities.

560. Cornman James W., *Reference and Ontology: Inscrutable but Not Relative*, « The Monist », LIX, pp. 353-372.

It is shown how Quine's demands for inscrutability are in line with other considerations and how, given the inscrutability of reference, it may be reasonable to deny its relativity.

561. Cortes Alberto, *Leibniz's Principle of the Identity of Indiscernibles. A False Principle*, « Philosophy of Science », XLIII, pp. 491-505.

The possibility is considered that particles (e. g. photons) violate Leibniz's principle. In that case it can no longer be formulated in terms of names and variables and it follows that Quine's ontological commitment criterion is not universally applicable.

562. Croddy W. Stephen, *Quine on Identity and Names*, « Erkenntnis », X, pp. 99-101.

This brief article looks at two Quine's theses: (Q1) ' = a ' can be treated as a simple predicate; and (Q2) ' a = a ' every assertion with such a form is logically true. The article sets out to show their incoherence, for if we want to use Q1 to eliminate names from the language we cannot accept Q2 and viceversa.

- \* 563. Davis Steven, *Philosophy and Language*, Indianapolis, Bobbs-Merrill.

Three theories of language are described and discussed; Austin's, Chomsky's, and Quine's behaviourism along with the indeterminacy of translation thesis and the inscrutability of reference.

- \* 564. Garrido M. (Ed.), *Aspectos de la filosofía de W. V. Quine*. Actas del V Simposio de Lógica y Filosofía de la Ciencia, (Cullera, 28-29 giugno 1974). Valencia, Departamento de Lógica y Filosofía de la Ciencia, Universidad de Valencia.

This is a collection of essays that appeared yet in the journal « Teorema » in 1975, followed by Quine's replies.

565. Genova A. C., *Linsky on Quine's Way Out*, « Philosophy and Phenomenological Research », XXXVII, pp. 109-115.

Linsky in *Referring* presents some counterexamples to a possible interpretation of Quine's thesis of referential opacity. The author maintains that all the counterexamples fail in their purpose because they involve a misunderstanding of Quine's thesis of opacity or an oversimplification of Leibniz's law.

566. Gironella Juan R., *El Objeto Subyacente al Lenguaje. A propósito de la "Relatividad Ontológica" del Prof. W. V. Quine*, « Espíritu », XXV, pp. 163-170.

At the beginning Quine's position relating to language, as in Q141, is set out; then it is put under critical examination.

567. Gottlieb Dale, *Ontological Reduction*, « The Journal of Philosophy », LXXIII, pp. 57-76.

Ontological reduction is discussed, showing how the Löwenheim-Skolem theorem is not problematic in this respect. No extensional criterion for ontological reduction can be correct; relationships of epistemic-deductive, inductive support etc. shouldn't be too disturbed by the reduction and should be protected from Harman's neo-pythagorism that reduces everything to sets.

568. Graybeal David P., *The In- and Under-determinacy of Translation*, « Dialectica », XXX, pp. 9-15.

The problem of the relationship between the indeterminacy and the underdetermination of physical theory is examined. According to the author there is no difference: both physical theories and translation are underdetermined but not indeterminate.

569. Haack Susan, *Some Preliminaries to Ontology*, « The Journal of Philosophical Logic », V, pp. 457-474.

The article begins with a detailed criticism of Carnap's *Empiricism, Semantics, and Ontology*. It goes on then to examine Quine's criticism of Carnap, criticism that is found to be anomalous with respect to the ontological considerations peculiar to Quine.

- \* 570. Harding Sandra G. (Ed.), *Can Theories be Refuted? Essays on the Duhem-Quine Thesis*, Dordrecht, D. Reidel Publishing Company.

This article contains a reprint of essays by Duhem, Quine, Hempel, Popper, Kuhn and others.

- ° 571. Harman Gilbert, *Katz' Credo*, « Synthese », XXXII, pp. 387-394.

Cfr. 1974, no. 428.

- ° 572. Harris Jr. James F., *Indeterminacy of Translation and Analitycity*, « The Southern Journal of Philosophy », XIV, pp. 239-243.

Cfr. Minogue, 1976, no. 583.



- \* 573. Herrera Ibáñez A., *¿Es la Existencia un Predicado Lógico?*, México D. F., Inst. de Investigaciones Filosóficas, U.N.A.M.

Firstly the viewpoints of Frege, Russell, Quine, Carnap and others are discussed. Then it is concluded that existence is not a predicate, on the basis of Strawson's considerations of the presupposition concept and his definition of predicative statement.

- 573a. Hinnion R., *Modèles de fragments de la théorie des ensembles de Zermelo-Fraenkel dans les "New Foundations" de Quine*, « Comptes Rendus de l'Académie des Sciences de Paris », (serie A), CCLXXXII, pp. 1-3.

- ° 574. Hintikka Jaakko, *Quine Vs Peirce?*, « Dialectica », XXX, pp. 7-8.

Cfr. Føllesdal, 1973, no. 371.

575. Hofer John R., *Quine on "Translation and Meaning". A Consideration of the Indeterminacy Thesis*, « Auslegung », III, pp. 95-114.

The indeterminacy thesis is considered also in the light of Quine's earlier works on meaning, together with some criticism. It is concluded that Quine's thesis is either banal or meaningless.

576. Hollinger Robert, *A Defence of Essentialism*, « The Personalist », LVII, pp. 327-344.

Versions of essentialism attributed to Aristotle and Leibniz are considered. In so doing the latter is contested whilst Aristotle's essentialism is defended and its heuristic value too, as outlined in Peirce's viewpoint on the ideal scientific theory. Numerous well-known objections to essentialism by Quine and Wittgenstein are set out.

577. Hollinger Robert, *Aspects of the Theory of Classification*, « Philosophy and Phenomenological Research », XXXVI, pp. 319-338.

Various general approaches to the philosophical problems inherent in classification, for example naturalism and conventionalism, are distinguished. Quine's position on the matter is mentioned particularly as regards the relativity of reference thesis and the attack on essentialism. The author, however, intends to defend a pragmatic opacity rather than Quine's referential opacity.

578. Jacques F., *A Terminological Note about Reference*, in *Contemporary Aspects of Philosophy*, Ryle Gilbert (Ed.), Stocksfield, Oriel Press, pp. 103-110.

It is an analysis of the terms used by various authors writing about the philosophical problems of language. As far as Quine is concerned, a certain tendency to make use of terminology belonging to various conceptual systems is highlighted.

579. Joja Crizantema, *La vocation ontologique de la sémantique moderne*, « Philosophie et Logique », XX, pp. 233-239.

580. Lee J. Roger, *Belief as a Dispositional Property*, « Philosophical Studies », XXX, pp. 207-208.

It is a discussion of the belief problem, which is seen as a disposition to answer in a given way to given stimuli. According to Quine, when the belief changes, then so does the disposition. The author maintains, of the contrary, that sometimes disposition can survive belief.

581. Lycan W. G. - Pappas G. S., *Quine's Materialism*, « Philosophia » (Israel), VI, pp. 101-130.

It is difficult to say which of the different version of materialism is accepted by Quine. He says only a little about the 'mind/body' problem and what little can lend itself to various interpretations. This is an attempt to see which sort of materialism best suits Quine's positions, as they are expressed in his writings, and to show which correlated theses he refuses.

582. Lycan William G., *Reality and Semantic Representation*, « The Monist », LIX, pp. 424-440.

Davidson, Harman and others have proposed a semantic program for the natural languages study, by which every statement must be assigned to one or several semantic representations along with the syntactic history of the statement derivations from such representations. According to Quine, such assignations are indeterminate in the sense that they are not hypotheses regarding facts and neither are they, in themselves, correct or incorrect. The article is an attempt to reconcile Davidson and Harman's program with Quine's point of view.

583. Minogue Brandan P., *Quine on Analyticity and Translation*, « The Southern Journal of Philosophy », XIV, pp. 233-238.

Quine's position on the analytic/synthetic distinction is defended, maintaining moreover that it is quite compatible with Quine's logical truth definition. A number of arguments opposing Quine are then considered, and it is shown that they are invalid, for they misunderstand the meaning of the indeterminacy of radical translation thesis.

- \* 584. Mooij Jan J. A., *A Study of Metaphor. On the Nature of Metaphorical Expressions, with Special Reference to Their Reference*, Amsterdam North-Holland.

The role of reference in metaphoric use of language is dealt with. A classification of the main theories on the metaphor is offered from this point of view. The question of whether these theories recognise a reference to the literal extension of words used metaphorically is then dealt with.

585. Moulder James, *Do all Quine's Satisfaction Relations Satisfy?*, « Philosophical Studies », XXIV, pp. 140-147.

In Q195, Quine gives some recursive definitions for sequences which satisfy statements in a canonic language here shown. The author means to offer a more elegant alternative to Quine's definition of open and closed existential statements.

586. Napoli Ernesto, *La miseria della linguistica*, « Annali della Scuola Normale Superiore di Pisa », Classe di Lettere e Filosofia, VI, pp. 279-327.

The author denies that Quine has ever really demonstrated the foundation of the indeterminacy thesis. Giving a wide overview, he shows the main themes of the thesis: underdetermination, analytical hypotheses, stimulus-meaning, substitutional and referential quantification, logical deviance, and he also deals with a number of criticisms of these areas. In conclusion he maintains that the thesis consequences, if understood and radically applied, go too far what Quine himself perhaps purposed, striking semantics as well as empirical science.

587. Nerlich Graham, *Quine's 'Real Ground'*, « Analysis », XXXVII, pp. 15-19.

According to Quine an underdetermined by all possible observation theory cannot be translated in a stated way. The objection here is that it does not follow from the fact that a class of observation sentences is correlated to a particular language that such a language is correlated to the expression of all and solely observation sentences. In other words, underdetermination does not imply indeterminacy.

588. Norton B., *On Defining "Ontology"*, « Metaphilosophy », VII, pp. 102-115.

The author criticises Quine's idea that is impossible to distinguish ontology of science from that of ordinary language.

589. Orayen Raul, *Verdad lógica y significado*, « Critica », VIII, pp. 11-43.  
It is shown that, in the light of some Quine's considerations, the concept of logical truth should be refuted as the notion of synonymy must necessarily be used in its definition. Some consequences of using such a notion in the characterisation of 'logical truth' are then analysed.
590. Orianne André, *Intentional Meaning*, « Foundations of Language », XIV, pp. 195-209.  
This is an examination of some of the more interesting aspects of Quine's criticism of traditional theories of meaning. It is shown that the essence of his criticism remains valid even though one may refute some of his assumptions. In particular the relevance of this is shown with regard to Husserl's phenomenology.
591. Over D. E., *Quine's Dispositions*, « Philosophical Studies », XXX, pp. 333-339.  
Quine's stance on dispositions is criticised because it has the implausible consequence that scientists are not logically justified in using dispositional operators to generate new terms.
592. Parlavacqua Paolo, *Linguaggio e teoria scientifica nella concezione di Quine*, « Scientia », CXI, pp. 417-479.  
The author dwells on Quine's language model, on the indeterminacy thesis and on his epistemology and ontology. He highlights the links between these areas.
- \* 593. Parrini Paolo, *Linguaggio e teoria. Due saggi di analisi filosofica*, Firenze, La Nuova Italia.  
The first essay reproduces *From Quine to Katz* (cfr. no. 279 and no. 335); the second, which is unedited, investigates the possibility of the empirical falsification of isolated scientific hypotheses.
594. Peacocke C., *With Reference to the Roots*, « Inquiry », XXI, pp. 105-129.  
This is an examination of the main points dealt with by Quine in Q213: observation sentences, dispositions, ontology, the set theory, substitutional quantification.
595. Putnam Hilary, *Two Dogmas Revisited*, in *Contemporary Aspects of Philosophy*, Ryle Gilbert (Ed.), Stocksfield Oriel Press, pp. 202-213.

The author means to distinguish between a linguistic notion of analyticity and the notion of a priority. This seems to be Quine's real target. He has not only refuted it but he has even tried to devise a methodology which could do without it.

596. Reeves Alan, *The Foundations of Quine's Philosophy*, « Philosophical Studies », XXX, pp. 75-94.

Quine is strongly criticised. The author maintains that the tensions in *Two Dogmas* are not resolved in Quine's later works. Naturalized epistemology is wrongly presented as the only alternative to phenomenism, and behaviourism is considered implausible.

597. Rolston Howard L., *A Note on Simplicity as a Principle for Evaluating Rival Scientific Theories*, « Philosophy of Science », XLIII, pp. 438-440.

Kording (*The Justification of Scientific Change*, Dordrecht, D. Reidel, 1971) maintains that simplicity can constitute a criterion of choice among alternative scientific theories. This contradicts Quine's theory according to which the simplicity of a theory is relative to a conceptual framework and cannot have presumptions of objective truth. The author criticises both Kording's position and the accuracy of his interpretation of Quine.

598. Root Michael D., *Speaker Intuitions*, « Philosophical Studies », XXIX, pp. 221-233.

A comparison of Quine's and Chomsky's stances with regard to grammar and linguistics in general is set out.

599. Rothbart Daniel, *Propositions and Quine's Indeterminacy of Radical Translation*, « Dialogue » (Phi Sigma Tau), XVIII, pp. 33-43.

This is a discussion of the refusal of the existence of propositions, departing from the radical translation thesis.

600. Sagal Paul T., *Paradox, Confirmation and Inquiry*, « Philosophy », LI, pp. 467-470.

The author discusses the role of the paradox in the construction of a scientific theory and gives an account of Quine's considerations of the matter, going back to Q186.

- ° 601. Schoen Edward L., *Indeterminacy Still Lurks. A Reply to Carney and Van Straaten*, « Foundations of Language », XIV, pp. 243-245.

Cfr. 1974, no. 423.

602. Simpson Thomas M., *Las Creencias y el Mundo: Sobre las Objeciones de Hintikka a Quine*, « Critica », VIII, pp. 45-54.

Hintikka's objections to Quine are based on a wrong evaluation of the possibilities offered by Quine's notation, whose flexibility and expressive strenght are remarkable.

603. Szrednicki Jan, *Quine et la Logique de la Structure* (in polish), « Studia Filozoficzne », n. 3, pp. 129-135.

Quine's criticism of the analytical/synthetic distinction is discussed.

604. Szrednicki Jan, *The Two Paradoxes of Induction*, « Dialectics and Humanism », III, pp. 159-164.

605. Stevenson L., *On What Sorts of Thing There Are*, « Mind », LXXXV, pp. 503-521.

Ontological problems occur at three distinct levels: 1) that of existence assertions implied by a theory of the first order; 2) that of the variables range of a language of the first order; 3) that of extra-linguistic correlates of a semantic theory. A detailed analysis of Quine's writings reveals that these three levels are enough clearly distinguished.

606. Vandamme F., *L'épistémologie et la Sémantique*, « Revue Internationale de Philosophie », XXX, pp. 435-449.

The consequences of Quine's refusal of the analytical/synthetic distinction for the study of language are set out. Even admitting this refusal, central semantic functions can be explained and described.

### 1977

- ° 607. Aune Bruce, *Root on Quine's Thought Experiment*, « Midwest Studies in Philosophy », II, pp. 240-243.

Cfr. 1977, no. 647.

608. Barnes Gerald, *Some Remarks on Belief and Desire*, « The Philosophical Review », LXXXVI, pp. 340-349.

Quine's distinction among propositional attitudes is applied to the psychological problem of the distinction between belief and desire. The philosophical interest of the matter is highlighted.

- ° 609. Bergmann Merrie, *Logic and Sortal Incorrectness*, « The Review of Metaphysics », XXXI, pp. 61-70.

The key-idea is that truth values represent different ways of carrying out semantic evaluation and so the deviance of incorrect propositions would not be reflected semantically through the assignation of a non-classic truth value.

610. Boer Steven E., *Logical Truth and Indeterminacy*, « Notre Dame Journal of Formal Logic », XVIII, pp. 85-94.

In several works, Quine has tried to describe the conditions under which a statement of a natural language is valid as a logical truth. Strawson's objection to this is that it is not possible without having recourse to intensional devices. The author means to point out the inadequacy of Quine's replies and those of his defenders. Quine's most plausible definition of logical truth for natural languages is only acceptable if paraphrasing is a determined operation. So the indeterminacy of translation and logical truths are mutually incompatible.

611. Boffa M., *On the Axiomatization of NF*, in *Colloques Internationaux du C.N.R.S.*, CCXLIX, (Colloque International de Logique, Clermont-Ferrand 1975), pp. 157-159.

612. Boffa M., *The Consistency Problem for NF*, « The Journal of Symbolic Logic », XLII, pp. 215-220.

Specker, Jensen and Grishin's results, concerning equiconsistent theories with NF and consistent fragments of NF, are discussed.

613. Bradley M. C., *Mind-Body Problem and Indeterminacy of Translation*, « Mind », LXXXVI, pp. 345-367.

A latent contradiction among three of Quine's philosophical theses emphasized: the indeterminacy of translation, the mind/body relationship and the underdetermination of physics.

614. Burge Tyler, *Belief "de re"*, « The Journal of Philosophy », LXXIV, pp. 338-362.

After a discussion of the semantic and epistemic methods to set the distinction between *de re* and *de dicto* attitudes, it is argued that the former type is fundamental in that it is a necessary condition for who does not have any attitude. Kaplan's attempt to define *de re* belief in terms of *de dicto* belief is thus criticised. The article concludes with a discussion of the notion of 'sense' in Frege.

615. Burge Tyler, *Kaplan, Quine and Sustended Belief*, « Philosophical Studies », XXXI, pp. 197-203.

Kaplan (cfr. 1968, no. 188) maintains that the Quine's notation to represent relational contexts is inadequate in some cases of belief suspen-

sion. If this argument had foundations then any theory which did not represent *de re* belief as a special case of *de dicto* belief would be indeterminate. The author wants to contest Kaplan's argument.

616. Carloye Jack C., *Ontological Commitment and Semantics*, « *Methodology and Science* », X, pp. 169-176.

Quine's affirmation, according to which if a theory logically implies a statement as 'X exists' then the theory commits us to the existence of X, is defended. The most serious objections are based on the idea that 'X refers to X' is, in some cases, false and so 'X exists' may be true but there may be no X. These arguments are confuted and it is concluded that 'X exists' is the same as 'X has reference' and, in general, existing means being a referent of a true statement.

617. Coppotelli F., *On Two First Order Type Theories for the Theory of Sets*, « *Notre Dame Journal of Formal Logic* », XVIII, pp. 147-150.

It is shown that the two axioms systems for the simple type theory, Quine's (cfr. Q156) and author's, are the same.

618. Davidson Donald, *Reality Without Reference*, « *Dialectica* », XXXI, pp. 247-258.

The idea here is to treat reference as a theoretical construction whose sole function is to be useful to a theory of truth. As, however, such a function can be differently absolved, the concept of reference loses importance and has no essential role to play in explaining the relationship between language and reality.

619. Double Richard, *Quine and the Determinateness of Reference*, « *Kinesis* », VII, pp. 49-61.

The indeterminacy of reference Quine's argument departs from a premise according to which the notion of absolute, objective reference must be refuted. It is claimed that this argument is unacceptable if we include the referential intentions of the speaker in our ontology. One does not to be a physicalist to recognise them.

620. Glouberman M., *How Philosophers See 'Red'*, « *Grazer Philosophische Studien* », IV, pp. 43-64.

621. Glouberman M., *Semantic Determinacy and Ontology*, « *Idealistic Studies* », VII, pp. 109-131.

According to a well-known Quine's thesis a statement has factually defined meaning only if we can trace in it standard individuating structures



of the predicates logic. Moreover, a language whose statements do not have defined meaning cannot sustain ontological commitment. Here, this position is contested through a number of counter-examples (Strawson) and by maintaining that it is possible to use a language which is devoid of the semantic richness necessary for ontological commitment in an individuating way.

622. Gochet Paul, *Being, Truth and Meaning in Quine's Philosophy*, « Philosophica », XIX, pp. 119-135.

An examination of the relationships among holism, underdetermination of scientific theories, indeterminacy of translation and ontological relativity as they figure in Quine's philosophy, is set out.

623. Grandy Richard E., *In Defence of a Modest Platonism*, « Philosophical Studies », XXXII, pp. 359-369.

Within a discussion of the meaning of an ontological approach to the philosophy of mathematics, the author defines Quine as a reluctant Platonist in that he accepts the existence of mathematical objects on the basis of their usefulness for descriptions and predictions in science. This position is contested, partly because it reduces mathematics to physics.

624. Haack Susan, *Analyticity and Logical Truth in "The Roots of Reference"*, « Theoria », XLIII, pp. 129-143.

It is shown that Quine's considerations of analyticity and logical truth include both prudent and radical elements. In Q213 the genetic/social definition of analyticity is prudent, while the introduction of three-value functions is radical. The conjecture through which Quine tries to reconcile this tension (according to which, although some logical laws are analytic, those associated with incomplete judgements are synthetic) is false.

625. Haack Susan, *Pragmatism and Ontology: Peirce and James*, « Revue Internationale de Philosophie », XXXI, pp. 377-400.

Peirce's realist version of pragmatism is compared to James's nominalist version and it is held that they are not necessarily contrasting. Peirce's distinction between realism and nominalist platonism is applied to recent works by Quine, Goodman, Strawson, and Mellor.

626. Hornsby Jennifer, *Singular Terms in Contexts of Propositional Attitude*, « Mind », LXXXVI, pp. 31-48.

The problem of opaque and transparent belief contexts is approached from the point of view of the proper nouns theory and defined descriptions.

- \* 627. Hutchison John A., *Living Options in World Philosophy*, Honolulu, University Press of Hawaii.
- Inside a discussion on the universalising function of philosophy, logical positivism is also discussed along with Quine's thesis of relativity and ontological commitments.
628. Joseph Geoffrey, *Conventionalism and Physical Holism*, « The Journal of Philosophy », LXXIV, pp. 439-462.
- Three fundamental examples of conventionalist theory are put under comparison: special relativity, Poincaré-Reichenbach's thesis of the conventionality of geometry and Quine's on the indeterminacy of translation. The aim is to seize the common structure and to decide to what extent they depend upon empirical presuppositions. This analysis leads to clarify the relationships between conventionalism and the two different idealist and materialist traditions.
629. Katz Fred M. - Katz Jerrold J., *Is Necessity the Mother of Intension?*, « The Philosophical Review », LXXXVI, pp. 70-96.
- An outline of Quine's critique to logical empiricism on the two fronts of translation indeterminacy and the compromising of quantified modal logic with essentialism. Then the proposals of several authors (Montague, Hintikka, Lewis) regarding the modal calculus semantics and the conception of possible worlds are also outlined. These proposals come a decade after Quine's criticisms and seem to finally defeat any scepticism.
630. Kielkopf Charles F., *Quine Vs Putnam on the Use of Second Order Formulae*, « ITA Humanidades », XIII, pp. 51-62.
- ° 631. Kirk Robert, *More on Quine's Reasons for Indeterminacy of Translation*, « Analysis », XXXVII, pp. 136-141.
- Cfr. 1973, no. 383; 1975, no. 475 and no. 537.
632. Kleiner Scott A., *Referential Divergence in Scientific Theories*, « Studies in History and Philosophy of Science », VIII, pp. 87-109.
- Some versions of the thesis that common reference offers a foundation for the comparison of conceptually divergent theories are put under examination. A place is reserved for an exposition of Quine's theory of reference.
633. Largeault Jean, *De la difficulté d'expliquer ce qu'est la logique*, « Revue de Métaphysique et de Morale », LXXXII, pp. 289-295.

This is a reflection, using Q199 as a starting point, on the linguistic roots of logic and the possibility of various logics.

634. Largeault Jean, *L'épistémologie de W. V. O. Quine*, « Critique », XXXIII, pp. 71-91.

This is a survey made on the occasion of French translation of Q54, Q92, Q185 and Q195.

635. Largeault Jean, *Indétermination de la traduction et indétermination de la référence*, « Dialogue », XVI, pp. 245-273.

The first four essays of Q185 are set out and discussed.

636. Lauener H., *Quine über Ontologie und substitutionelle Quantifikation*, « Dialectica », XXXI, pp. 333-357.

According to Quine, objects are theoretical constructions, postulated entities. As in natural language logical functions are not sufficiently clear, Quine introduces into the language a system of reference that contains a logic, predicates and an ontology.

- ° 637. Lepore Ernest, *Reply to Professor Root's "Speaker Intuitions"*, « Philosophical Studies », XXXII, pp. 211-215.

Cfr. 1976, no. 598.

- \* 638. Linsky Leonard, *Names and Descriptions*, Chicago, University of Chicago Press.

Reference, proper names and definite descriptions in the works of Mill, Russell, Frege, Wittgenstein, Kripke and Quine are discussed.

639. Margolis Joseph, *The Axiom of Existence: Reductio ad Absurdum*, « The Southern Journal of Philosophy », XV, pp. 91-99.

Various formulations of the axiom of existence are examined and it is shown that reference is an intentional or grammatical category, without any ontological importance. Then the theories of Quine and Searle are set out.

640. Margolis Joseph, *The Stubborn Opacity of Belief Contexts*, « Theoria », XLIII, pp. 41-46.

It is shown that opacity in belief contexts cannot be resolved extensionally. A detailed examination is made of the solution to the problem proposed by Quine, that indeed turns out to be founded on a non-extensionalist attitude.

641. Merrill Gary H., *On an Enduring "Non Sequitur" of Quine's*, « Notre Dame Journal of Formal Logic », XVIII, pp. 613-615.

One of Quine's criticisms of quantified modal logic is that it is committed with non-material entities. Here it is shown that such systems of modal logic are not committed to anything other than the language in which they are expressed.

642. Orenduff J. M., *Are Modal Contexts Referentially Opaque?*, « Notre Dame Journal of Formal Logic », XVIII, pp. 128-132.

Quine has affirmed that modal propositions cannot be quantified because they are referentially opaque. Here, exactly the opposite is put forward. What's more it is contested that the attempt to demonstrate that modal propositions lack substitutivity is based on an ambiguity in the assertion of identity involved. Such misunderstanding emerges from not observing that the truth of an assertion of identity depends on the non-univocal meanings of the terms.

- \* 643. Orenstein Alex, *Willard Van Orman Quine*, Boston, G. K. Hall & Co.

The major themes of Quine's philosophy are examined: ontological commitment, the criticisms of the notions of meaning, synonymy and analyticity, the indeterminacy of translation thesis, and ontological relativity. Quine's position is then compared with Frege's, Russell's, Carnap's and Chomsky's.

644. Ostien Philip, *Beyond Truth and Reference*, « Philosophy Research Archives », III, n. 1212.

Quine professes to be a naturalist — but here the author argues that his naturalism is not sufficiently resolved. The notions of truth and reference, so central to Quine's work, wouldn't remain so in a theory of language that was genuinely naturalist.

645. Panova E., "L'ontologie relative" de Willard Van Orman Quine, (in bulgarian), « Filosofska Misul », XXXIII, pp. 89-98.

- 645a. Pétry A., *On Cardinal Numbers in Quine's "New Foundations"*, in *Set Theory and Hierarchy Theory*, V, (Bierntowice, Poland 1976), Springer Lect. Notes in Math. 619, pp. 241-250.

646. Pradhan R. C., *The Foundations of the Analytic-Synthetic Distinction*, « Indian Philosophical Quarterly », IV, pp. 1-6.

A question is put against necessary truths in logic and mathematics and factual truths. The former are part of our conceptual system and are

not so easily corrected in so far as they are deep rooted in our way of thinking. They are, therefore, also responsible for the organisation of our experience and it is because of this that one can't point to an absolute difference between the two types of truth.

647. Root Michael, *Quine's Thought Experiment*, « Midwest Studies in Philosophy », II, pp. 225-239.

648. Scales Ronald, *From Purity to Reference*, « Grazer Philosophischen Studien », III, pp. 107-124.

It is maintained, from a Russellian point of view about truth, that the existential generalisation and the substitutivity of identicals are not equivalent tests for the referential position and that the first is more appropriate than the second.

649. Schleifer M., *Behaviourisme et Psychologie*, « Philosophiques », IV, pp. 327-334.

650. Schwartz D., *Sequenzenschliessen in der algebraischen Attributenlogik*, « Zeitschrift für Mathematische Logik und Grundlagen der Mathematik », XXIII, pp. 487-495.

An algebraic logic is constructed (Quine's « predicate-functor logic ») that corresponds to the classic calculus of predicates. Then the sequences of influence are examined within this logic.

651. Simpson Thomas M., *Brentano y Quine: Modalidades Psicológicas "de re" e Indeterminación de la traducción*, « Crítica », IX, pp. 23-33.

This is a discussion of the utilisation in Q151 of Brentano's thesis on intentionality. *De re* and *de dicto* contexts are examined and it is held that Quine's principal aim is not so much to distinguish the two senses as to give a theory of degree to opacity and that this, being linked to the predicates of intentional *de re* statements, cannot be completely eliminated.

652. Smokler Howard, *Three Grades of Probabilistic Involvement*, « Philosophical Studies », XXXII, pp. 129-142.

The precise sense in which probabilistic contexts are intentional has never been formulated. Here, some distinctions are used in relation to the three degrees of modal involvement and it is established, more exactly than has been done previously, the degree of intentionality that assertions probably have. The distinctions used here have been introduced by Quine. By paraphrasing it can be demonstrated that assertions of probability exemplify that which Quine calls the third degree of

modal involvement. As a result, they are intensional in a way that is not acceptable to the majority of extensionalists.

653. Widerker David, *Epistemic Opacity Again*, « Philosophical Studies », XXXII, pp. 355-358.

The author intends to defend Quine's position from Sleigh's attacks (cfr. 1966, no. 159) on opacity in belief contexts. He goes on to evaluate Quine's thesis in so far as it throws light on important philosophical links between truth-functionality and referential transparency.

654. Yegermann H., *Indeterminacy of Translation and Its Critics*, « Tijdschrift voor Filosofie », XXXIX, pp. 130-140.

The author proposes the formulation of the indeterminacy thesis. In so doing he resolves an apparent internal paradox and discusses Young's (cfr. no. 360) and Landesman's (cfr. no. 244) criticisms.

### 1978

- ° 654a. Abaté C. J., *Indeterminacy and Referential Intentions*, « Kinesis », VIII, pp. 3-9.

Cfr. 1977, no. 619.

655. Ackerman Diana, "De Re" *Propositional Attitudes toward Integers*, « Southwestern Journal of Philosophy », IX, pp. 145-153.

This article faces the problem of the *de re* interpretation of propositional attitudes (in the sense in which Quine has redefined them) relevant to the number theory.

656. Baker John R., *Some Remarks on Quine's Arguments against Modal Logic*, « Notre Dame Journal of Formal Logic », XIX, pp. 663-673.

According to the author, both Quine's affirmations for which terms in all alethic modal contexts don't occur in a purely referential way, and his argumentation against quantification in modal contexts, are wrong.

657. Bechtel P. William, *Indeterminacy and Intentionality: Quine's Purported Elimination of Propositions*, « The Journal of Philosophy », LXXV, pp. 649-661.

The argument that we cannot place entities as meanings in constructing semantic theories in the same way that we can use theoretical entities in constructing scientific hypothesis, falls down in so far as the analytic

hypotheses have identical characteristics to scientific ones. The affirmation according to which the indeterminacy is more than a type of underdetermination, is independent; unless it is seen as a consequence of Quine's physicalism. But the argument is then circular because physicalism already constitutes a prohibition of intentional entities.

658. Bechtel P. W. - Stiffler Eric, *Observationality. Quine and the Epistemological Nihilists*, in *PSA 1978. Proceedings of the 1978 Biennial Meeting of the Philosophy of Science Association*, I, Asquith P. D. - Hacking Ian (Eds.), East Lansing, Michigan State University, pp. 93-108.
- ° 659. Bradley M. C., *More on Kirk and Quine on Underdetermination and Indeterminacy*, « *Analysis* », XXXVIII, pp. 150-159.  
Cfr. 1973, no. 383 and 1977, no. 631.
660. Clark Michael, *Time-Slices of Particular Continuants as Basic Individuals: An Impossible Ontology*, « *Philosophical Studies* », XXXIII, pp. 403-408.  
Quine's vision of ontology is discussed in the light of problems brought about by the definition of objects that we want to consider. Quine's position turns out to be weaker than Strawson's, which is defended by the author.
661. Cohen S. Marc, *Essentialism in Aristotle*, « *The Review of Metaphysics* », XXXI, pp. 387-405.  
Quine characterises a certain type of metaphysical considerations as Aristotelian essentialism. Recent work on Aristotle has shown, however, that he could not have been an essentialist in Quine's sense. This article examines if, and to what extent, Aristotle is committed to the type of essentialism discussed by Quine.
- ° 662. Crabb B. G., *Bradley on Quine*, « *Mind* », LXXXVII, pp. 582-587.  
Cfr. 1977, no. 613.
663. Cresswell M. J., *Can Epistemology be Naturalized?*, « *Southwestern Journal of Philosophy* », IX, pp. 109-118.  
This discusses the problem posed by Quine's naturalized epistemology, in which the philosophy of knowledge is treated essentially from a psychological point of view. The author compares Quine's viewpoint with Bradley's going back to a holistic solution.

- ° 664. Dale A. J., *Reference, Truth-Functionality and Causal Sentences*, « *Analysis* », XXXVIII, pp. 99-106.  
Cfr. Anscombe, 1969, no. 203.
665. Descombes Vincent, *Une supposition très singulière on comment désigner la porte d'Ali-Baba*, « *Critique* », XXXIV, pp. 467-492.  
This discusses Quine's thesis for which it makes sense to distinguish between singular and general terms, and the former are considered theoretically superfluous, and this is applied to the 'open Sesame' from the story of Ali-Baba, to show the weakness of the method of singular designation.
666. Dessì Paola, *Quine tra innovazione epistemologica e conservazione logica*, « *Rivista di Filosofia* », LXIX, pp. 451-464.  
In examining Quine's criticism of the analytical-synthetic distinction, the author shows how Quine does not always distinguish between semantic and epistemological arguments and how the innovatory content of the epistemological theses clashes, as far as logical theories are concerned, with a certain conservatism. The function carried out by logical truths at the centre of Quine's holistic conception is then discussed.
667. Fales Evan, *Opacity in the Attitudes*, « *Canadian Journal of Philosophy* », VIII, pp. 725-752.  
The problems relating to referential opacity in attitudinal contexts are examined and then the existence of alternative strategies to characterise beliefs is examined.
668. Field Hartry, *Mental Representation*, « *Erkenntnis* », XIII, pp. 9-61.  
The author proposes the formulation of a theory of intentionality adequate for materialistic positions. Quine is referred to with regard to the role of the notion of translation in semantics, in connection with the problem of the truth value of observation statements, and to the concept of interlinguistic and intralinguistic synonymy.
669. Fuller Gary, *Reductionism and Empathy*, « *The Southern Journal of Philosophy* », XVI, pp. 35-49.
- \* 670. Gochet Paul, *Quine en perspective. Essai de philosophie comparée*, Paris, Flammarion.  
The main themes discussed by Quine during his thought working are set out.



671. Gordon M., *Sur l'aspect épistémologique de la " Philosophie de la logique " de Quine*, (in polish), « *Studia Filozoficzne* », n. 10, pp. 111-124.
672. Grandy Richard E., *Ontology and Reduction*, « *Southwestern Journal of Philosophy* », IX, pp. 69-78.  
The concept of reduction, central to Quine's ontology, is formally defined.
673. Grünfeld Joseph, *Translatability as a Norm in Quine*, « *Science et Esprit* », XXX, pp. 325-328.  
The notion of stimulus-meaning is criticised, for it is inadequate to give us behaviourist criteria of meaning and therefore of translatability.
674. Haack R. J., *Quine's Theory of Logic*, « *Erkenntnis* », XIII, pp. 231-259.  
The three-fold influence of Frege, Dewey and Hume on Quine's logic is revealed and how Quine reconciles Frege's logicism with Dewey's pragmatism. Quine's vision, in which logic is the universal language of science and in which canonic notation reflects the general characteristic of reality, is discussed and criticised in favour of a pluralist alternative.
- ° 675. Hadley Robert F., *Possibility, Necessity and Logical Truth*, « *Analysis* », XXXVIII, pp. 182-186.  
Cfr. Hadley, 1974, no. 423; Sayward, 1975, no. 533.
676. Halbasch Keith, *A Theory of Numbers*, « *The Journal of Critical Analysis* », VII, pp. 73-81.
677. Harman Gilbert, *Meaning and Theory*, « *Southwestern Journal of Philosophy* », IX, pp. 9-20.  
Two well-known theses of Quine's, holistic verificationism and underdetermination of theories, are discussed.
678. Healey Richard, *Physicalist Imperialism*, « *Proceedings of the Aristotelian Society* », LXXIX, pp. 191-211.  
The author examines some attempts to formulate a non-reductive physicalism. Quine's position is moderately reductionist and his physicalism appears to be a metaphysical thesis to the author.
- ° 679. Higginbotham James, *Bechtel on the Possibility of Propositions*, « *The Journal of Philosophy* », LXXV, pp. 661-664.  
Cfr. 1978, no. 657.

680. Hochberg Herbert, *Nominalism, General Terms and Predication*, « The Monist », LXI, pp. 460-475.  
The author observes a certain circularity in Quine's nominalist arguments starting from the distinction between general and singular terms.
681. Hollinger Robert, *The Philosophical Significance of the Duhemian Argument*, « The Personalist », LIX, pp. 221-240.  
This is an examination of some problems emerging from Duhem's thesis, comparing the reflections of Hume, Quine and Kant on scepticism. Duhem's position weakens classical epistemology cancelling out Kant's distinction between antinomic and dialectic use of reason.
682. Hookway Christopher, *Indeterminacy and Interpretation, in Action and Interpretation. Studies in the Philosophy of the Social Sciences*, Hookway C. e Pettit P. (Eds.), Cambridge, Cambridge University Press.  
The author presents the indeterminacy thesis and attempts to protect it from any criticisms. He also shows some of its implications in the field of hermeneutics.
683. Hunter Graeme, *The Logic of Fiction and the "Sayso" Semantics*, « Dialogue », XVII, pp. 344-366.
684. Ioan Petru, *Ontologie et assumption ontologique dans la syllogistique formelle*, « Philosophie et Logique », XXII, pp. 103-120.
685. Largeault Jean, *Glose de " Philosophie de la Logique " de Quine*, « Dialogue », XVII, pp. 138-166.
686. Lauener Henri, *Probleme der Ontologie*, « Zeitschrift für Allgemeine Wissenschafts Theorie », IX, pp. 63-92.  
With regard to ontological commitment and substitutional quantification, the controversy between Quine and Carnap is examined. The analytic/synthetic distinction is defended against holism because the ontology which results from it works better and is more closely aligned with intuition and common sense.
687. Leeds Stephen, *Quine on Properties and Meaning's*, « Southwestern Journal of Philosophy », IX, pp. 97-108.
688. Leeds Stephen, *Theories of Reference and Truth*, « Erkenntnis », XIII, pp. 111-129.

The author discusses the possibility of constructing a theory of reference and truth for natural languages which would be analogous to Tarsky's one for formal languages. The difficulty of such an enterprise is underlined. He maintains the coherence of a naturalistic point of view of the investigation into language and introduce also Quine's naturalism in this perspective.

689. Levin Michael E., *Quine's View(s) of Logical Truth*, « Southwestern Journal of Philosophy », IX, pp. 45-67.

The notion of logical truth in Quine is discussed. There is also a critical analysis of conventionalism, holism, the refusal of deviant logics.

690. Malherbe Jean-François, *Epistémologie logique et ontologie: une mise en perspective des thèses de Quine*, « Revue Philosophique de Louvain », LXXVI, pp. 371-385.

A synthetic overview of Quine's main ideas; the translation indeterminacy, the reference opacity and scientific theories empirical underdetermination.

691. Marcus Ruth Barcan, *Nominalism and the Substitutional Quantifier*, « The Monist », LXI, pp. 351-362.

Discussing the way in which a substitutional interpretation of quantifiers lends itself to nominalistic aims, the author constantly uses Quine as a point of reference.

692. Margolis Joseph, *The Problems of Similarity: Realism and Nominalism*, « The Monist », LXI, pp. 384-400.

The fact that realism and conventionalism are antithetic and incompatible leads us to an inevitable incoherence in Quine's position, and the fact the epistemic vitality of nominalism depends directly on realism leads us to conclude that Goodman's position is fundamentally incomplete.

- \* 693. Martin Richard M., *Events, Reference and Logical Form*, Washington, Catholic University of America.

A collection of unedited essays by Martin (all written before 1973). The main idea is the development of a systematic theory which would serve as the basis for an investigation of the main problems involved in philosophy, logic and the philosophy of science and language. Among others, there is an article dedicated to Q195.

694. Massey Gerald, *Indeterminacy, Inscrutability and Ontological Relativity*, « American Philosophical Quarterly », XII, pp. 43-55.

695. Messer John D., *Quine's Paradox of Attribute Determination*, « The Southern Journal of Philosophy », XVI, pp. 355-361.

The thesis that every class determines an attribute, like the opposite one, that every attribute determines a class, leads to some paradoxes: e. g. the one developed by Quine in Q65. The author suggests restricting the determination of attributes on the basis of a distinction between names and descriptions. So if we only recognise those attributes which correspond to predicates which follow a copula, then Quine's paradox is not generated.

696. Meyers Robert G., *Indeterminacy and Positivism*, « Synthese », XXXIX, pp. 317-324.

The article sets out to clarify the relationship between Quine's holism, the indeterminacy thesis and positivism. In contrast with Boorse, (cfr. 1975, n. 473) the author maintains that the underdetermination of theories thesis is based on Quine's refusal of analyticity and that Quine's positivism derives from his position on indeterminacy and from holism, rather than being a premise of it.

697. Mohanty J. N., *On the Roots of Reference: Quine, Piaget, and Husserl*, « Southwestern Journal of Philosophy », IX, pp. 21-43.

Departing from Quine's behaviourist structure and Husserl's transcendental/phenomenological one, this is an attempt to find a point of contact between the psychogenesis of reference in Q213 and Husserl's genealogy of logic as described in *Experience and Judgement*. Piaget's discoveries about the constitution of objectivity are used to show up some weaknesses in Quine's vision. His ontological approach is contrasted with the phenomenology of reference.

698. Napoli Ernesto, *A Note on Carnap's and Quine's Analyticity*, « Annali della Scuola Normale Superiore di Pisa », Classe di Lettere e Filosofia, VIII, pp. 249-255.

All of Quine's arguments are motivated and are meant to motivate the holistic and pragmatistic approach. For this reason Quine contests the existence of a certain type of statement — the analytic one. It might be said that the debate between Quine and Carnap is not so much about analyticity as about the desirability and acceptability of an atomistic model of science. It is precisely from holism that the impossibility of posing the question derives, without placing it behind two different rivals ways of perceiving.

699. Napoli Ernesto, *A Note on Quine's Criterion of Ontic Commitment*, « Annali della Scuola Normale Superiore di Pisa », Classe di Lettere e Filosofia, VIII, pp. 685-693.

Quine has given more than one formulation of the ontological commitment criterion. Here they are outlined as they appear in various Quine works and are analysed and compared.

700. Nuttall Jon, *Belief, Opacity and Contradiction*, « Philosophical Quarterly », XXVIII, pp. 253-258.

The existence of valid arguments for the referential opacity of belief contexts is here contested.

701. Pastin Mark, *Warrant and Meaning in Quine's Clothing*, « Southwestern Journal of Philosophy », IX, pp. 110-132.

An attempt by the author to go deeper into the idea of connecting the meaning of statements to the epistemological basis which can be given them. This involves introducing a notion of 'epistemic completeness' which is here defined and justified.

702. Putnam Hilary, *There is at Least One A Priori Truth*, « Erkenntnis », XIII, pp. 153-170.

The notions of analyticity, apriority, and non-revisability which however can be interpreted behaviouristically or epistemologically from Quine's point of view are considered as equivalents. The author maintains that, in this second sense, a priori truths do exist. Logical truths, because of their centrality to our mental structure, are never refutable through a rational argument of the deductive type, even if we can revise a statement by putting it up against its negation or by refusing an implicated concept.

703. Rappaport Steven, *Quine's Behaviourism*, « Philosophy Research Archives », IV, n. 1300.

A careful analysis of logical behaviourism leads us to the conclusion, according to the author, that Quine does not really adhere to it, even though, when dealing with linguistics, he adopts a methodological behaviourism.

704. Rorty Richard, *Epistemological Behaviourism and the De-Transcendentalization of Analytic Philosophy*, « Neue Hefte für Philosophie », XIV, pp. 115-142.

705. Roth Paul A., *Paradox and Indeterminacy*, « The Journal of Philosophy », LXXV, pp. 347-367.

Here we find a general description of Quine's epistemology and it is shown how the indeterminacy thesis comes from within in. There follows a defence of the affirmation that the thesis is separate from and additional to the underdetermination of theories.

706. Sagal Paul T., *Epistemology De-Naturalized*, « Kantstudien », LXIX, pp. 97-109.

This is a broad but well-defined overview of Quine's contributions to the philosophy of language, science and epistemology taking, as a starting point, his naturalist and pragmatic positions whose roots are here traced.

707. Schuldenfrei Richard, *Dualistic Physicalism in Quine: A Radical Critique*, « The Philosophical Forum », X, pp. 37-54.

Although Quine calls himself a physicalist, he maintains a distinction between linguistic and non-linguistic aspects. For example, experience in its linguistic form is part of the holistic conceptual framework. In its physical form, it is made up of irradiations of nervous terminations. The problems connected with this view are discussed and alternatives are suggested.

- ° 708. Smith Michael T. - McLean John, *Toward a Causal Theory of Evidence*, « The Journal of Philosophy », LXXV, pp. 424-433.

Cfr. Joseph, 1977, no. 628.

709. Steiner Mark, *Quine and Mathematical Reduction*, « South-western Journal of Philosophy », IX, pp. 133-143.

Taking as a starting point the criticism of the reduction of mathematics to the set theory idea, the author discusses Quine's concept of reduction and justifies the concept of 'explanatory demonstration' which is at the heart of his anti-reductionist program.

710. Thiers W., *Quine and the Policy of Extensionality*, « Philosophical Studies », XXXIII, pp. 387-394.

In Q131 we find an argument which establishes determined connections between transparency and extensionality. It also provides a criterion for distinguishing between different levels of systems of extensionality. At the heart of this is the formal argument that, in a context which satisfies transparency, the substitution of equivalent expressions can be operated *salva veritate*. According to the author, such a criterion is unfounded in that it is based on an invalid formal argument.

711. Turek Mieczyslaw, *Contemporary Controversies on the So-Called Propositions of Duhem-Quine*, (in polish), « Roczniki Filozoficzne », XXVI, pp. 39-52.

712. Veatch Henry B., *Is Quine a Metaphysician?*, « The Review of Metaphysics », XXXI, pp. 406-430.

The author tries to place Quine's philosophy in relation to the history

of metaphysics. He starts by distinguishing between the aristotelian notion of metaphysics and Kant's transcendental approach to the study of phenomena and the unknowability of noumenon. Quine's metaphysics seems to find itself somewhere within Kant's transcendentalism: Quine's repeated affirmations are noted according to which metaphysical methods and procedures are in a continuum with those of natural science. He also mentions Quine's view of hypotheses which, as they do not seem to be either verifiable or falsifiable in the strict sense of the word, can be considered as being subject only to a transcendental justification.

713. Waller Bruce N., *Carnap and Quine on the Distinction Between External and Internal Questions*, « Philosophical Studies », XXXIII, pp. 301-312.

Following on from an exposition of Carnap's position and Quine's objections, a number of observations are made on the distinction proposed by Carnap and its role in a radical empiricism.

714. Wessel H., *Definition des Existenzprädikates als Voraussetzung zur Lösung des zeitgenössischen Universalienstreites*, « Deutsche Zeitschrift für Philosophie », XXVI, pp. 367-377.

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715. Almeder Robert, *Peirce on Meaning*, « Synthese », XLI, pp. 1-24.

Quine's criticism of Peirce's semantics is examined and contested. Quine's theory of meaning, unlike Peirce's, supports a Humean verificationism not dissimilar to that of the Viennese positivists.

- \* 716. Ambrosini Maria Grazia, *Riferimento e significato. Carnap, Quine e la problematica d'oggi*, Palermo, Editrice Italo-Latino-Americana.
- \* 717. Benchot Mauricio, *Elementos de Semiótica*, México, U.N.A.M.  
One chapter of the eight in the book is dedicated to Quine.
718. Bhattacharya N. - Baron N. S., *The Problem of Direct and Indirect Reference*, « Semiotica », XXVI, pp. 81-98.
719. Bhattacharya Goja, *Some Reflections on Analytic and Synthetic Distinctions*, « Indian Philosophical Quarterly », VI, pp. 557-565.

- 720. Bieri Peter, *Scepticism and How to Take It*, in *Transcendental Arguments and Science*, Horstmann R. P. (Ed.), Boston, D. Reidel, pp. 299-307.

Cfr. Stroud, no. 759.

721. Bolton D. E., *Quine on Meaning and Translation*, « *Philosophy* », LIV, pp. 329-346.

The thesis of indeterminacy presupposes a symmetry between the 'home' language and the one to be translated. This is considered implausible and the theory self-contradictory in that it is asking that, at the same time, certain distinctions are made in meaning (to construct diverging translation) *and* that they should not be made in such a way that the translated statement has indeterminate meaning relative to the diverging translations. An alternative thesis is then proposed.

722. Callaway Howard G., *Reference Variables and the Empty Universe*, « *Logique et Analyse* », XXII, pp. 85-98.

The notion of reference as it is used by Quine is dealt with. In Quine, variables of quantification assume, as values, objects in a universe of discourse and the notion of empty universe in relation to the first. It is then shown how such a notion of reference allows us to do without the empty universe and the considerable theoretical advantage of this solution, as opposed to the definition of validity, is underlined.

- 723. Cooper David, *The Argument from Evolution*, « *Aristotelian Society: Supplementary Volume* », LIII, pp. 223-237.

Cfr. Lewis, no. 741.

- 724. Costa Ornella, *La tesi Duhem-Quine: razionalità, progresso e metodo scientifico*, « *Scientia* », CXIV, pp. 513-516.

Cfr. Harding, 1976, no. 570.

725. Davidson Donald, *The Inscrutability of Reference*, « *Southwestern Journal of Philosophy* », X, pp. 7-20.

In linguistic behaviour there can be many ways of assigning a reference to singular terms and predicate. This leads Quine to affirm that the ontology of the speaker is only relatively fixed to an arbitrary choice of a translation manual and of a pre-existent acquired language. But the inscrutability of reference, far from supporting such relativisations, shows that there is no way of deciding when it comes to ontology.

726. Du Toit Basil, *Ontological Relativity and the Inscrutability of Reference*, « *Philosophical Papers* », VIII, pp. 57-65.



727. Elgin Catherine Z., *Quine's Double Standard: Indeterminacy and Quantifying In*, « Synthese », XLII, pp. 353-377.

It is shown how, in Quine, reference and translation are explained in terms of intensional notions, stressing that the lack of a real distinction between meaning and belief leads to the indeterminacy of translation and to ontological relativity. It is also maintained that radical translation is an example of quantification in an opaque context and the respective problems which arise in the light of their identification are considered. Finally, the ineludibility of a criterion of choice between different interpretations (pragmatic, epistemic or ontological criteria) is stressed. In this way, the arbitrariness of choice thesis is contested.

728. Evers C. W., *Analytical Philosophy of Education: From a Logical Point of View*, « Educational Philosophy and Theory », XI, pp. 1-15.

729. Hart W. D., *The Epistemology of Abstract Objects, II. Access and Inference*, « Aristotelian Society: Supplementary Volume », LIII, pp. 153-165.

A discussion of Quine's epistemological holism, in connection with Duhem's thesis. The author also considers some criticisms, including Dummett's one of the theory of meaning.

730. Hattiangadi J. N., *Meaning, Reference and Subjunctive Conditionals*, « American Philosophical Quarterly », XVI, pp. 197-205.

The author first considers the problem of the change of meaning of a theory, in the light of certain reflections by Anglo-saxon philosophers of science (Kuhn, Feyerabend etc.). He then goes on to consider meanings as sets of theories and then approaches their inherent communication problems. In connection with this question Quine's line, as set out in Q147, is illustrated.

731. Hauptli Bruce W., *Inscrutability and Correspondence*, « The Southern Journal of Philosophy », XVII, pp. 199-212.

The correspondence theory deals with the relationship between words and objects, attributing partial meanings to terms (e. g. 'rabbit' could denote both the class of rabbits and the class of its parts). Quine contests this theory, supporting ontological relativity and the inscrutability of reference. Here, Quine's position is illustrated and the weakness of both attempts (Field's and Cornman's) to defend the correspondence theory is stressed.

- 731a. Hinnion R., *Modèle constructible de la théorie des ensembles de Zermelo dans la théorie des types*. « Bulletin de la Société Mathématique de Belgique », (série B), XXXI, pp. 3-11.
732. Kanthamani A., *W. V. O. Quine's Model of Language*, « Indian Philosophical Quarterly », VI, pp. 535-544.
733. Kaptein H. Y. R., *De Semantiek van "Two Dogmas of Empiricism"*, « Algemeen Nederlands Tijdschrift voor Wijsbegeerte », LXXI, pp. 67-80.
- Quine's criticism of the analytic/synthetic distinction is contested and it is shown that the need for a non-reductionist semantics can be obviated by using such a distinction.
734. Kimbrough Steven O., *On Simplicity as a Guide to Truth*, « Kinesis », IX, pp. 55-72.
- The article examines the common belief in the maxim of simplicity. According to it, between two competing scientific hypotheses the simpler is probably the true one. A method for testing the reliability of such a maxim is proposed, a number of examples are discussed and the conclusion is that simplicity and truth do not always correlate and that scepticism about the maxim is indeed justified.
735. Kline A. David, *The Quinean 'Pressing from Above' Argument*, « Philosophical Research Archives », V, n. 1311.
736. Kraut Robert, *Worlds Regainet*, « Philosophical Studies », XXXV, pp. 239-255.
- Hintikka has suggested the idea that the identification of objects in possible worlds is analogous to the identification of objects in our world except in different times. Quine agrees but, while he accepts temporal logics, he does not accept quantified modal logic. The fundamental problem is the meeting of quantifiers and modal operators. The author, although he agrees that this is a problem, does not accept Quine's reasons and criticises his rejection of quantified modal logic on the basis of convictions which Quine himself has expressed with regard to temporal modalities.
737. Kruger Lorenz, *Some Remarks on Realism and Scientific Revolutions*, in *Transcendental Arguments and Science*, Horstmann R. P. (Ed.), Boston, D. Reidel, pp. 227-233.

The affirmation that Quine's radical translation and scientific realism are compatible is criticised, saying that the latter has to rely on the per-

sistence of reference and has to be correlated to the ontological and epistemological meanings of the used terms.

738. Lake John, *The Approaches to Set Theory*, « Notre Dame Journal of Formal Logic », XX, pp. 415-537.

Cantor's work is described, showing how, at least in some areas, it has been misunderstood and also how successive works has departed from these misunderstandings. A justification of ZF in Cantor's terms is then given and quasi-constructive approaches are considered. Finally, there is an examination of set theories with an universal set, among which we find NF.

739. Levin Michael E., *A Note on "p = mv"*, « Notre Dame Journal of Formal Logic », XX, pp. 639-646.

740. Levin Michael E., *Forcing and the Indeterminacy of Translation*, « Erkenntnis », XIV, pp. 25-32.

If we add to ZF axioms, Cohen's axioms for *forcing*, the resulting ZFF can be translated either into ZF plus weak implication or into ZF plus modal logic, so that the theorems are preserved. The purpose here is to construct an example of indeterminacy without having recourse to the inscrutability of reference.

741. Lewis H. A., *The Argument from Evolution*, « Aristotelian Society: Supplementary Volume », LIII, pp. 207-221.

It is an examination of Quine's position on the evolution theory by natural selection, as it relates to the acquisition of knowledge and language set out in Q186.

742. Lycan William G., *Does Quotation Sometimes Permit Substitution?*, « Notre Dame Journal of Formal Logic », XX, pp. 279-280.

Quine maintains that in some cases of quotation, singular terms with the same reference can be substituted in quotation marks *salva veritate*. Such a substitution does not appear to be valid, not so much from the point of view of the application of a logically valid inference rule as from the point of view of the truth of premises which have previously been assumed and which are quite contingent.

- \* 743. Markis Dimitrios, *Quine und das Problem der Übersetzung*, Freiburg im Bressgau, Albert.

744. Merrill Gary H., *Marginal Notes on the Theory of Reference*, « Grazer Philosophische Studien », IX, pp. 35-50.

745. Merrill Gary H., *On the Uniqueness of the Identity Relation*, « *Analysis* », XXXIX, pp. 133-136.

746. Nersessian Nancy J., *The Roots of Epistemological 'Anarchy'*, « *Inquiry* », XXII, pp. 423-440.

The incommensurability of theories, which the 'epistemological anarchists' claim, derives from the holistic conception of meaning. Quine's attempt to develop the neutral notion of observation sentence involves the tacit acceptance of the dogma of reductionism and of a third debatable dogma, i. e. the 'stimulus-response' theory of behaviourism. In order for observation sentences to play the role of arbiter between theories, we need a similarity of assent which is not considered, as such, a particularly meaningful notion in the study of relationships between different structures.

747. Paluch Stanley, *The Fall of the House of Being*, « *The Journal of the British Society for Phenomenology* », X, pp. 73-77.

In the form of a dialogue, this article contests Quine's philosophy in the light of a reading of Heidegger's work. It is pointed out that the philosophy of science does not exhaust all the meaningful ways of philosophising and it is suggested that ontological theses cannot be read and interpreted ignoring the concise procedures adopted by various mathematical logicians.

- \* 748. Papineau David, *Theory and Meaning*, Oxford, Clarendon Press.

The author sets out to show that the meaning of scientific terms cannot be separated from the theories context in which they appear and that they inevitably with any change of theory. The author illustrates the indeterminacy of translation thesis and Quine's holism.

749. Petry André, *On the Typed Properties in Quine's "New Foundations"*, « *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik* », XXV, pp. 99-102.

A resumption of a work by Boffa (cfr. 1975, no. 470). It is shown in NF that each property that is verified by at least one set, is always verified by some sets which are not equipollent to their power set. All that is later specified by a result of consistence.

750. Priest Graham G., *Two Dogmas of Quineanism*, « *Philosophical Quarterly* », n. 29, pp. 289-301.

The author reacts to Quine's attack on the analytic/synthetic distinction and on the positivist conception of analytical truth as truth by convention. The author's stance is diametrically opposed to Quine's; he defends those concepts.

751. Putnam Hilary, *Analyticity and Apriority. Beyond Wittgenstein and Quine*, « Midwest Studies in Philosophy », IV, pp. 423-441.

Wittgenstein's arguments regarding the nature of mathematical necessity are valid from a verificationist and finitist point of view, while Quine's are valid for an empiricist stance also in the philosophy of mathematics. They do not show, however, that *a priori* truths do not exist. Here, the author maintains that some logic truths are so fundamental that the very concept of 'explanation' falls down when we try to explain its truth.

752. Putnam Hilary, *Il existe au moins une vérité 'a priori'*, « Revue de Métaphysique et de Morale », LXXXIV, pp. 195-208.

A substantial resumption of a preceding article (cfr. no. 702). In a footnote, the author partly denies some stances. Logical and mathematical truths are no longer considered as the product of conventions or practices of translation as distinct from unreduceable factual elements.

753. Quinton Anthony, *Objects and Events*, « Mind », LXXXVIII, pp. 197-214.

Is the world made up of objects or events? Among those who have theorized a reply to this question (which has not always been put so explicitly), Quine is mentioned. The author departs from an analysis of the arguments presented in Q147 and Q172 about the nature of physical objects and events in their spatial/temporal relationships. Generally, Quine's position is placed within anglo-saxon empiricism, in the current going back to Locke.

754. Richards Thomas J., *How Quine didn't Learn to Quantify?*, « The Journal of Philosophy », LXXVI, pp. 421-429.

In Q213, Quine explains how it is possible to consider universal quantification as being the essence of the ontological discourse, the nucleus of the referential apparatus. Here, an alternative explanation of the greater significance of referential quantification as opposed to substitutional quantification is sketched out.

755. Rorty Richard, *The Unnaturalness of Epistemology*, in *Body, Mind and Method*, Gustafson D. F. (Ed.), Dordrecht, D. Reidel, pp. 77-92.

Quine suggests that instead of freeing ourselves from epistemology we should naturalise it, considering it as a part of psychology. He does not, however, offer a clear way of dealing with the relationship between causation and justification.

756. Schoen Edward L., *Introspection and the Inscrutability of Reference*, « The Southern Journal of Philosophy », XVII, pp. 523-529.
757. Shanana R. W. - Swoyer C. (Eds.), *Essays on the Philosophy of W. V. Quine*, Norman, University of Oklahoma Press.  
 This collection, published on the occasion of Quine's 70th birthday, includes ten articles on his philosophy and his own Q234. The essays deal with various themes in Quine's work including meaning, reference and naturalized epistemology. The authors are: Harman, Mohanty, Levin, Grandy, Gottlieb, Leeds, Cresswell, Pastin, Steiner, Ackerman and Quine himself.
758. Slater B. H., *Singular Subjects*, « Dialogue », XVIII, pp. 362-372.
759. Stroud Barry, *The Significance of Scepticism*, in *Transcendental Arguments and Science*, Horstmann R. P. (Ed.), Boston, D. Reidel, pp. 277-297.  
 A discussion of Quine's epistemology within a wider discussion whose aim is to evaluate the so-called 'transcendental arguments', according to which some concepts enjoy a special status because without them human knowledge or experience would not be possible.
760. Vuillemin Jules, *On Duhem's and Quine's Theses*, « Grazer Philosophische Studien », IX, pp. 69-96.  
 This article opens with an examination of the various meanings and the varying importance that the so-called Duhem-Quine thesis assumes when placed within the respective philosophies of the two authors so combined. The acceptability of such a thesis is then questioned as well as its logical strength and its historical soundness.
761. Wallace John, *Translation Theories and the Decipherment of Linear B*, « Theory and Decision », XI, pp. 111-140.  
 An examination of the theories of radical translation and their application in the decipherment of Linear B. Quine's theory presupposes a physicalist reconstruction of the notion of observation sentence. The case of Linear B, however, suggests that in real situations the contexts in which expressions as yet uninterpreted are incorporated are much more specific and more variable than in Quine's model.
762. Weidemann Hermann, "Socrates est" / "There is no Such Thing as Pegasus". *Zur Logik singularer Existenzaussagen nach*

*Thomas von Aquin und W. Van Orman Quine*, « Philosophisches Jahrbuch, LXXXVI, pp. 42-59.

An elaborated version of the report given in Bonn on the 30th August 1977 at the VIth International Congress of Medieval Philosophy entitled: *Language and Knowledge in the Middle Ages*.

763. Woods Michael, *Scepticism and Natural Knowledge*, « Proceedings of the Aristotelian Society », LXXX (1979-80), pp. 231-248.

Traditional epistemology is examined in the light of the Quine's new conception.

764. Yu Paul, *Grammar and Understanding*, « Canadian Journal of Philosophy », IX, pp. 261-281.

Some different concepts of grammar are discussed and Dummett's, Chomsky's and Katz's stances are criticised. The author sees grammar as the system of concepts used to organise linguistic perceptions, to integrate expressions etc. There follows a discussion of the implications that such a grammar has for the examination of certain problems regarding the philosophy of language.

765. Yudkin Marcia, *On Quine's Contretemps of Translation*, « Mind », LXXXVIII, pp. 93-96.

A number of incongruities in Q147 are spotted. The method for constructing ontologies for different cultures also appears to have weaknesses. It is observed that peoples with particular metaphysical convictions — for example that there *really are* only stages of physical objects — otherwise speak and act like anyone else, and that if their metaphysical ideas were never formally uttered then no lack of uniformity would ever be suspected.

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766. Armstrong D. M., *Against "Ostrich Nominalism"*. A Reply to Michael Devitt, « Pacific Philosophical Quarterly », LXI, pp. 440-449.

767. Arruda A. T. M., *A critica behaviorista de W. V. O. Quine*, « Trans/Form/Ação », III, pp. 115-125.

768. Bar-Elli Gilead, *Ontology and Ontological Commitment*, « Scientia », CXV, pp. 301-320.

An attempt to clarify the difference, with regard to a theory, between

the notion of ontological commitment and of ontology. Questions are posed about the meaning and aim of such notions, and Quine's as well as his critics' replies are analysed.

769. Bechtel P. W., *Indeterminacy and Underdetermination. Are Quine's Two Theses Consistent?*, « Philosophical Studies », XXXVIII, pp. 309-320.

In Q199, Quine uses the thesis of underdetermination of theories which is then described in more detail in Q224 as a premise of his argument for indeterminacy of translation. Here, this procedure is contested and indeterminacy even considered incoherent.

770. Berger Alan, *Quine on "Alternative Logics" and Verdict Tables*, « The Journal of Philosophy », LXXVII, pp. 259-277.

A discussion of Quine's affirmation that 'change of logic = change of subject', through an analysis of his writings from Q147 to Q213.

771. Bernstein Richard J., *Philosophy in the Conversation of Mankind*, « The Review of Metaphysics », XXXIII, pp. 745-775.

Within a critical study of Rorty's volume (*Philosophy and the Mirror of Nature*, Princeton, 1979) the interpretation of Quine's thought on epistemology is reported. Quine did not carry his holistic tendencies to an extreme. Rather than hoping for a different and better way of 'making epistemology' or for a substitution with legitimised scientific research he should have up quite simply put an end to epistemology. Being a behaviourist in epistemology, as Quine is, means regarding science both as a set of models and as the fulfilment of objective truths, meant as the most widespread and accredited explanation of what happens.

772. Chihara Charles S., *Ramsey's Theory of Types*, in *Prospects for Pragmatism*, Mellor D. H. (Ed.), Cambridge, Cambridge University Press, pp. 21-47.

773. Cooper David E., *Referential Occurrence*, « Notre Dame Journal of Formal Logic », XXI, pp. 182-188.

Quine's extensional principle for the referential occurrence of *a* in *Fa* is that the substitution of coreferents entails that the truth value of *Fa* is maintained. Lewy (cfr. C. Lewy, *Meaning and Modality*, 1976) has argued that a non-referential occurrence ('cat' in « 'cat' has three letters ») could satisfy the principle. But this counter-example is not valid: if terms occur in a non-referential way, not all the co-referents have the same number of letters and given that, necessarily, the terms of a language have non-referential occurrences, necessarily not all co-referential terms have the same number of letters.



774. Devitt Michael, "Ostrich Nominalism" or "Mirage realism"?, « Pacific Philosophical Quarterly », LXI, pp. 433-439.

775. Gibson Roger F. Jr., *Are There Really Two Quines?*, « Erkenntnis », XV, pp. 349-370.

Chomsky (cfr. 1975, no. 480) maintains that Quine has two linguistic doctrines. One goes back to Q147 and the other to Q185 but they are mutually incoherent, the second totally abandoning the behaviourism of the first. The author attempts to demonstrate that this point of view is wrong and he tries to throw some light on Quine's behaviourism.

\* 776. Gochet Paul, *Outline of a Nominalist Theory of Propositions*, Dordrecht, D. Reidel Publishing Company.

Cfr. 1972, no. 308.

777. Goldstick D., *Cognitive Synonymy*, « Dialectica », XXXIV, pp. 183-204.

The crucial point in Quine's argument against synonymy consists in asking for an explanation of the behavioural difference between the disposition to use two predicates interchangeably because they are usually 'believed' to be coextensive, and the disposition to do this because the meaning is the same for both. As synonymy is taught behaviouristically, the distinction must be behaviourist but it cannot necessarily be explained in a non-mentalistic way. The distinction can be put in terms of what would extinguish the disposition. The concept of 'cognitive synonymy' is used to explain how logical deduction through tautological steps might bring us to a new knowledge.

\* 778. Gottlieb Dale, *Ontological Economy: Substitutional Quantification and Mathematics*, Oxford, Oxford University Press.

When Quine's ontological commitment is modified to admit substitutional quantification, a forceful method is made available for reducing ontological commitments. This method involves the constructions of replacement extensions of referential language, in which statements which refer to undesirable entities (like Pegasus) can be interpreted in an ontologically neutral way. Thus modified, Quine's criterion is then contrasted with the semantics of Davidson and Kripke.

779. Grünfeld J., *Possible Worlds and Human Freedom*, « Logique et Analyse », XXIII, pp. 431-436.

This is a discussion of the philosophical implications of Kripke's theory of possible worlds, relative particularly to human freedom. The positions of Quine and K. on the notion of possibility are compared.

780. Hauptli Bruce W., *Quinean Relativism: beyond Metaphysical Realism and Idealism*, « The Southern Journal of Philosophy », XVIII, pp. 393-410.  
The examination of Quine's arguments against metaphysical realism works in favour of a relativism which overcomes metaphysical idealism equally well.
- 780a. Hinnion R., *Contraction de structures et application à NFU. Définition du "degré de non-extensionnalité" d'une relation quelconque*, « Comptes Rendus de l'Académie des Sciences de Paris », (série A), CCXC, pp. 677-680.
781. Humphries Jill, *Quine's Ontological Commitment*, « The Southern Journal of Philosophy », XVIII, pp. 159-167.  
Quine's principle of ontological commitment, and the associated programme of translation in canonic notation are examined. The latter is felt to be unsatisfactory, as ontological commitment is intensional and canonic notation extensional.
782. Imbert Claude, *Logique et Epistémologie*, « Critique », XXXVI, pp. 393-421.  
This is a statement of Quine's thought from Q147 to Q213, taking its cue from the monograph by P. Gochet. (Cfr. 1972, no. 308).
783. Jackson F., *Ontological Commitment and Paraphrase*, « Philosophy », LV, pp. 303-315.  
Quine's theory of reference is adopted as the starting point of an independent development by the author on the same subject.
784. Jacques Francis, *L'oeuvre de Quine: perspectives sur un réseau*, « Les Etudes Philosophiques », n. 2, pp. 215-238.  
In a critical commentary on the monograph by P. Gochet, Quine's entire philosophical thinking from Q85 to Q213 is retraced.
- \* 785. Kanger Stig - Ohman Sven (Eds.), *Philosophy and Grammar*, Dordrecht, D. Reidel Publishing Company.  
This is a collection of papers from the Symposium held at Uppsala in 1978 on « Philosophy and Grammar ». It includes a paper by Quine and a reply by Føllesdal.
786. Kiestler A. R., *Natural Kinds, Natural History and Ecology*, « Synthese », XLIII, pp. 331-342.

The author starts from Q186 to develop his own discussion on ecology as science.

- \* 787. Kmita Jerzy, *Z Problemow Epistemologii Historycznej*, Warszawa, Panstwowe Wydawnictwo Naukowe.

The theory of knowledge in the light of historical materialism is discussed. One essay is devoted to the Duhem-Quine thesis.

- \* 788. Largeault Jean, *Quine, questions de mots, questions de faits*, Toulouse, Privat.

A collection of essays, most of which are previously published, in which all the most important themes in Quine's thought are considered.

789. Lauener Henri, *Ontologie im Lichte einer zeitgenössischen Analyse*, « Conceptus », XIV, pp. 3-11.

A framework of rules for the use of the word 'exists' is proposed together with a general structure which allows the neutral treatment of ontological questions. Quine's holism is criticised confirming that ontology addresses itself to the choice of specific linguistic systems which we use for very different purposes.

790. Lehrer Adrienne, *The Empirical Investigation of Synonymy and the Implication for Science*, in *Rationality in Science*, Hilpinen R. (Ed.), Dordrecht, D. Reidel, pp. 35-50.

The synonymy judgements appear more stable and coherent than non-synonymous words with similar meanings. Synonymy is a behaviouristically valid concept, and is more useful and clearer than similarity of meaning, contrary to Quine's affirmations.

- ° 791. Lewis H. A., *Quine on Wiggins*, « Philosophy », LV, pp. 125.

Cfr. Lewis, *Rev. of Wiggins*, ibidem, 1978, pp. 404-407.

792. McDowell John, *Quotation and Saying That*, in *Reference, Truth and Reality*, Platts M. (Ed.), London, Routledge & Kegan, pp. 206-237.

- \* 793. Mellor D. H. (Ed.), *Prospects for Pragmatism*, Cambridge, Cambridge University Press.

794. Morick Harold, *A Confirmation Criterion of Synonymy*, « Grazer Philosophische Studien », XI, pp. 13-21.

A criterion of synonymy is suggested which recalls Quine's but which

corrects it to make it better conform to our intuitive notions of synonymous statements.

795. Mouloud N., *Quine en Perspective*, « Revue de Metaphysique et de Morale », LXXXV, pp. 263-270.  
A critical survey emerging from the examination of P. Gochet's book (cfr. no. 670).
- \* 796. Noonan Harold W., *Objects and Identity. An Examination of the Relative Identity Thesis and Its Consequences*, The Hague, Nijhoff.  
Within a discussion on the notions of object and identity, along with the positions of Frege, Geach, Dummett and Lewis, that of Quine is also discussed.
797. Panova E., *Quine et le problème de la relativité ontologique* (in russian), « Vestnik Moskovskogo Universiteta, Filosofija », VI, pp. 59-70.
- \* 798. Parrini Paolo, *Una filosofia senza dogmi. Materiali per un bilancio dell'empirismo contemporaneo*, Bologna, Il Mulino.
799. Quesada Daniel J., *L'analisi della credenza dalla logica alla psicologia*, « Epistemologia », III, pp. 275-297.  
This is a discussion of the *de re* and *de dicto* readings of the belief sentences, the meaning of essentialism, and of the criticisms by Hintikka and others to Quine's position.
800. Romanos George, *The Meaning of Quine's Philosophy*, « Metaphilosophy », XI, pp. 210-228.
801. Roth Paul A., *Theories of Nature and the Nature of Theories*, « Mind », LXXXIX, pp. 431-438.  
The author discusses the so-called Duhem-Quine thesis and naturalized epistemology, keeping them distinct and interpreting the former as a basis for the latter.
802. Shirley Edward S., *Quine and Referential Scepticism*, « The Journal of Critical Analysis », VIII, pp. 29-34.
803. Siegel Harvey, *Justification, Discovery and the Naturalizing of Epistemology*, « Philosophy of Science », XLVII, pp. 297-321.  
The article centres on the debate arising from the distinction proposed

by Reichenbach between the context of discovery and the context of justification. Quine is cited for his vision of naturalized epistemology and links with psychological processes which guide knowledge.

804. Stebbius Sarah, *Necessity and Natural Language*, « Philosophical Studies », XXXVII, pp. 1-12.

Quine proposes that 'necessary' be construed as a predicate in the natural language, and not as sentence operator of modal logic. Since necessary truths are truths, a semantics for natural language deals with truth and necessity in a similar way. The author argues that 'true' is construed as a predicate in natural language, and the characteristics which justify this construction also justify the construing of 'necessary' as a predicate.

- ° 805. Strawson P. F., *Reply to Cohen, Quine and Geach*, in *Philosophical Subjects. Essays Presented to P. F. Strawson*, Straaten Zack Van (Ed.), Oxford, Clarendon Press, pp. 287-294.

Cfr. Q255.

806. Tiles Mary, *Référence et Relativité (ou: Quine dans le contexte)*, « Critique », XXXVI, pp. 850-868.

Quine's position on epistemology is considered, starting from reference and linguistic behaviour. The influence of Frege, Duhem, Carnap, Russell and Tarski is analysed in so far as they relate to the development of Quine's thought in its various forms.

807. Tournier Frederic, *La thèse de Duhem-Quine et l'indétermination de la traduction*, « Revue de Métaphysique et de Morale », LXXXV, pp. 503-508.

After a brief explanation of Duhem thesis and that of Quine on the indeterminacy of translation, the author discusses the underdetermination of scientific theories.

808. Trajano Menezes A. A., *W. O. Quine's Behaviouristic Critique*, (in portuguese), « Trans/Form/Ação », III, pp. 115-125.

The notion of observation sentences and the role of the so-called Duhem-Quine thesis in Quine's rejection of propositions are considered.

- \* 809. Trigg Roger, *Reality at Risk. A Defence of Realism in Philosophy and the Sciences*, Sussex, Harvester Press.

In examining the works of Peirce, Davidson, Dummett and Quine, the defence of realism is taken up, questioning many forms of both idealism and empiricism in various areas, including sociology and quantum mecha-

nics. Quine's concepts on scientific theories, their underdetermination and problems connected with language, are explained.

810. Van Rijen J., *On Criticizing Deviant Logics*, « *Logique et Analyse* », XXIII, pp. 235-262.

Three criticisms of deviant logics are taken into consideration: Bacon, Barth and Quine. The author recommends considering the study of these logics in relation to the conceptual frameworks which support them and without which they would be uninterpretable.

811. Wilson Mark, *The Observational Uniqueness of Some Theories*, *The Journal of Philosophy* », LXXVII, pp. 208-233.

The underdetermination of theories is contested by making use of the notion of observational equivalence, and by demonstrating that many theories do not have equivalent rivals from an observational point of view which would not be superfluous expansions on the same theory.

812. Zimmerman David, *Meta-Ethics Naturalized*, « *Canadian Journal of Philosophy* », X, pp. 637-662.

A discussion is attempted on the nature and functions of meta-ethics (understood as a theory which provides logical-formal conditions of ethical discourse) and, taking up again Quine's argument on the analytical/synthetic distinction, the necessity of a naturalized meta-ethics, that is devoid of analytical propositions, is affirmed.

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813. Altshuler Bruce, *Peirce's Theory of Truth and the Revolt against Realism*, « *Transactions of the Charles S. Peirce Society: A Journal in American Philosophy* », XVIII, pp. 34-56.

Peirce's pragmatist theory of meaning is here contrasted with the arguments of Dummett, Putnam, Goodman and Quine.

814. Balzer W., *Über Quines Beobachtungssätze*, « *Kantstudien* », LXXII, pp. 336-355.

The philosophies of Quine and Kant are compared relative to the construction of concepts and the relationship between philosophy of language and epistemology. The author concentrates on the problem of Quine observation sentences and proposes a formalisation of them.

- \* 815. Benchot Mauricio, *El problema de los universales*, México, U.N.A.M.

In the second part, dedicated to present analytical philosophy, the author deals also with Quine.

816. Bieri Peter, *Heidelberg: Quine, Strawson und der Skeptiker*, « Zeitschrift für Philosophische Forschung », XXXV, pp. 27-46.

The article first criticises Quine's naturalized epistemology and then examines the Strawson position and refutation of scepticism. The analysis of Strawson is insufficient because it does not discuss the epistemic principles on which the sceptic bases himself; a discussion of these principles could lead to pragmatic Kantism to be found in the writings of Sellars and Rosenberg.

- ° 817. Blum Alex, *Quine on an Alleged Non Sequitur*, « Notre Dame Journal of Formal Logic », XXII, pp. 249-250.

Cfr. 1972, no. 358; 1977, no. 641.

- 817a. Boffa M., *La théorie des types et NF*, « Bulletin de la Société Mathématique de Belgique », (série A), XXXIII, pp. 21-31.

818. Boffa M. et al., *La théorie des ensembles de Quine* (Colloque NF, Louvain-La-Neuve), « Cahiers du Centre de Logique », n. 4.

819. Broughton Lynne M., *Quine's 'Quality Space'*, « Dialectica », XXXV, pp. 291-302.

In Q147 and Q186, Quine uses the notion of quality space as a way of characterising the recognition of similarities, this being considered fundamental for the induction and learning of language. Here the author demonstrates how this notion cannot provide a sufficient basis for the explanatory value given to 'similarity' which is to be understood mainly in a mentalistic way.

820. Chihara Charles, *Quine and the Confirmational Paradoxes*, « Midwest Studies in Philosophy », VI, pp. 425-452.

- \* 821. Devitt Michael, *Designation*, New York, Columbia University Press.

Drawing on the ideas of Kripke and Donnellan, the book offers a detailed causal theory of reference for names and other singular terms, which is applied to resolve various problems of referential opacity. Casual theory is then inserted into a semantic program correlated to those of Davidson, Grice and Dummett.

822. Dubey Asha, *On Analytic-Synthetic Distinction*, « Indian Philosophical Quarterly », VIII, pp. 1-9.

Historical development of the analytical/synthetic distinction from Quine to Hintikka is presented, and a number of important problems are pointed out. The author is in general agreement with Quine but thinks that there are good reasons for maintaining analyticity, and evaluates the thinking of Hintikka from this point of view.

823. Feleppa Robert, *Hermeneutic Interpretation and Scientific Truth*, « Philosophy of the Social Sciences », XI, pp. 53-63.
- The article discusses a recent attempt to adjust the theory of indeterminacy to subjects which favour the inclusion of a special hermeneutic component in methods of social research. The potential affinity between Quine's thinkings and hermeneutics is also discussed.
824. Forster T. E., *Quine's New Foundations. An Introduction*, « Cahiers du Centre de Logique », n. 5.
825. Gellner Ernest, *Pragmatism and the Importance of Being Earnest*, in *Pragmatism, Its Sources and Prospects*, Zeltner P. M. - Mulvaney R. J. (Eds.), New York, Columbia University Press, pp. 41-65.
- Quine is described as the most important contemporary representative of pragmatism, the main sources of which are outlined.
- ° 826. Gómez Ricardo J., *En torno a una revisión del Logicismo*, « Crítica », XIII, pp. 77-95.
- Cfr. Steiner, 1975, no. 539.
827. Grünfeld Joseph, *Quine's Inscrutability of Reference*, « Logique et Analyse », XXIV, pp. 441-449.
828. Grünfeld Joseph, *Quine: The Real and The Quantifiable*, « Science et Esprit », XXXIII, pp. 245-253.
- Quine considers language to be a superstructure of experience, but what we observe is not separated from what we know and say. Quine turns to behaviourism but what counts as reinforcement depends on how an action or an event is identified by our terminology.
829. Hacking Ian, *Was There Ever a Radical Mistranslation?*, « Analysis », XLI, pp. 171-175.
- A number of examples of mistranslation demonstrate that the idea of a radically false translation, which is the theoretical limit of Quine's thesis of indeterminacy, is in fact impossible.



830. Hugly Philip - Sayward C., *Bound Variables and Schematic Letters*, « *Logique et Analyse* », XXIV, pp. 425-429.

A language T can be constructed which results from the extension of the functions of truth theory, introducing a quantification on propositional variables for which there exists a semantics in which quantification is not substitutional.

831. Jarasuis Vida, *Quine and Instrumentalism*, « *Auslegung* », VIII, pp. 59-79.

832. Kivinen S. Albert, *Quine's First Dogma*, « *Acta Philosophica Fennica* », XXXII, pp. 111-125.

833. Kordig Carl R., *Some Statements Are Immune to Revision*, « *The New Scholasticism* », LV, pp. 69-76.

Quine argues that logical laws are not immune from revision in the light of recalcitrant experiences, but the law of contradiction falsifies his thesis because the redistribution of truth values precludes incoherence. Quine's affirmation that no statement is immune from revision is thus either self-contradictory or meaningless.

834. Krecz Charles A., *The Specification of Facts in Linguistic Contexts*, « *Philosophy and Phenomenological Research* », XLI, pp. 524-531.

In contrast with Quine, Davidson and others, the author maintains that although facts cannot be specified by identifying predicates, such a specification can be rendered by the construction of linguistic contexts, in which reference to facts is placed. It is thus demonstrated that the correspondence theory can escape from various objections considering the specification of facts.

- ° 835. Largeault Jean, *La Philosophie de Quine*, « *Revue Philosophique de la France et de l'Étranger* », CVI, pp. 461-470.

Cfr. 1979, no. 757.

836. Largeault Jean, *Quelques remarques à propos de Quine*, « *Revue Philosophique de la France et de l'Étranger* », CVI, pp. 471-475.

Quine's ontological relativity is considered and contrasted with the positions of epistemologists from Duhem to Feyerabend.

- \* 837. Malherbe Jean-François, *Épistémologies Anglo-Saxonnes*, Namur, Presses Universitaires de Namur.

The evolution of arguments on reference and on the relationship between logic and semantics from Frege to Rescher is explained. In this context Quine's work is examined.

838. Malmquist H., *Quine and Transcendental Metaphysics*, « Dialogue (Phi Sigma Tau) », XXIV, pp. 1-8.  
The author wonders how Quine's argument on ontological relativity can be relevant to transcendental metaphysics, and examines the indeterminacy thesis and the inscrutability of reference in respect of conceptual frameworks which can be properly considered transcendental.
839. Mc Ginn Marie, *The Third Dogma of Empiricism*, « Proceedings of the Aristotelian Society », LXXXII, pp. 89-102.
- ° 840. Mortensen Chris, *A Plea for Model Theory*, « Philosophical Quarterly », XXXI, pp. 152-157.  
Cfr. Priest, 1979, no. 750.
841. Nuño Juan A., *Un empirismo lógico sin dogmas. Sobre analiticidad*, « Teorema », XI, pp. 269-278.
- 841a. Oswald U., *Inequivalence of the Fragments of "New Foundations"*, « Archiv für Mathematische Logik und Grundlagenforschung », XXI, pp. 77-82.
842. Peacocke Christopher, *The Theory of Meaning in Analytical Philosophy*, in *Contemporary Philosophy*, Fløistad G. (Ed.), I, The Hague; Nijhoff, pp. 35-56.
- \* 842a. Pitt J. C., *Pictures, Images and Conceptual Change: an Analysis of Wilfrid Sellars's Philosophy of Science*, Dordrecht, D. Reidel.  
In chapter two the inference and induction problems are discussed and Sellars opinions are compared with Goodman's and Quine's.
843. Sober Elliott, *Evolutionary Theory and the Ontological Status of Properties*, « Philosophical Studies », XL, pp. 147-176.  
Quine's argument against the opinion that properties must be included in the ontology of science is critically examined.
844. Sober Elliott, *Revisibility, A Priori Truth and Evolution*, « Australasian Journal of Philosophy », LIX, pp. 68-85.  
According to the author, and contrary to Quine's opinion, it is not possible to logically revise all beliefs, as this involves consequences con-

trary to holism. The philosophical influence of natural selection, seen as a mechanism for revising components of our cognitive apparatus, is then considered with regard to our assertions about revisibility.

845. Stemmer Nathan, *Generalization Classes as Alternatives for Similarities and Some Other Concepts*, « *Erkenntnis* », XVI, pp. 73-102.  
A long article in which, amongst others, Quine's point of view on language learning and the notion of perceptive similarity is explained and discussed.
846. Stroud Barry, *The Significance of Naturalized Epistemology*, « *Midwest Studies in Philosophy* », VI, pp. 455-471.  
The author highlights the relationship between the scheme of naturalized epistemology as formulated by Quine and the traditional examination of knowledge, together with the peculiarities of each approach.
847. Thompson Manley, *Epistemic Priority, Analytic Truth and Naturalized Epistemology*, « *American Philosophical Quarterly* », XVIII, pp. 1-12.
- \* 848. Tondl Ladislav, *Problems of Semantics. A Contribution to the Analysis of the Language of Science*, Boston, D. Reidel Publishing Company.
849. Tuana Nancy, *Taking the Indeterminacy of Translation One Step Further*, « *Philosophical Studies* », XL, pp. 283-291.  
The author wishes to demonstrate that the indeterminacy of translation applies also to propositional connectives offering an example in which two linguists could construct alternative manuals of translation for truth functions that would conform equally well to the speaker's dispositions.
850. Tuschling Burkhard, *Sind die Urteile der Logik vielleicht "insgesamt synthetisch"?*, « *Kantstudien* », LXXII, pp. 304-335.
- \* 851. Urbani Ulivi Lucia (Ed.), *Gli Universali e la formazione dei concetti*, Milano, Edizioni di Comunità.  
The editor examines and evaluates the positions of various authors, including Quine, on the problem of universals.
852. Wilson Mark, *The Double Standard in Ontology*, « *Philosophical Studies* », XXXIX, pp. 409-427.

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- \* 853. Ayer Alfred J., *Philosophy in the Twentieth Century*, London, Weidenfeld & Nicolson.  
One paragraph is devoted to Quine, providing biographical data and a description of his philosophical work.
- 853a. Bacon John, *First-order Logic Based on Inclusion and Abstraction*, « The Journal of Symbolic Logic », XLVII, pp. 793-808.
854. Baertschi Bernard, *L'existence est-elle un prédicat: signification et enjeux de la question*, « Revue de Théologie et de Philosophie », CXIV, pp. 321-347.  
The author wishes to throw light on the distinction between two concepts of existence, characterised by Quine as « what a theory says there is » and « what there is », i. e. the existential quantifier and its phenomenological complement. A number of different positions are discussed relative to this problem among them those of Frege, Williams and Husserl.
855. Bar-Elli Gilead, *Identity and the Formation of the Notion of Object*, « Erkenntnis », XVII, pp. 229-248.
- \* 856. Bonevac Daniel A., *Reduction in the Abstract Sciences*, Indianapolis, Hackett.  
Only with the elimination of abstract entities, through so-called ontological reduction, can epistemology and ontology be reconciled. The positions of Benacerraf and Quine are expressed and finally a theory of ontological commitment is presented which follows an epistemological criterion for ontic decisions.
857. Burdick Howard, *A Logical Form for the Propositional Attitudes*, « Synthese », LII, pp. 185-230.  
In a lengthy analysis of modal contexts and beliefs, Quine's relevant work is constantly cited as critical reference.
- 857a. Caorsi Carlos E., *Lenguaje y Ontología. Una Introducción a la Filosofía de W. V. Quine*, « Análisis Filosófico », II, pp. 7-21.
- 857b. Church Alonzo, *Una Observación respecto a la Paradoja de Quine sobre la Modalidad*, « Análisis Filosófico », II, pp. 25-32.

857c. Crabbé M., *On the Consistency of an Impredicative Subsystem of Quine's NF*, « The Journal of Symbolic Logic », XLVII, pp. 131-136.

858. Croddy W. Stephen, *What Is a Singular Term?*, « Logique et Analyse », XXV, pp. 191-197.

The author wishes to demonstrate that contrary to Quine's view, no singular term is substitutable in every open statement because the structure of a singular term is not the same of an unbound variable.

858a. Dalla Chiara M. L. - Toraldo di Francia G., *Consideraciones Ontológicas sobre los Objetos de la Física Moderna*, « Análisis Filosófico », II, pp. 35-43.

859. Englebretsen George, *Aristotle and Quine on the Basic Combination*, « The New Scholasticism », LVI, pp. 244-249.

The positions of the two authors on logical syntax are contrasted. For Quine, the basic combination is a statement which unites a singular and a general term, where the former has a referential position and the latter a predicative one. For Aristotle, these statements unite a subject and a predicate, where the former is a 'quantified' term and the latter a 'qualified' one, and in addition, unlike for Quine, they are syntactically homogeneous.

860. Feys Robert, *Translation as Rule-Governed Behaviour*, « Philosophy of the Social Sciences », XII, pp. 1-31.

861. Flanagan Owen J., *Quinean Ethics*, « Ethics: An International Journal of Social Political and Legal Philosophy », XCIII, pp. 56-74.

Quine's distinction between science and ethics is criticised and an attempt is made to reformulate Quine's ethical theory in a naturalistic way.

861a. Forster T. E., *Further Consistency and Independence Results in NF Obtained by the Permutation Method*, « The Journal of Symbolic Logic », XLVIII, pp. 236-238.

862. Freund Max, *Lesniewski, Quine y Geach: un análisis de sus demostraciones con respecto a la restricción del axioma V del sistema de Frege*, « Revista de Filosofía », (Costarica), XX, pp. 177-180.

- \* 863. Gibson Roger F., *The Philosophy of W. V. Quine. An Expository Essay*, Tampa/St. Petersburg, University Press of Florida.  
Quine's philosophy is presented as a systematic attempt to answer, from an empiricist point of view, the central question of epistemology: how we construct our theory of the world. The development of Quine's philosophy within a naturalistic/behaviouristic conception of language is also demonstrated. Finally, Quine's position is defended against Chomsky's criticisms.
864. Gochet Paul, *Five Tenets of Quine*, « The Monist », LXV, pp. 13-24.  
The author demonstrates how epistemological and semantic holism is incompatible with the thesis of the underdetermination of scientific theories and also examines how two theories can differ in meaning although coinciding in empirical content.
- \* 865. Grayling A. C., *An Introduction to Philosophical Logic*, Sussex, Harvester Press.  
The notions of necessity, existence, truth, meaning and reference are illustrated. In particular a paragraph is devoted to the analysis of Quine's behaviourism.
866. Grim Patrick, *What Won't Escape Sorites Arguments*, « Analysis », XLII, pp. 38-43.
- 866a. Hinnion R., *NF et l'axiome d'universalité*, « Cahiers du Centre de Logique », n. 4, pp. 45-59.
867. Hornstein Norbert, *Foundationalism and Quine's Indeterminacy of Translation Thesis*, « Social Research », XLIX, pp. 32-67.
868. Hylton P., *Analyticity and the Indeterminacy of Translation*, « Synthese », LII, pp. 167-184.  
The analytical/synthetic distinction is examined in relation to the indeterminacy of translation and the debate between Quine and Carnap on this point is illustrated.
- \* 869. Kaminsky Jack, *Essays on Linguistic Ontology*, Carbondale, Illinois University Press.
- ° 870. Kirk Robert, *On Three Alleged Rivals to Homophonic Translation*, « Philosophical Studies », XLII, pp. 409-418.  
Cfr. Massey, 1978, no. 697.

871. Kreinovic V. - Oswald U., *A Decision Method for the Universal Theorems of Quine's New Foundations*, « Zeitschrift für Mathematische Logik und der Grundlagen der Mathematik », XXVIII, pp. 181-187.

872. Krips H., *Epistemological Holism: Duhem or Quine?*, « Studies in History and Philosophy of Science », XIII, pp. 251-264.

Duhem and Quine give different answers to the problems emerging from their pragmatism and anti-reductionism. It is maintained that an univocal Duhem-Quine thesis does not exist, and a synthesis is suggested of the two positions on broadly holistic terms.

873. Kvat Igal, *Quine and Modalities De Re: a Way Out?*, « The Journal of Philosophy », LXXIX, pp. 295-328.

In examining Quine's criticism of the notion of quantification in modal contexts, the author demonstrates that one can give sense to *de re* quantification by means of a function of reference intention which legitimises quantifiers outside modal contexts. The notion of modality and counterfactual statements are related to non-modal language.

\* 873a. Lacey Alan R., *Modern Philosophy. An Introduction*, London, Routledge & Kegan.

The way in which various philosophical problems are discussed in the English-speaking world in the second half of the twentieth century is here examined. A part about new developments considers authors as Wittgenstein, Quine, Strawson and Chomsky.

874. Lauener Henri, *Neurath's Protocol Sentences and Schlick's "Konstatierungen" versus Quine's Observation Sentences*, « Grazer Philosophischen Studien », XVI/XVII, pp. 129-148.

\* 875. Lauener Henri, *Willard Van Orman Quine*, München, Beck.

\* 876. Leonelli Michele, *Aspetti della filosofia di W. V. Quine*, Pisa, V. Corsi.

Although not attempting to offer a comprehensive account of Quine's philosophy, the book explains a number of important themes within it, partly in the light of the most recent collections of Quine's essays.

877. Leonelli Michele, *Nota introduttiva, to Saggi Filosofici 1970-1981*, Roma, Armando Armando, pp. 9-45.

The author, who has also translated Quine's essays contained in the

collection, illustrates a number of the most characteristic aspects of Quine's philosophy.

878. Mariani Mauro, *Da Quine a Kripke: problemi di semantica*, « Teoria », II, n. 2, pp. 85-104.

While for Quine the senselessness of quantified modal logic depends on that of Aristotelian essentialism, Kripke comes out clearly in favour of essentialism in which sense is closely connected with the theory of reference and meaning. The article sets out to evaluate these two opposing points of view in the light of developments which they have given rise to.

- 879. Massey Gerald, *Bizarre Translation Defended: A Reply to Kirk*. « Philosophical Studies », XLII, pp. 419-423.

Cfr. no. 870.

- 880. Mortensen Chris, *A Mistaken Argument*, « Philosophical Studies », XXXII, pp. 358-359.

Cfr. 1981, no. 840.

- 880a. Orayen Raul, *Quine, los conceptos intensionales y la Lógica del lenguaje ordinario*, « Análisis Filosófico », II, pp. 47-72.

- 880b. Oswald U., *A Decision Method for the Existential Theorems of NF<sub>2</sub>*, « Cahiers du Centre de Logique », n. 4, pp. 23-43.

881. Pappas George S., *Postulation and materialism*, « Philosophical Studies », XLI, pp. 71-82.

According to Quine mental entities can be eliminated because they are not necessary for the explanation of behaviour. Here the author takes up and amplifies Cornman's contrary thesis and attempts to evaluate it.

882. Ricketts T. G., *Rationality, Translation and Epistemology Naturalized*, « The Journal of Philosophy », LXXIX, pp. 117-136.

The thesis of indeterminacy, the controversy between Quine and Carnap on analyticity and Quine's epistemology are discussed.

- 882a. Ros A., *Epistemología naturalizada en Quine*, « Análisis Filosófico », II, pp. 77-103.

- 883. Roth Paul A., *Logic and Translation: A reply to Alan Berger*, « The Journal of Philosophy », LXXIX, pp. 154-163.

Cfr. 1980, no. 770.



884. Routley Richard, *On What There Is Not*, « Philosophy and Phenomenological Research », XLIII, pp. 151-177.

Quine's position from Q85 to Q179 on ontology, the problem of universals, and that which allows distinction between entity and non-entity is discussed.

- 884a. Simpson Thomas S., *Quine bifronte: vindicación y condena de las modalidades "de re"*, « Análisis Filosófico », II, pp. 125-136.

885. Tuana Nancy, *The Hidden Structure of Quine's Attack on Analyticity*, « The Southern Journal of Philosophy », XX, pp. 257-262.

- \* 886. Tudor Andrew, *Beyond Empiricism. Philosophy of Science in Sociology*, London, Routledge & Kegan.

The author explains a number of characteristics of the philosophy of contemporary science from the point of view of their usefulness with respect to sociology. Quine's thought is often cited and illustrated as a point of reference when considering naturalism, systems of belief and the languages in which theories are expressed.

887. Weingartner Paul, *On the Demarcation between Logic and Mathematics*, « The Monist », LXV, pp. 38-51.

A number of general theories on the difference between logic and mathematics are defended and four different methods for a possible demarcation between logic and mathematics are formulated, Quine's among them.

- 887a. Zuleta Hugo R., *Universales y entidades abstractas*, « Análisis Filosófico », II, pp. 139-155.

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888. Bakhale S. W., *Opaque Context*, « Indian Philosophical Quarterly », X, pp. 193-202.

889. Berger Alan, *Quine on Alternative Logics*, « The Journal of Philosophy », LXXX, pp. 127-129.

- 889a. Elder Crawford L., *The Case against Irrealism*, « American Philosophical Quarterly », XX, pp. 239-254.

- 889b. Gibson Roger F., *A New Perspective on Quine*, « Journal of Thought », XVIII, pp. 73-84.
- Quine is considered as the author of a systematic philosophy and to support this new perspective on his work an original interpretation is formulated. The constant systematical replies to the epistemological question about the way in which we form a world theory are pointed out.
890. Handjaras Luciano, *Logica, ontologia e conoscenza naturale in Willard Van Orman Quine*, in *Epistemologia, logica e realtà. Una introduzione a K. Popper e a W. V. Quine*, Handjaras L. - Marinotti A., (Eds.), Firenze, La Nuova Italia, pp. 97-191.
- The evolution of Quine's research is traced starting sometimes from internal inconsistencies emerging from deep analysis. There is continual comparison with the theses of other thinkers, thus allowing a more effective perspective.
- ° 891. Hauptli Bruce, *Quine's Theorizing about Theories*, « Synthese », LVII, pp. 21-33.
- Cfr. Roth, 1980, no. 801.
892. Hinst Peter, *Quines Ontologiekriterium*, « Erkenntnis », XIX, pp. 193-215.
- A precise reconstruction of Quine's criterion for ontological presuppositions of a theory is made and two versions of the criterion are elaborated, the second being discussed.
893. Ineichen Hans, *Bedeutung und Verifikation. Über die Möglichkeit einer verifikationistischen Bedeutungstheorie*, « Zeitschrift für Philosophische Forschung », XXXVII, pp. 227-240.
- Despite Quine's rejection of the verificationist theory of meaning, Dummett and Tugendhat have defended it recently by important arguments. Here the positions of the three authors are critically discussed.
- ° 894. Mosley J. C., *Jackson, Criteria and Ontological Commitment*, « Australasian Journal of Philosophy », LXI, pp. 192-201.
- Cfr. 1980, no. 783.
895. Read Stephen, *Quine's Private Language*, « Ratio », XXV, pp. 49-57.
- The author contests Quine's affirmation that the indeterminacy of translation is extensible to private language.

- ° 896. Roth Paul A., *Siegel on Naturalized Epistemology and Natural Science*, « Philosophy of Science », L, pp. 482-493.  
Cfr. 1980, no. 803.
897. Samsonov V. F., *Etude Critique de la Philosophie de W. V. Quine* (in russian), « Voprosy Filosofii », n. 3, pp. 120-126.
- 897a. Saunders Ruth, *Quine and Davidson on the Reference of Theoretical Terms and Constraints on Psychology*, « Philosophical Studies », XLIV, pp. 121-140.
- 897b. Sayward Charles, *What is a Second Order Theory Committed To?*, « Erkenntnis », XX, pp. 79-92.  
The author maintains that no second order theory is ontologically committed to nothing but what on which its individual variables vary.
- 897c. Shanks Niall, *Indeterminacy and Verification*, « The Southern Journal of Philosophy », XXI, pp. 301-312.  
Dummett's arguments about indeterminacy of translation are inadequate because they assume two dogmas refuted by Quine. Some examples from physics are considered to assure a scientific respectability to Quine's thesis.
898. Skagestad Peter, *American Pragmatism*, in *Contemporary Philosophy*, Floistad G. (Ed.), IV, The Hague, Nijhoff, pp. 363-386.
899. Sosa Ernest, *Nature Unmirrored, Epistemology Naturalized*, « Synthese », LV, pp. 49-72.
900. Tuana Nancy, *Quine's Hidden Premises*, « The Southern Journal of Philosophy », XXI, pp. 123-136.
- 900a. Van Inwagen Peter, *Fiction and Metaphysics*, « Philosophy and Literature », VII, pp. 67-77.  
Quine's ontology with regard to fictitious worlds and figures existence is considered.
901. Vernant Denis, *Le traitement logique de l'existence et les pré-supposés de l'ontologie*, « Dialectica », XXXVII, pp. 111-132.
- 901a. Ward Andrew, *The Development of Quine's Logicism*, « Dialogue (Phi Sigma Tau) », XXV, pp. 48-55.

In Russell, Whitehead and Quine, with the attempt to resolve the Frege's work problems there is the tendency to mix logicism and set theory.

902. Wyschogrod Edith, *Time and Non-being in Derrida and Quine*, « The Journal of the British Society for Phenomenology », XIV, pp. 112-126.

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26. *Bulletin of American Mathematical Society.* (bimonthly), Box 6248, Providence, RI 02940, USA.  
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31. *Convivium.* (3 times a yr), Facultad de Filosofía y Letras, Universidad de Barcelona, Barcelona, Spain.  
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32. *Crítica: Revista Hispanoamericana de Filosofía.* (3 times a yr), Apartado Postal 70-447, Mexico 20, D. F., Mexico.  
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34. *Critique.* Editions de Minuit, 7, rue Bernard Palissy, 75006 Paris, France.  
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37. *Dialectica: Revue Internationale de Philosophie de la Connaissance.* (q), CH-2501, Bienne, Switzerland.  
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39. *Dialogue: Canadian Philosophical Review - Revue Canadienne de Philosophie.*

- (q), The Canadian Philosophical Association, University of Ottawa, Simard Hall, Ottawa, Ontario, K1N 6N5 Canada.  
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44. *Educational Philosophy and Theory*. (six-m), Directory NSW University Press, P. O. Box 13, Randwick, NSW 2031, Australia.  
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45. *Educational Theory*. (q), Education Building, University of Illinois, Urbana, IL 61801, USA.  
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46. *Epistemologia*. (six-m), Tilgher-Genova Sas, Via Assarotti 52, 16122 Genova, Italy.  
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60. *Inquiry: An Interdisciplinary Journal of Philosophy and Social Sciences.* (q), Universitetsforlaget, P. O. Box 7508, Skillebekk, Oslo 2, Norway.  
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61. *International Logic Review - Rassegna Internazionale di Logica.* (six-m), Via Belmeloro 3, 40126 Bologna, Italy.  
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62. *International Philosophical Quarterly.* (q), Fordham University, Bronx, NY 10458, USA.  
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63. *Isis. International review devoted to the history of science and its cultural influences.* (5 times a yr), History of Science Society, 215 S. 34th St., D6, Philadelphia, PA 19104, USA.  
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102. *Philosophical Linguistics*. (ann), Great Expectations Bookstore, 909 Foster Street, Evanston, IL 60201, USA.  
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103. *Philosophical Papers*. (six-m), Rhodes University, P.O. Box 94, Grahamstown 6140, Republic of South Africa.  
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108. *Philosophical Studies* (Ireland). (8 times a yr), The National University of Ireland, 57 Trimleston Gardens, Boostertown, Dublin, Ireland.  
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109. *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*. (9 times a yr), D. Reidel Publishing Company, P. O. Box 17, 3300 AA Dordrecht, The Netherlands.  
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114. *Philosophy*. (q), Cambridge University Press, P. O. Box 92, London NW1 2DB, England.  
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123. *Proceedings of the American Philosophical Society*. (6 times a yr), 104 S. Fifth St., Philadelphia, PA 19106, USA.  
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145. *Scripta Mathematica. Devoted to the philosophy, history and expository treatment of mathematics*. (q), Amsterdam Ave. & 186th St., New York, NY 10033, USA.  
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156. *Synthese: An International Journal for Epistemology, Methodology, and Philosophy of Science*. (9 times a yr), D. Reidel Publishing Company, P. O. Box 17, 3300 AA Dordrecht, The Netherlands.  
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158. *Teorema*. (q), Apartado 1, 107, Valencia, Spain.  
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159. *Teoria*. (six-m), ETS, Piazza Torricelli 4, 561000 Pisa, Italy.  
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162. *Tijdschrift voor Filosofie*. (q), Residentie Binnenhof, Ravenstr. 112, B-3000 Leuven, Belgium.  
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163. *Times Literary Supplement*. (weekly), Times Newspapers Ltd., Box No. 7, New Printing House Square, Gray's Inn Rd., London WC1X 8EZ, England.  
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164. *Trans/Form/Ação*. (ann), Biblioteca Central da UNESP, Av. Vicente Ferreira, 1278, Caixa Postal 420, 17.5000-Marília-SP, Brasil.  
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