SOME METAPHYSICAL ASPECTS OF TRUTH *

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Abstract

People make statements that are, "ex hypothesi", either true or false. The principle of bivalence can be taken as metaphysical necessity, and arguments in support of this thesis are given. Several theories of truth are analysed from this point of view, and various truth contexts in which *circularity* is manifest in different ways are highlighted. It is intended to show that the problem of truth remains a rich and open issue.

Key words: truth; material adequacy; correspondence; bivalence; circularity; Tarski; Frege; Russell; Gupta; Belnap; McGinn.

For the set of concepts that we intend to elucidate, it is a similar thing in this context to say that the principle of bivalence about truth is an *a priori* concept as to say that it is one of our deepest and most unchangeable convictions. One way or another, it imposes itself on us as a necessary part of any cognitive or communicative activity. The strength of this latter affirmation is increased if two opposed philosophical positions on the concept of truth are compared. We will call them the *epistemic* and the *metaphysical*.

The epistemic position arises as a result of the difficulties encountered in finding a way of access to a world or reality uncontaminated by the act of knowing itself. This leads to describing truth, as in the case of Putman 1981 pp. 50-75, as "rational acceptability in ideal conditions". But what is achieved by this method is to ask of knowledge, which, as such, is always

contingent, the validity that must necessarily be associated with any idea of truth. To explain the truth, therefore, as something which may on occasions cease to be true does not seem to be a good route to follow.

The metaphysical position, on the other hand, can be shown by the necessity of affirming the existence of something objective, not epistemic, outside language, and which, for that reason, is not subject to being ultimately dependent on knowledge –which is fallible– and which provides the basis for the validity of stated truths and the invalidity of falsehoods. This is the position, for example, of Popper 1972, as it also was for Frege. Of course, the postulation of an objective basis opens the way, from the metaphysical point of view, to criticism from the epistemic point of view, as the latter will either have to admit the possibility of the invalidity of something true – as being dependent on knowledge – or will have to abandon the logical principle of bivalence, as Dummett 1978 does, or accept that rational justification in ideal conditions not only finds its reason for being in what we know but also in something else, which is ultimately what in general terms prevents a true statement from being false.

As we pointed out at the beginning, we consider it to be metaphysically inadequate to have as a point of departure about truth and its values anything other than the principle of bivalence, which could eventually open the question up to a wider range of values of truth.

On the other hand, if what is trying to be elucidated is the concept of truth itself, the point of departure that we consider necessary, and which of course is not original to us, is the schema T of Tarski 1933: " 'p' is true iff p", where p are statements taken, one by one, as assertions of sentences. This principle, or criterion of material adequacy, served its author, not to be the conceptual beginning of a definition of truth, but to show the infinite gradation of truth predicates that went against both a definition of truth for natural languages and, consequently, a universal concept of a truth predicate. From the point of view of formal logic, the Tarskian solution is entirely sufficient and operative, but from the philosophical point of view it only established the undeniable nucleus from which to continue thinking about what we understand as truth.

Since at least Frege 1918, the *circular* nature of the truth concept has been emphasised. As we know, just as the creator of modern logic disallowed, argumentally, any definition of truth "as correspondence", he sharply points out that any definition of truth must include statements or characteristics in the *definiens* which, when applied to the explanation of an instance or particular example, must necessarily also be considered as true. In fact, the situation described by Frege is analogous to that expre-

ssed by Russell in the Principle of the Vicious Circle (Russell 1908, p.63): "What a whole collection presupposes should not form part of that collection". In this case, the collection would be the concept of truth itself. There is no escape from the circle. This situation lead Frege to say that the truth concept is original, *sui generis*, and not definable. Studies after Tarski have continued to offer definitions of truth, but among those which we believe to be the most reliable, *circularity*, in some form or another, has made an appearance.

Frege 1918 also speculated with other ideas on the concept of truth that we do not wish to consider in this study, as if we were to do so, the main point we wish to make would become diffuse. To paraphrase Frege, we are looking at the true difference between conjecture and a theorem. If we take Goldbach's Conjecture as the antecedent of a conditional, the consequent of which is false, it remains possible that that conditional could be true; but if we substitute, in the same conditional, Goldbach's Conjecture for Pythagoras' Theorem, the resulting statement is false. At this point, therefore, for us, for the principle of bivalence, the enunciation of a statement makes it already true, although in a tacit and hypothetical way, in the same way as the enunciation of its negation makes the former false.

As we know, Tarski's criterion of material adequacy, or schema T, was described by its author as the point of departure for the construction of a potentially infinite ladder of different, but similar, truth predicates, expressed in formalized languages and that enabled him to offer a general and ascending definition of truth that included them all. This, we believe, is the only way of escaping from circularity, although at the cost of the creating the possibility of a potentially infinite ascent. With the Tarskian definition, of course, any paradox is avoided.

It should be borne in mind that, from the point of view of this study, it makes no difference if the truth predicate belongs to formal or natural language. For our purposes, as an example of the former we have taken that defined by Tarski 1933, and as examples of the latter, those defined by Gupta and Belnap 1993, and by Yaqub 1993.

Naturally, one thing is the idea of truth, and the possibility of defining it is something else again. Various authors (Gupta and Belnap 1993; Yaqub 1993; McGinn 2000, for example) have written about the circularity of specific concepts, to cite the most obvious: identity, existence, membership and truth. The authors cited above also describe the concept of truth as extraordinary and unique. From my point of view, it must also be said that the root of the circularity of the concepts other than truth is imposed by and transferred from that of truth. Let us consider *membership*, for

example. When we state bŒA we are carrying out a communicative operation equivalent to the negation of bœA, so that apart from being able to express typically circular statements such as yŒ { x: xŒ x } = yŒy, when we use the symbol of membership to represent a concept, we are also bringing in the concept of truth; it is because the supervenience effect, if you like. This occurs with concepts which derive from verbs. In saying this, we are merely applying the doctrine of the necessity of the principle of bivalence, and, in the same way, what we wrote at the end of the first paragraph of this page.

In accordance with the foregoing, therefore, if for whatever reason one should wish to define truth for a language that allows the (internal) use of the predicate "is true", we must conclude not only that the truth concept is circular, but that any definition that we may try to make must also be circular.

We do not claim to be original with these affirmations, as they have been well endorsed by the authors cited above. One of the aims of this study is to point out the various types of circularity that are associated with the concept of truth and its derivatives (as the definitions are), to criticise the definition of truth that seems to us to be the weakest, and highlight the positive aspects of that which appears to us to be the most acceptable, all based on our assertion which always involves the use of truth and falsehood, although it may be implicitly and hypothetically.

Both the study of Gupta and Belnap 1993 and that of Yaqub 1993 are based on the assumption of Tarski's schema T as a definition of truth, although partial, and this is motivated by the words of the author himself, who makes this affirmation cautiously and only taking into account its application to statements taken one by one. Tarski deliberately leaves aside the technical problems that such a conjunction of statements, of infinite length, implies (Tarski 1944, Section 4).

As we have already indicated, as opposed to Tarski, the main aim of the present authors is to leave the truth predicate in the context of natural language itself, and to give an acceptable explanation of the logical and linguistic phenomena that derive from that.

Gupta and Belnap accurately point out that the circularity of truth manifests itself in some of the common examples that are typical of schema T. For example: "everything that John says is true" is true iff everything that John says is true. Here, the circularity cannot be eliminated.

In order to deal with the circularity in a consistent way and to confront the semantic paradoxes, for instance: "this statement is false", these authors created the Theory of the Revision of Truth that, in fact, as many

others have done before, underlines the peculiarity of the truth predicate, and moreover, and this is the most important thing, takes this peculiarity to the extreme of giving the truth predicate a *revision rule* that is quite different from the *application rule* that must be used with any other predicate. The application rule is the simple mechanism that is used in order to know if an object has the characteristics expressed by the predicate, or if it doesn't. For example, in order to determine if a car is red, or if it isn't.

The attempt by these authors to treat the infinite statements that can be generated by schema T in a consistent way, and to make them into a (complete) definition of truth, lead them to treat the General Theory of the Definition, and to substitute Tarski's biconditional sign for the defining equality sign (= df). They are, nevertheless, aware that this modified schema T, although it maintains material adequacy, loses (as an effect of circularity), formal correctness. This stratagem lead them to say that paradoxical statements are not contradictory, as the biconditional sign that showed them to be so has disappeared. They could, however, take advantage of this situation by inventing some concepts –categoricity, stability– that, used together with the revision rule, can produce new ways of dealing with the truth of statements, especially those that are clearly circular and which incorporate the truth predicate. In our opinion, their theory provides and interesting, but unsatisfactory, perspective on truth.

It is true that Gupta and Belnap clearly show that the truth predicate does not have a stable extension, and that in true circular statements it is necessary to start from a hypothetical extension of the predicate "to be true". But to go on from there to make a *special semantic law* for these statements, with which, by means of the mechanism of the revision rule, they are not able to stabilize any determined truth-value, because this mechanism falls in a circle, we believe is a leap. The statements that we refer to, and which they call pathological, as they cannot be fixed, are not categorical, and are not, therefore, able to be called either true or false, nor neither true nor false. If they were to be categorised in one of these three ways, other equally pathological statements would be produced. Thus, whether they like it or not, it appears to us that they are going against the principle of bivalence.

Yaqub 1993 was inspired by Gupta's revision rule to offer his own theory of truth. His work is just as valuable, and more convincing. His revision mechanism sets up a group of formal hierarchies, and stops short, in the worst case, by showing that the truth predicate frequently cannot have any fixed extension. It is not his revision mechanism that falls into the circle, but rather his formal mechanism shows that it is the true circular statements

themselves that do not have any fixed or determined extension. On the other hand, by not modifying schema T, on which his work is based, he describes, as Tarksi does, paradoxical statements as such. Yaqub clearly distances himself from the previous authors with the postulation of the existence of semantic facts, an affirmation that Gupta and Belnap do not accept. This difference is of great importance, as the arguments of the latter lead them to have to affirm that the truth is a supervenient propertie, and that, finally, non semantic facts are the necessary basis for making true statements. For Yaqub, it is quite the contrary, the mechanism of his hierarchies is able to analyse more and more true statements that arise without contradiction. His research leads him to affirm that the truth is not supervenient and is not deflationary. To some extent, he distances himself from the principle of bivalence when his mechanism does not achieve stability, and is constructed to behave that way, but his distancing from bivalence is less abrupt from that of the previous authors. Yaqub opens the possibility that the notion of truth is basically a vague concept. We are not able to determine what a true vague principle of bivalence would consist of. The research continues.

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