Defending Tarski's Semantic Conception of Truth

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The correspondence theory of truth holds that truth consists in correspondence to reality, thereby a statement is said to be true if and only if it corresponds to a fact of reality. Although it is clear that a strong point in favour of this theory is its intuitive appeal, Tarski revealed a good logician's soul when he remarked that formulations of the classic correspondence theory of truth "can lead to various misunderstandings, for none of them is sufficiently precise and clear" (Tarski, 1944, p. 343). He then proposed a doctrine by which to judge theories of truth: a "semantic conception of truth" alleged to be "a more precise expression of our intuitions" (Tarski, 1944, p. 343) which "does conform to a very considerable extent with the common-sense usage" (Tarski, 1944, p. 360) of the term "true". This essay is centred on these last two claims. I will first attack the language regimentation upon which Tarski's project rests, arguing that, contrary to his claims, it is counter-intuitive and not viable. I will then recognise these shortcomings but argue why the attack misconstrued Tarski's project. Finally, I will elaborate on how Tarski's project successfully satisfies intuitions of another kind.

At the centre of the semantic conception of truth is what Tarski called the material adequacy condition, which asserts that a satisfactory theory of truth must logically entail sentences that follow a very specific pattern, which Tarski called the T-Schema. Tarski's project is tripartite: the material adequacy condition is applied to a theory of truth for language L *only when* L is fragmented into object-language and meta-language *and* has an exactly specified structure. Moreover, any sentence φ of L must bear a truth-value (i.e. L must be fully interpreted). These last two clauses are the basic and essential prerequisites that need to be satisfied before we can consider whether a truth theory satisfies the material adequacy condition. The gist of the attacks is that Tarski's project fails because these prerequisites require regi-

menting language in an unacceptably stringent and counterintuitive way.

One of the pillars of Tarski's semantic conception of truth is his object-language and meta-language distinction (the object language is the language under study stripped of its semantic terms, and the meta-language is a richer language used to talk about the object language). This fragmentation is crucial to Tarski's project because it is only in the meta-language that the definition of truth itself along with each instance of the T-Schema are to be formulated. But it is evident that our language naturally contains its meta-langauge: we express the semantic properties of English in English, not in "meta-English", for English, as any other non-artificial language, naturally contains its own truth-predicate. When the man on the street remarks that: "it's true that snow is white", he does not make a semantic ascent. We don't leap into "the meta-language" when we say that something is true, we consciously remain in the same language we are in. We often use the predicate "is true" just like we use, say, the predicate "is red"; and we understand both predicates as part of the same language. It is counter-intuitive to see the predicate "is true" as belonging to a separate language simply because *there is no such language in reality.*

Tarski's semantic conception of truth also requires the language to be fully interpreted. This is because sentences of the T-Schema assert that "'φ' is true if and only if φ" for *any* φ of the language L. But contemplate what it would mean for every sentence of, say, English to be either true or false. Even if we forcefully impose truth-values on declarative sentences, our language remains far from being fully interpreted. For instance, we hitherto cannot *know* the truth-value of sentences such as "an object that hits the region at the centre of a black hole is transferred to a parallel world". Nor can we fix the truth-value of many sentences pertaining to fields like ethics or theology. Furthermore, imperative and interrogative sentences, among others, simply lack truth-values. These impenetrabilities let us catch a glimpse of the absurd epistemological commitments we would be taking should we require our language to be fully interpreted.

Another analogous prerequisite is that the structure of L must be "exactly specified". Grammarians' and linguists' efforts are not enough, because "to specify the structure of a language, we must characterize unambiguously the class of those words and expressions which are to be considered meaningful", "formulate the conditions under which a sentence of the language can be *asserted*" and "give the so-called *rules of inference* (or rules of proof) by

means of which we can deduce new asserted sentences from other sentences which have been previously asserted" says Tarski (Tarski, 1944, p. 346, original emphasis). It is commonplace, as Grayling notes in his survey of the matter, that unequivocally satisfying these requirements is "enormously complex" (Grayling, 1982, p. 169) insofar as our language is concerned. Suffice it to say that the best efforts of philosophers, who have struggled and are still struggling to find adequate criteria of meaning for our language, conflict and remain not very far from ambiguous and uncontroversial. And in fact, as Grayling adds, "there is no consensus among philosophers as to what sorts of thing are truth-bearers" (Grayling, 1982, p. 24). Tarski wants sentences to be truth-bearers, but Russell holds that only beliefs expressed as propositions can bear truth, while James argues that only ideas bear truth, and Ramsey maintains that nothing is a truth-bearer. So without any sort of consensus on adequate criteria of meaning and truth-bearers, the project of exactly specifying the structure of our language, in Tarski's sense, is hopeless.

So calling the semantic conception of truth "a more precise expression of our intuitions" was an understatement, for before applying the semantic conception of truth to English, one would need to regiment it in a way such that it satisfies Tarski's three aforementioned preconditions, and this regimentation is not only unrealistic, it is also counter-intuitive. Pertinently, Tarski remarked: "I happen to believe that the semantic conception does conform to a very considerable extent with the common-sense usage – although I readily admit I may be mistaken" (Tarski, 1944, p. 360). Tarski was indeed mistaken, for, as we have seen, the features of the semantic conception of truth are absent from our "common-sense usage" of the term "true" – we don't have a meta-language and we don't think true sentences follow a rigid pattern resembling the T-Schema, to name two objections discussed above. "Truth or falsity", as Strawson indicated, "are functions of the *use* of the sentence" (Strawson, 1950, p. 327, my emphasis) and therein should rest our conception of a truth-predicate if our aim is to propose a theory or conception of truth for natural languages. Tarski's semantic conception demands an exercise in revisionary linguistics, substituting for the actual structure of our language a conception of one which is nothing more than intellectually agreeable to logicians.

Defending Tarski from these attacks requires understanding what he intended to achieve by articulating "a more precise expression of our intuitions". What motivated Tarski were the coherence problems surrounding

truth, exemplified in the paradox of the Liar. We use the concept of truth ubiquitously, in mathematical, scientific, legal, everyday contexts, and ascribe it singular importance. It is thus intolerable that using it, as it stands, should give rise to paradox. The intuitions that Tarski wanted to do justice to were those begging for "a concept of truth that will at least serve the scientific and mathematical purposes *to which the everyday notion is put*, but which can be guaranteed free of inconsistency" (Etchemendy, 1988, p. 361, my emphasis). Hence the "more precise expression": "I believe that [problems concerning the notion of truth] can be exactly formulated and possibly solved *only* on the basis of a precise conception of this notion" (Tarski, 1944, p. 360, my emphasis).

Tarski specified the aforementioned prerequisites because his semantic conception needed this precise basis, which he believed natural languages lack. "For other languages – thus for all natural, "spoken" languages – the meaning of the problem is more or less vague, and its solution can have only an approximate character" (Tarski, 1944, p. 347). Concerning the prerequisite for L to be exactly specified, for instance, he indicated that "our everyday language is certainly not one with an exactly specified structure" (Tarski, 1944, p. 349).

Features of natural languages such as vagueness and indexicalities daunt logicians, and this is why the only refuge where they can tame truth is an imaginary formalised arena of their own. Attacking the semantic conception on the grounds that it cannot be applied to natural languages is flogging a dead horse, for Tarski stipulated that his semantic conception is not applicable to natural languages.

The semantic conception bears its fruits in formalised contexts, its proper domain of application. Tarski's technique allows us to define and consistently use truth predicates for a very wide variety of scientific purposes, if satisfaction, by which we define the semantic terms which define truth, is defined in terms of physical concepts alone. It does justice to scientists' intuitions because it provides a versatile yet robust and unambiguous cross-disciplinary method for defining a truth predicate that can do justice to correspondence to facts and that can also be adapted to one's field of enquiry. Moreover, it calls for a common, formalised language and conceptual scheme in which the primitive conception of truth is uncontroversial. In Popper's words, Tarski rehabilitated truth as a *common* "regulative principle" (Popper, 1963, p. 306) among scientists.

To conclude, the merits of Tarski's semantic conception of truth lie in its application to formal contexts, where it provides a precise and versatile primitive notion of truth that can, as Popper explains, serve as a common regulative principle among scientists. It cannot and should not be applied to natural languages for it entails an unacceptable regimentation of the latter. Tarski's semantic conception does wonders in languages that have met its prerequisites, but believing that it conforms "to a very considerable extent with the common-sense usage" requires a good logician's soul.

References

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