THE CONVENTION T IS NOT APPLICABLE TO NATURAL LANGUAGES (1)

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Donald Davidson has proposed to apply Tarski's famous Convention T to natural languages (2). According to the convention any satisfactory definition of truth should fulfill the condition:

(1) X is true iff r,

where r stands for an arbitrary sentence of the object language in question, and X is the name of the sentence under consideration. Of course (1) can be applied straightforwardly only to declarative natural language sentences, and it is well-known that there are sentences with anaphoric and indexical expressions to which the convention does not apply (3). Jaakko Hintikka has pointed out another kind of objection to Davidson's proposal, and it is the purpose of this short paper to present one more (4).

I will use quotation marks to form a name of a sentence out of the sentence in question (5). An instance of (1) is (2):

(1) I would like to thank Jaakko Hintikka, Julius Moravcsik, Merrill Provence, and Anthony Ungar for comments on earlier versions of the paper.

(2) See Alfred Tarski, «The Semantic Conception of Truth» in *Philosophy and Phenomenological Research.* 4, pp. 341-375 (1944); Donald Davidson, «Truth and Meaning» in *Synthese.* 17, pp. 304-323 (1967); Donald Davidson, «True to the Facts» in *Journal of Philosophy.* 66, pp. 748-764 (1969) and Donald Davidson, «In Defense of Convention T» in *Truth, Syntax and Modality,* Hughes Leblanc (ed.), pp. 76-86 (1973).

(3) See Jaakko Hintikka, «A Counterexample to Tarski-type Truth-definitions as Applied to Natural Language» in *Language in Focus,* Asa Kasher (ed.) p. 107 (1976).

(4) Jaakko Hintikka, *op. cit.,* pp. 107-112.

(5) See Alfred Tarski, *op cit;* Donald Davidson, «Semantics for Natural Languages» in *Linguaggi nella Societa e nella Tecnica,* pp. 177-188 (1970), and e.g., John Wallace, «On the Frame of Reference» in Synthese. 22, pp. 117-150 (1970). Wallace is philosophically very close to Davidson in this work.

(2) «Two plus two equals four» is true iff two plus two equals four.

Another instance of (1) is (3):

(3) «France is hexagonal» is true iff France is hexagonal ([6]).

Let r_0 stand for the sentence of the object language on the right hand side of the «iff» in (3).

Now I want to argue that (3) shows the inadequacy of (1) as a condition on the truth definition of a natural language.

In *How to do things with Words,* John Austin discusses the conditions under which the sentence r_0 is true ([7]). He rightly argues that this sentence, taken out of context, is not simply true or false because it just makes a rough claim. Another example of a non-bivalent sentence given by Austin (op. cit., p. 143) is «Lord Raglan won the battle of Alma». The battle was a soldier's battle and Lord Raglan's orders were never transmitted to some of his subordinates. Hence this sentence makes a correct claim in some contexts and not in others; it is not simply true or false.

«Povel Ramel is famous» is another example of a non-bivalent sentence. In the context of recent Swedish culture, the claim made by the sentence is undoubtly true, but in many other contexts it is obviously false to conclude it is not clear what the ultimate *standards* for fame are even given these standards in one context.

The previous sentences are all examples which do not supply sufficient information for their truth values to be uniquely determined. I will call such sentences vague and claim that they are bivalent only when taken in a context which provides the necessary additional information. Of course, sentences do not normally occur without context, but the case when such a context is not given cannot be ignored by Davidson.

([6]) DAVIDSON claims in (1967) *op. cit., pp. 316-317* that Convention T applies both to descriptive and evaluative terms, Hence Convention T should be applicable to (3).

([7]) See John AUSTIN, *How to do things with Words,* p. 142 (1962).

To explicate the point about the non-bivalency of r_0 let me define the semantic information of a natural language unit as its extra-linguistic context invariant meaning, and pragmatic information as its extra-linguistic context variant meaning. To motivation the choice of these particular definitions is, however, beyond the scope of this essay. Since Davidson wants to use Convention T to give a semantics for natural languages, he cannot invoke pragmatic information when interpreting sentences of the form (1) ([8]). Davidson can only use the semantic content and not the shared interpersonal meaning when interpreting r_0. However, in the case of r_0 it is often the addressee's context dependent understanding of the information that really determines whether the sentence is true of false.

In short, r_0 is vague without any further context, and this further context is not available within a reasonable version of Davidson's program.

If one insists that r_0 must be true or false even without a context, it is necessary to find some way of giving it a more precise meaning.

Following Arne Naess I will define «precization» in the following way: ([9])

(4) An expression E_1 is a precization of an expression E_0 iff all reasonable interpretations of E_1 are reasonable interpretations of E_0 and there is at least one reasonable interpretation of E_0 which is *not* a reasonable interpretation of E_1 ([10]).

Then a natural precization of r_0 would be the interpretation r_1 that France is hexagonal roughly speaking.

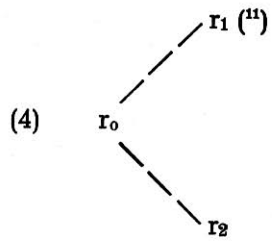
([8]) See DAVIDSON (1970) *op. cit.*, p. 177. I do not find Davidson's discussion of the terms semantics and pragmatics acceptable. See DAVIDSON *op. cit.*, pp. 180-181. His conception of pragmatics is inadequate, because, for example, the audience Davidson mentions may be the readers of a newspaper. This specific audience, however, cannot be used in any way to disambiguate sentence (3).

([9]) See Arne NAESS. Communication and Argument (1966).

([10]) See p. 39 in Arne NAESS *op. cit.*, footnote 4.

Another natural precization of r_0 would be the interpretation r_2 that France is hexagonal in the strict geometrical sense. For my purposes these two precizations of r_0 will suffice.

Now it is clear that r_1 is true and r_2 is false. The situation can be represented by the following tree:



The advantage of using a tree, is that it enables me to introduce a notion of *depth* (of intention) relative to which one can discuss the truth or falsity of r_0 ([12]). In (4) the node labelled by r_0 is at depth 0 while the nodes labelled r_1 and r_2 are at depth 1. Even if one does not know whether r_0 is true at depth 0, it has two distinct true-values at depth 1 and therefore is ambiguous at this depth between readings r_1 and r_2.

So if one asks whether r_0 by itself is true or false it is clear that this question lacks a correct answer. This illustrates the quite common need for conceptual clarification, when dealing with natural language expressions. It is often easy to go wrong in case like this without employing a careful analysis.

In fact this question is in principle unanswerable. Yet (3) is an instance of Convention T. The previous explication clarifies why Convention T does not work for (3), since by using it one can obtain (5):

(5) «France is hexagonal» is true iff r_0 lacks truth-value. Convention T presuppose two-valued logic, but according to it (5) is a meaningless claim. Hence this case does not conform to Convention T contrary to what Davidson would have to

([11]) See Arne NAESS, *Interpretation and Preciseness* p. 78 (1953).

([12]) See Jan BERG, «Remarks on Empirical Semantics: in *Inquiry* II pp. 227-242. (1968).

maintain. Therefore I have found a new objection to Davidson's proposal ([13]).

Finally, it is important to notice that when Convention T is applied to formal languages no problems will arise about the truth-value of r in (1), since conventions about the semantics of formal languages ensure that when an expression is interpreted the interpretation is unique.

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([13]) The same type of argument can of course be carried out for many other natural language expressions, but surprisingly my argumentation is even applicable to a classical example as «Grass is green» is true iff grass is green. One can ask one self at least what does it mean that grass is green. For example does it mean that grass is green in our conceptual perception of reality, or does it mean that grass is green in an «objective reality» independent of our human senses ? At least I am inclined to say that grass is green only in the former sense since this claim presupposes for example a white light source. Hence I could construct a similar argument in this case too. However I wanted to pick a case that had two interpretations that were obviously different to avoid unecessary controversy