# Is Truth an Epistemic Value?\*

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# Introduction

That truth is an epistemic value is a thesis that at least has the following two interpretations:

Truth can be defined through, or identified with, some epistemic notion or other. This is the epistemic side

Truth is something that science, or research, should pursue. Truth is something valuable. This is the value side.

Whereas interpretation (i) makes a false statement, interpretation (ii) expresses something that is true, although empty. But both interpretations have a grain of truth, and both are, in their own way, somewhat misleading. Their confusing offsprings have been epistemic and metaphysical theories of truth, respectively.

The grain of truth in (i) is that the truth predicate is omnipresent when we deal with epistemic notions, and so that not even the most basic theses in epistemology can be stated without using the truth predicate essentially. Besides, the endorsement role that the truth predicate performs in natural languages is applied in many cases to the items that have passed the kind of justificatory filters sanctioned by epistemology.

The grain of truth in (ii) is that the best, and shortest, way of codifying the infinity of contents to whose knowledge science is aimed to is by the help of sentences that involve the truth predicate.

The misleading aspect of (i) is that it suggests that truth should be identified with some item out of a set of epistemic situations: ideal justification, results of reliable processes, what the best scientific theories say, etc., and all this in order to seal the gap through which the sceptical menaces to slip in.

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The misleading aspect of (ii) is that any attempt to conceptually detach the notion of truth from the notion of value is automatically understood as a declaration of relativism, cynicism, or of a sinful brand of pragmatism.

But, in fact, the truth predicate does not work as an epistemic notion, and saying, on the other hand, that science aims at truth, and thus that truth is an epistemic value, does not illuminate in the least the meaning of truth and the way in which the predicate works.

In what follows, we will defend that truth is a semantic notion and, as such, an intralinguistic operator that permits building complex propositional variables in natural languages. This is the core of the so-called prosentential theory of truth (PT, from now on), the theory we favour and that we consider the correct account of the meaning of truth in natural languages. And we will make a declaration of independence. A theory of truth has to solve the problems derived from the meaning and use of the truth operator, but it does not need to solve all philosophical problems. For instance, a theory of truth does not solve the problems derived from the notion of justification, or from the notion of meaning. And asking a theory of truth to do all this is asking too much. In a sense, a theory of truth is, as Austin said, a series of truisms. But often comprehending these truisms is a difficult task. The prosentential account of truth shows that it is possible to develop a theory about how the truth operator works in natural languages without even mentioning how the world is or which kind of epistemic powers human beings possess.

The general setting in which we would like to place this discussion is *pragmatist*, in the sense that the role that truth performs is connected with the actions of rational agents. And it is also *pragmatic*, in the sense that it takes profit from the metaphor of the tool box, i.e., of the idea that not all speech acts in which a declarative sentence is involved aim at describing the world. But this is my election, for the technical theory that, to my mind, correctly characterizes the truth operator, the pro-sentential theory, does not have any particular connexion, from a conceptual point of view, with pragmatism. It can be adopted from any other philosophical background.

The prosentential theory of truth has already a long history. It is a defendable interpretation of the Aristotelian dictum, which nevertheless has become the lemma of the correspondence theories of truth. Ramsey first explicitly put it forward, in 1927. It has appeared now and then during the xx century. But it was re-discovered in 1975 by D. Grover, J. Camp and N. Belnap, and independently, in 1976 by C. Williams. Nowadays, it has been put at work in Brandoms system. Prosententialism and pragmatism are independent positions that propound theses that lie at different levels. One can be maintained without the other. The three main defenders of the prosentential view in the xx century, Ramsey, Grover and Williams, have had diverse degrees of involvement with pragmatism. Ramsey was a pragmatist, but Williams was not, and the case of Grover is uncertain. She might have had some pragmatist influence via relevance logic. But she never mentions it in her writings. Brandom, in turn, uses the prosentential account in a general context that can be characterized as rationalist pragmatism.

# 1 A brief survey of prosententialism

We call an account of truth prosentential if it interprets the truth operator as a means of forming natural language pro-sentences. A pro-sentence is a proform of the sentential kind, i. e., a sort of propositional variable. A welcome consequence of prosententialism is that it considers truth as a member of a general kind, the kind of proforms. To this kind belong pronouns, the best-known proforms, but also pro-adjectives, pro-adverbs, and now we know that pro-sentences as well. Proforms in natural languages are the counterparts of variables in formal languages.

### 1.1 The semantic functions of the truth predicate

We begin with the semantic part because the semantic aspects of truth constructions have been the trademark of prosententialism. Typically, pro-forms perform three tasks: they are vehicles (I) of direct reference, (II) of anaphoric reference, and (III) of generalization. As most of our everyday quantifiers are binary operators, most cases of (III) are also cases of (II).

Let us look at some examples:

- (a.1) This is my car
- (a.2) I heard about this car and I bought it
- (a.3) If I own a car, I take care of  $it \ [\forall x \ (x \text{ is a car \& I owns } x \text{ I take care of } x)]$

These three are examples of pronouns working as cases of (I) (a.1), of (II) (a.2) and of (III) (a. 3). Now we will see examples of pro-adverbs, pro-adjectives and pro-sentences. Most of the natural language expressions that carry these logical tasks do not have the grammatical category of adverbs, adjectives and sentences respectively. A difficulty the pro-sentential account has faced is that natural languages paradigmatically use pro-nouns, i. e. expressions with the syntactic category of singular terms, to perform the logical roles of the rest of pro-forms. Think of the English pronouns it or this. They can assume any logical content. For this reason, when we talk of pro-adjectives, pro-adverbs and the like, we refer to their logical categories not to their grammatical ones.

Cases of pro-adverbs are:

- (b.1) I love being here
- (b.2) I will go to Miami and will be there till Christmas
- (b. 3) There are nice people everywhere  $[\forall l \exists x \ (l \text{ is a place } x \text{ is a person } \& x \text{ is nice } \& x \text{ lives in } l)$

Again, (b.1) is a case of pro-adverb in function of direct reference, (b.2) is a case of pro-adverb in function of anaphoric reference, and (b.3) is a case of pro-adverb performing a generalization function (and anaphoric reference).

The following are examples of pro-adjectives:

- (c.1) What colour will you paint the house? I would like my house to be *this* [pointing at a sample]
  - (c.2) Victoria is shy, but Joan is not so.

(c. 3) Victoria is some thing that Joan is not  $[\exists v \ (Victoria is \ v \& \ Joan \ is \ not \ v)].$ 

In (c.1), this functions as a pro-adjective that is in the place of a colour word. In (c.2) so works as a variable that anaphorically refers to the adjective shy, and in (c. 3) something is a quantifier that quantifies over qualities, so that the instances of (c.3) have to include adjectives in the argument place.

That in natural languages there are pro-forms other than pronouns is something that has been widely defended. Thinking of Ramsey, Prior, Grover, and Williams will be enough. If we are convinced that the class of pro-forms is wider than the class of pro-nouns, then we will not object pro-sentences.

Pro-sentences are typical pro-forms, and as such they perform the same three tasks performed by the rest of pro-forms. Let see some examples:

- (d.1) What did she say? She said this [pointing to a sentence in a newspaper]
- (d.2) Bush said that Katrina would be harmless and people believed it
- (d.3) Everything President Bush says is ratified by Condoleeza Rice  $[\forall p$  (President Bush says that p Condoleeza Rice says that p)].

There are some topical objections launched once and again against the analysis of pro-forms that we have put forward. The most obvious is that this analysis requires higher-order quantification and that this obliges us to embrace an untenable ontology. First of all, the proponents of the prosentential view are aware of this alleged obstacle. And the answer is that the objection is unjustified. There is no reason to maintain, pace Quine and his followers, that quantification exhibits our ontological commitments. In natural languages we use quantifiers related to all kind of expressions, and we do not feel that our ontology is overcrowded with skylines, ways of cooking rice, and secret desires together with medium size objects. And we are right. Ontology is signalled by referential expressions, and quantifiers and the variables bound by them are not of this kind. But a complete and worked out answer to this qualm is out of the scope of this paper<sup>1</sup>

Having what has been said so far as theoretical background, let us go now for the explanation of truth. Languages need pro-forms because they are the only means of anaphoric reference and generalization. Without them, the expressive power of languages would be considerably shortened. Some uses of pro-forms are uses of laziness, but in cases of anaphoric reference and generalization pro-forms cannot be dispensed with. Examples of uses of laziness in which pro-sentences are involved are responsible for the widespread false idea that the truth operator is redundant. And cases of anaphoric reference and generalization explain why it is not. In general, the truth operator is as redundant as any other kind of pro-forms, and we have independent theories that explain that pronouns and demonstratives are not<sup>2</sup>

Thus, we can assume that we need pro-forms. In a formal language as the language of propositional calculus we have single propositional variables, the

<sup>&</sup>lt;sup>1</sup>To a highly convincing and deeply informed defence of non-nominal quantification see Prior (1971), Chapter 3, and Williams (1989).

<sup>&</sup>lt;sup>2</sup>See for instance the explanations about quasi-indicators due to H-N. Castañeda (1967, 74).

sentential letters. Wittgenstein also used propositional variables under the name of the general form of the proposition,  $\varphi x$ . In other formal languages, in the first order predicate calculus for instance, we can interpret formulae as complex propositional variables of a certain kind. Natural languages<sup>3</sup> possess the same variety. We have single propositional variables, although unfortunately, there are only two of them, yes and no. Grammar characterizes yes and no as adverbs, but from a logical point of view the kind of pro-form to which a particular token belongs does not depend on their syntactic category but on the kind of item from which it inherits its content. And in this case, yes and no inherits, in positive or negative, complete propositional contents. These two unique single propositional variables are patently not enough to do all the work that prosentences have to perform. But natural languages have other resources. In particular, they have means of building complex propositional variables. Some of these means are the dummy predicates is true, is a fact and others.

In examples (d.1) (d.3), this, and it have the syntactic category of pro-nouns, although the logical category of pro-sentences, and -thing in the quantifier binds also pro-nouns. A slight paraphrase of (d.3) will clarify this:

(d.3) When Georg Bush says anything, Condoleeza Rice ratifies it.

#### 1.2 The syntactic function of the truth predicate

The truth predicate also performs an indispensable syntactic function. In the previous examples but for those in the first group, the syntactic category of the pro-form does not coincide with its logical status. In (d.3) the expression that is a pro-sentence from a logical point of view has the status of a pronoun. Nevertheless, there are situations in which we need pro-sentences with the syntactic status of sentences. That is, there are situations in which a prosentential use of, say, it needs to possess the status of a well-formed sentence to be able to be stated preserving the rules of grammar.

Imagine that Victoria utters I do not like Mondays to express the proposition that she does not like Mondays. We can refer to her claim by different means. We can say that she really believed what she said, and here what she said is the pro-sentence. When we refer to a proposition, we use an expression appropriate for referring, i. e., a singular term, and in these cases what is logically a prosentence is syntactically a pro-noun, or a definite description. A useful way of referring to propositional contents in the written language is using inverted commas  $^4$ .

In the same sense in which we have in natural languages mechanisms to squeeze complete propositions into singular terms, we also have mechanisms to

<sup>&</sup>lt;sup>3</sup>We are referring to Indo-European languages; we do not know how other languages work. It is not too risky to suppose that the use of variables of different categories might be a semantic universal, but we do not have proofs that this is so.

<sup>&</sup>lt;sup>4</sup>Inverted commas have many other uses, not only this one, and when they are a mechanism of reference they not always refer to a content. They can refer to the sentence it self, either type or token, or to some aspects of it. See, for instance, Haack (1974), Davidson (1979), Richard (1986), Bennet (1986), or Cappelen and Lepore (1997).

execute the opposite movement. If we call the former mechanisms nominalizers, we can also call the latter mechanisms de-nominalizers. Recall that this is the function that Horwich (1998) concedes to the truth predicate, and it is a generalization of the famous Quinean disquotationalism. The two functions of obtaining singular terms out of propositions and propositions out of singular terms end in what the Kneales have dubbed designations of propositions and expressions of them, respectively. An example

Proposition: Victoria says she does not like Mondays

Designation of the proposition (exhibitive): Victoria does not like Mondays

Designation of the proposition (blind): What Victoria said

Expression of the proposition (exhibitive): Victoria does not like Mondays is true (is a true sentence)

Expression of the proposition (blind): What Victoria said is true.

There are other denominalizers in natural languages. is a fact is a well-known one, a false friend that have nurtured the correspondence theories of truth. What Victoria said is true is a prosentence (or a prosentence and the dummy truth predicate, it depends on authors<sup>5</sup>) constructed out from a blind designation of a proposition and a denominalizer. Its content depends on its anaphoric head. In the previous example its content is that Victoria does not like Mondays, but in different situations it can inherit any propositional content whatsoever. What Victoria said is a fact has exactly the same structure and function, and thus connecting the two expressions (or their contents) by an equivalence sign results in a true claim, What Victoria said is true *iff* it is a fact, that does not take us closer to the understanding of any of the predicables involved.

Thus, the syntactic function of the truth predicate is to convert designations of propositions into expressions of them, restoring the status of sentencehood to singular terms with the content of propositions.

#### 1.3 The pragmatic function of the truth predicate

We aim at truth when we produce assertions, and both notions, truth and assertion, belong to the same family of notions, they need each other, and their interdefinibility only means that we are characterising a particular linguistic game to which they both are constitutive. Truth is a semantic notion, its job is making explicit some of our inferential commitments. But what kind of commitment does a truth ascription make explicit? It makes explicit that we are engaged in a speech act with the force of a claim, although this is not its only job. Austin was accused by Strawson (Strawson, 1950, p. 182) of reducing the meaning of truth to this explicitating role. Since it brings into the open the force of a claim as a claim, it makes explicit the appropriateness of using its

<sup>&</sup>lt;sup>5</sup>Ramsey, Strawson, Horwich and Brandom offer a separate treatment of the truth predicate, while Grover, Camp and Belnap deal with complex pro-sentences like what he said is true as a block.

inherited content as something for which reasons can be given and demanded. In ascribing truth to a proposition we are disclosing our doxastic commitments to it. A truth ascription explicitly identifies a content as something to be counted among the available information, ready to be used in our inferential games. This can be done either by welcoming a proposition into the system for the first time or else by transferring contents from some circumstances, in which they have been accepted as claimable, to other, different, circumstances (considered similar in relevant ways as to permit a safe transfer).

Truth ascriptions by which we directly refer to a salient proposition are cases in which we allow the proposition at issue to enter the system of accepted information. The status of accepted information is highly context-dependent, and a proposition can be so characterized for some purposes, and inside this scope we can welcome it as true, while it can be rejected, and its entrance to the system vetoed, for some others, or in different circumstances, etc. Once contents are accepted, it is possible, using the truth operator, to generalize on them. But recall that the truth ascription does not produce nor cause the epistemic status of accepted belief. It merely sanctions it, makes it explicit and, by means of the rest of logical notions, the truth operator permits to handle propositional contents and possibly reorganize and project the information as in the case of generalizations. The truth operator operates at a second stage, i. e., it operates on the outputs of the justification processes. These processes can be positioned on any zone of the justificatory spectrum, they can be scientific procedures or assumptions of common sense, and they can be empirical or not, formal or not. All this belongs to epistemology and pragmatics, and would constitute the first step on top of which an explicit ascription of truth would be the second one.

# 2 Keeping track and answering some objections

The prosentential view explains the functioning of the truth predicate in all its aspects, syntactic, semantic and pragmatic. It is a technical position about the role of a wide class of expressions in natural languages, the class of proforms, to which the class of prosentences is but a part. But the truth predicate has had very bad luck in the history of philosophy. It has been damned with the burden of solving philosophical problems that have nothing to do with it. And for this reason we would like to vindicate its independence and limits. The prosentential account simply re-addresses truth constructions to the class of proforms, and explains how they instantiate all properties that define the class. In this sense, it is a technical theory as it is the Kaplanian view of demonstratives, or the Fregean view of quantifiers. It can be wrong, of course. But this should be decided inside the realm in which the truth predicate makes sense.

Nevertheless, the typical reaction to the prosentential view is saying (in the most favourable cases): OK, this is interesting but this does not explain why we should pursue truth, or why we should prefer true theories to false ones. And behind this kind of objection, it usually lies a conscious or unconscious

categorization of prosententialism as deflationism (whatever this might mean), and a concealed accusation of relativism. There is something true in this objection: that prosententialism does not explain some of the aspects involved in the objection. The quick prosententialist answer is that prosententialism answers everything that has to be answered by a theory of truth. And that the aspects of the objection not answered by it are aspect that are independent of, and unrelated with, the communicative role of the truth predicate. This kind of reply usually leaves the objector dissatisfied and with the impression that something important has vanished. And in some sense he is right. For this reason, we will take a different path. Instead of insisting in the prosententialist view, we will analyse the objection itself.

Let us focus on a particular version of the objection:

Objection 1 (O1): prosententialism does not explain why science should pursue the truth.

O1 contains the following thesis:

Thesis 1 (T1): science should pursue the truth

To make things clearer from the beginning, it is necessary to say that prosententialism does accept T1 or, better, that prosententialism as such can accommodate T1 in its theoretical framework without tension. For, we have insisted, prosententialism is neutral about the several metaphysical and epistemological options available. And thus there might be prosententialists that would reject T1. Although we do consider that one of the aims of science is pursuing truth, and we cannot think of any prosententialist that had thought that truth should not be counted among the aims of science.

The prosentential analysis of T1 is to consider the thesis as a generalization. What the thesis in fact says is that for all p, if p, then science should be interested in knowing that p. Here there is a new notion involved, the notion of knowledge. And somebody might think that the notion of truth has been already included in the notion of knowledge. But this does not need to be so, for several reasons. One of them is that a prosententialist theory of truth makes of truth an expressive notion and not a substantive one. Thus the definition of knowledge in terms of justified true belief should be revised. A possibility is explaining knowledge in terms of understanding, as Brandom (2005) does. And in any case, T1 can be paraphrased without involving the notion of knowledge as follows: for all p, if p, then science should be interested in being able to assert that p. Here the epistemic notion of knowledge has been substituted by the pragmatic notion of assertion.

We will distinguish, for the sake of precision, between the notions involved in the *formulation* of the objection, on the one hand, and the notions involved in the objection itself.

In the formulation in natural language the notion of truth appears. But PT interprets truth as means of forming prosentences that can be used when needed. One of these uses in which prosentences are no dispensable is as variables of quantification. Thus, PT understands T1 as

T1\* p (p science should try to be able to state that p)

The content of a generalization is the content of its instances. In an inferentialist view as the one maintained here the content of a generalization is its inferential potential. But, again, prosententialism is neutral between inferentialism and representationalism. Instances of T1 are

- That if the human genoma has such-and-such-ingredients, scientist should try to be able to state that it has such-and-such ingredients.
- That if the composition of Mars atmosphere is such-and-such, science should be interested in being in the position to assert that the composition of Mars atmosphere is such-and-such.

T1, or T1\*, cannot be stated in a single act of assertion without using quantifiers, among other reasons because it involves contents that we still cannot formulate. T1, and also T1\*, are genuine generalizations and for this reason they are projected to the future. For sure, there will be theoretical aims of science that we still do not know. To encapsulate all of them, even without knowing them, we use the mechanism of generalization. The mechanism of generalization can be applied to any sort of linguistically codified items, as we have seen. In any case, what is needed is a provision of proforms of the appropriate kind. The relevant items involved in science, or knowledge, are propositions and theories, and here truth shows its usefulness, providing with pro-sentences that will be the variables bound in generalizations in these contexts.

The forming process of the content of O1 and of T1 has, so to say, two steps, in one we have some of the particular contents, that if water is  $H_2O$ , science should be interested in being able to affirm that  $H_2O$ , or that if the temperature of the Earth is rising, science should pursue to be able to assert that the temperature of the Earth is rising. And now we are ready for the generalization step, that, semi-formalized, will look like this: that if p, science should be interested in discovering that p. And in run-of-the-mill natural language it looks like this: that science should pursue truth.

In O1, and in T1, there is a substantive philosophical question, the question of when we are allowed to characterize something as true. This is a genuine epistemological problem, whose prosentialist translation would be: when are we (or science) allowed to assert that p, for all p? The point here is that the natural language question means the same as its semi-formalized version. Once we have solved the latter, the former is just our customary way of saying it. This epistemological problem makes sense, and should be answered. But its answer does not depend on the notion of truth.

Even after all this explanation somebody might insist: yes, but this is not the last word. What we want to say with T1 is not T1\*, but T2\*

T2\*: for all p, if p is a fact, then science should be interested in knowing that p is true.

Well, we might want to say this, but T1\* and T2\* are strictly equivalent. And T2\* is reducible, after having eliminated the superfluous ingredients, to T1\*. In T2\* there are two prosentence formers, is a fact and is true. Both construe complex natural language prosentences out from designations of proposi-

tions. In T1\* and in T2\*, p is a propositional variable, thus it has the appropriate syntactic status to be the antecedent of the conditional and the argument of the epistemic operator. This means that, from a syntactic point of view, the use of is a fact and is true is idle, both are uses of laziness, of which every type of proform has occasions. The structure of T2\* is then as follows: p has been interpreted as a nominal variable, and then to reconstruct the structure of a whole sentence, the dummy predicate has been used, the denominalizer is a fact. The same happens with the argument of the epistemic operator: the alleged nominal variable p has been converted into a sentence by means of the denominalizer is true. Nothing is gained here. From a semantic point of view, p is a variable that varies on propositions and the content of any of its instances will be the proposition of which we are interested in saying that science pursues being able to state it. Imagine that the case we are interested in is that if the temperature of the Earth is rising, science should pursue to be able to assert that the temperature of the Earth is rising. The content of it is true that the temperature of the Earth is rising is exactly the same as the content of the sentence the temperature of the Earth is rising. The reason is that that is a nominalizer that converts the sentence the temperature of the Earth is rising into a singular term, which designates the content of this sentence when uttered, and It is true that is a denominalizer that converts this designation into an expression of the same content. Truth ascriptions (and the rest of prosentences) do not possess a content by themselves.

### 3 Final Remarks

The prosentential view is the best theory available about the meaning of the truth operator and the functions that truth ascriptions perform in natural languages. It classifies truth ascriptions as a kind of proforms and explains how they behave as the rest of the expressions of the general kind. It explains the appeal that correspondence theories have had through history, the intuition of redundantism, and solves the liar paradox in a very elegant way. Only for this it should be counted among the theories that deserve attention. And besides all this, it does not oblige us to modify our linguistic practices, or to reject or dissolve philosophical problems as nonsensical. On the contrary, it gives us theoretical tools to understand the real problems that we have to formulate by means of the truth predicate.

We have not presented the prosentential theory in all its power, nor have explained the semantic problems it solves. These have not been the aims of the present paper. What we have intended has been to trace its border with epistemology, and in doing so, we hope that to have contributed to clean the way for an unprejudiced consideration.

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