CHAPTER 5
OBJECTS OF TRUTH

5.1. I call "alethics" (from "αλεθεια") the doctrine studying the matter of truth, once *matter of truth* is assumed in the wide acceptation according to which, for instance, also the notions of decidability, probability, falsity concern the matter of truth. This notwithstanding, for the sake of concision, everywhere possible I will reason only on *true*, entrusting the reader with the immediate extrapolations.

Consequently I call "alesis" a statement where an alethic attribute is ascribed to an object statement.

Why a new word? To fill a lexical gap. "False". "decidable" et cetera adduce alethic attributes (values) just as "female", "hermaphrodite" et cetera adduce sexual attributes (values). Without the new word, for instance, we should say that "false" adduces a truth attribute, and this seems to me a para-oxymoron like saying that "female" adduces an attribute of masculinity. Furthermore every important doctrine has its specific name, and for sure alethics is an important one.

5.2. The only aim of this chapter is to show that the question
(5.i)   are sentences or propositions the very objects of truth?
admits only one consistent answer: propositions. In subsequent chapters alethics will be faced formally through an axiomatic system where deductive logic becomes simply a border case of inductive one.

5.2.1. Indeed, at first sight, (5.i) seems a pseudoproblem. Already Parsons (1974, Note p.407) had written: *I assume that the primary truth vehicles are sentences; otherwise "is true" should be read as "expresses a true proposition".* And Gupta (1982, p.4): *I assume that the objects of truth are sentences...... A more intensional proposal, such as that the objects of truth are ... propositions, is not acceptable to us .... In any case a theorist who insists that it is the latter that are the objects of truth may take us to be giving a theory not of truth but rather of the concept "being a sentence that expresses a true ... proposition".*

On these grounds their basic argument can be extrapolated as follows: these who insist that propositions are the objects of truth can define "veracious" ("fallacious" et cetera) to mean *expressing a true (a false et cetera) proposition* and refer the theory to veraciousness (fallaciousness et cetera).

I call such an argument "pertinence trick" to mean simply that in my opinion it is intrinsically misleading.

5.3. The current canonical position, according to which sentences are the actual objects of truth, follows from a famous article (1943), where Tarski, inquiring into a definition (**definition**, I re-emphasize) of truth, claims that his purpose is not to assign a new meaning to a familiar word, but, on the contrary, to understand its current meaning. I agree totally with his purpose: the task is not to dictate a sovereign (stipulative) definition, but to reach an heuristic one. Then both of us agree that
(5.ii)   when we currently say that something is true what are we speaking of?
is an equivalent formulation of (5.i).

Tarski remarks that "true" is used with reference sometimes to sentences, and sometimes to propositions, yet he concludes that for many reasons the former choice represents the best one, also because "proposition" is a term whose meaning has been very debated but never satisfactorily clarified (*certain ideal entities called "propositions"*). Since he does not expose the many reasons supporting his choice I cannot discuss them; anyhow I can expose some very strong arguments supporting my claim according to which sentences, far from being the best choice, are even an incoherent one.

5.4. The first argument is based on a rule I call "criterion of influence". By
                        no predicate can concern a kind of referent whose characteristics
                        do not influence the alethic value of the respective message
I epitomize a propaedeutic version of this criterion, whose obviousness is promptly showed through some minute examples.

5.4.1. Bob shows us a one dollar banknote and says
(5.iii)   it is a little bill, indeed
thus puzzling us: is he speaking 'syntactically' of its small size or is he speaking 'semantically' of its poor purchasing power? In other words: does his "little", which surely pertains to the banknote, regard the banknote itself or rather its purchasing power? Of course, as logicians, we cannot follow the simplest procedure (to submit directly our perplexity to Bob). Yet Tom is enlightened by a genial idea:
                        is this one little too?
he asks Bob showing him a 1000$ banknote. If Bob answers

yes, obviously!

we all understand that (5.iii) speaks of the size; on the contrary, if Bob answers

no, obviously!

we all understand that (5.iii) speaks of the purchasing power. Why? Because, since the two banknotes have the same size and a very different purchasing power, if a change involving only the purchasing power overturns Bob's opinion, surely he was not speaking of the size (as to the size, nothing is changed). Et cetera.

5.4.2. Another example (§3.2.2) is the lady's cross-word. Her

(5.iv)   -shuffler- is too short

cannot but refer to the word intended as a graphic type because any modification preserving the same graphic type (any modification of the phonetics or of the graphic token) is of no moment as for the alethic value of (5.iv).

5.4.3. The criterion of influence, above applied to -is little- and to -is too short-, can be identically applied to any alethic predicate (that is to any alesis). On its basis it is sufficient to ascertain whether an alesis, so to say, is homonymy-independent or synonymy-independent. An easy task indeed, since we can ascertain both the homonymy dependence and the synonymy independence of an alesis. In fact, since in a situation where different sentences adduce the same proposition the alethic value must be only one, while in the reciprocal situation (only one sentence adducing different propositions) the alethic values may be different, alethic predicates cannot regard sentences and can regard propositions.

5.4.4. Let me recall the example of §1.9.2. Bob wishes a new female swan to marry his cob and a new instrument for ink in his drawings, yet, since he cannot meet both expenses, he renounces the latter. Then, since

(5.v)   Bob bought a pen

is only one sentence, should we insist on the syntactical pertinence of alethic predicates, we ought to conclude that (4.v) is at the same time true (under the zoological interpretation of "pen") and false (under the other one), so falling into incoherence. On the contrary if we acknowledge that alethic predicates pertain to propositions, all is right: since "pen" is a homonymy bearer, (4.v) adduces (at least) two different propositions, and while one of them is true, the other is false.

In other words. The truth (or falsity et cetera) of

(5.vi)   A female swan has been purchased by Bob

can be inferred from the truth (or falsity et cetera) of (5.v) in its zoological interpretation; and vice versa. But what (5.v) in its zoological interpretation and (5.vi) have in common is the piece of information they adduce, surely not the linguistic vehicle adducing such a piece of information. And just because the piece of information is the same, the alethic value must be the same.

5.4.5. Another example. Here we have two documents: the (ideographic) report of the Japanese Intelligence about the secret nuclear programs of an Asian State, and its English translation. Once agreed by hypothesis that the translation is perfect (contents-conservative) we cannot coherently assign different alethic values to the two reports, though their texts are radically different. And why is it necessary to suppose that the translation is perfect? Merely because it it were not, a discrepancy in the respective contents (meanings, propositions) could justify the assignation of two different alethic values.

5.5. The argument is immediately extrapolable from informational identities to informational implications. For instance it would be manifestly incoherent to state that

Bill is an Irish setter

is true and that

Bill is a dog

is false just because *Irish setter* implies *dog*, and this meaning dependence entails an alethic dependence.

Reciprocally if we know that the truth of

This animal is a celep

implies the falsity of

This animal is a bird

we do not need to know exactly what a celep is to conclude that *celep* implies *non-bird*.

5.5.1. Of course we cannot forbid Tarski and his epigones to agree that a sentence is veracious iff it adduces a true proposition. Actually heuristic definitions allow the introduction of attributes whose pertinence depends on our free choices. This notwithstanding the regard of such attributes is not at all free; and so then assimilating the use of "veracious" to the current use of "true" is radically untenable. We come back to Bob's cuckoldries (§2.9). A theory of conjugal honesty grounded on a definition as

"cuckold" means *husband of an unfaithful wife*

is an only apparent 'husbandization' of the matter: undoubtedly husbands are the objects of cuckholdness, but to dog husbands would be a stupid measure just because the only way to ascertain if a husband is a cuckold is to ascertain if his wife is unfaithful. Therefore we fall again into a situation dealing with the behaviour of a wife.

Analogously, since we have ascertained that in its current use *true* necessarily concerns propositions, a theory of veraciousness grounded on the assumption of "veracious" as an abbreviation of "expressing a true proposition" is an only apparent 'syntactization' of the matter. For instance, we can assign an alethic value to

"Ava loves Bob or Tom" is a disjunctive sentence

on the basis of merely syntactic considerations (roughly: a sentence is disjunctive iff an "or" occurs); but in order to assign an alethic value to

"Ava loves Bob or Tom" is a veracious sentence

we must ascertain whether Ava loves Bob or Tom, then whether *Ava loves Bob or Tom* is true. And exactly because scrutinizing the sentence without looking at the proposition would be a hopeless procedure, the appeal to "veracious" is a mere artifice; such an attribute pertains to sentences, but unavoidably regards propositions. Here is the pertinence trick.

5.6.   In subsequent chapters all these intuitive conclusions will be formally derived from a strictly axiomatic definition of *true* (*false* et cetera). However they represent a massive proof that when in our everyday language we say that something is true (or false et cetera) we (necessarily though perhaps unconsciously) are referring to pieces of information. I write "pieces of information" instead of "propositions" in order to point out that a very general discourse about the objects of truth cannot be limited to propositions. In fact the Tarskian dilemma

sentences or propositions?

is reductive, since it tacitly presupposes a linguistic component while, on the contrary, alethic predicates can also be ascribed to non-linguistic objects, that is to non-linguistically mediated pieces of information.

A proposition is a piece of information adduced by a sentence, where a sentence is a sequence of words concatenated in compliance with well specifiable rules of formation. But even if we widen *language* (then *sentence*) in order to admit also non strictly linguistic transmissions of signs, the consequently widened *proposition* is still insufficient to contain the pieces of information acquired without any intervention of signs. Therefore, since alethic predicates can be properly ascribed to such pieces of information too, it would be reductive to claim that propositions are the very object of truth. The very objects of truth are pieces of information, and propositions are only a subset (the linguistically mediated pieces of information).

5.6.1.   An example. Immersed in a thick fog and escorted by my mastiff Tabù I am going through an unknown vineyard. Suddenly we realize that a gigantic, anthropomorphic and hostile figure is bobbing very close to us. While my heart goes mad, Tabù growls darkly. Two ridiculous reactions, because a bee-master's overalls hanging from a branch and tossed by a gust of wind can neither represent a danger, nor can be intimidated by a dark growl. Though

(5.vii)   a gigantic, anthropomorphic and hostile figure is threatening us

is a reasonable way to express in English the conviction which caused my reaction, I firmly believe that no linguistic mediation intervened in the process, also because finding acceptable words for describing the experience would have requested much more time than the flashing start of my tachycardia. And anyhow it is obvious that no linguistic mediation is hypothesizable in a dog, particularly in a dog whose intelligence is rather torpid.

Then, the immediate and alinguistic information which finds in something like (5.vii) its linguistic expression was false (actually our reactions are ridiculous because dictated by a quite erroneous interpretation of certain sensorial perceptions). Neither are the overalls a sign, as the bee-master who hanged it on the branch did not wish to communicate anything to anybody. This notwithstanding I am quite legitimated to say that I mistook myself, then that the piece of information which finds in (5.vii) its linguistic formulation was already false before finding such a formulation; but thus I am ascribing an alethic predicate to a non-propositional piece of information.

More about this matter in §13.8.1.

5.6.2.   In this essay we shall only deal with linguistic sentences and consequently with pieces of information whose propositional trait is assured. Yet these considerations about non-propositional pieces of information are not superfluous, since they show that the informational approach looks at the whole matter from a higher viewpoint. I mean that while the occurrence of a sign is necessary to configure a sentence (in its widest acceptation of a linguistic informational source), no occurrence of a sign is necessary to configure the source of an alethic object.

Hence a concise argument supporting the impossibility to give the syntactical solution to (5.ii): logic was born millions years before any language therefore, either logic does not concern sentences, or through millions of years it existed without any concern.

Once clarified this point, the mentioned linguistic character of the matter under scrutiny induces me to continue speaking of propositions to mean generically *pieces of information*.

5.7. A classical argument against the claim that sentences are the objects of truth is based on indexicality. According to it, for instance, since the alethic value of a message like

(5.viii)   yesterday it was raining here

varies with the moment "yesterday" and the place "here" refer to, it cannot concern the sentence, which is always the same. I obviously agree with the conclusion, yet I think that the argument does not grip. Very briefly (awaiting the detailed analysis proposed in Chapter 16). Indexical terms are contextual variables, that is variables whose contingent values are fixed by the context in which they are uttered; therefore, since (5.viii) is an open sentence (a free-variables-laden sentence), the adduced (open) proposition can be alethically judged only after its closure (after the promotion of its two indexical variables). In this sense (5.viii) is a scheme of various free-variable-free sentences, and the fact that different free-variable-free sentences have potentially different alethic values is not evidence against the syntactic regard of alethic attributes.