ABSTRACT. The concept of semantic interpretation is a source of chronic confusion: the introduction of a notion of interpretation can be the result of several quite different kinds of considerations. Interpretation can be understood in at least three ways: as a process of “dis-abstraction” of formulas, as technical tool for the sake of characterizing truth, or as a reconstruction of meaning-assignment. However essentially different these motifs are and however properly they must be kept apart, these can all be brought to one and the same notion of interpretation: to the notion of a compositional evaluation of expressions inducing a “possible” distribution of truth values among statements.

1. WHAT IS A SEMANTIC INTERPRETATION?

The concept of semantic interpretation might seem quite unproblematic. Expressions of our natural language stand for a kind of objects; therefore, if we make a logical formalization of language, we should make the expressions of the formal language also stand for something. Semantic interpretation is then what establishes the link between the formulas and what they stand for. According to this view, semantic interpretation is a formal imitation of the real denotandum/denotatum relation.

However, such a view, although accepted by many theoreticians of language, is utterly naive; it rests on the identification of language with a kind of nomenclature. We assume that expressions are sort of labels which we attach to pre-existing, real-world objects to make the objects capable of being referred to. Accordingly, our world is a great museum, the exhibits of which are waiting to be classified and named by us; therefore Quine (1969) calls this view the museum myth.

However, there are also other meanings in which we use the term interpretation. Even if we disregard the sense which underlies the enterprise of hermeneutics, there remain at least two other meanings, both of which are essential for formal logic and for the logical analysis of language. In one of these meanings interpretation is an assignment of concrete instances to items of an abstract formal system, typically an assignment of concrete language expressions to abstract formulas. Then there is the technical sense of interpretation used in textbooks of
mathematical logic, where interpretation is regarded as a technical
means of characterizing truth.¹

However, are these three meanings really essentially different? Some
authors appear to feel free to pass from one to another (Tarski's, 1936,
introduction of the concept of model is an example of a fluent passage
from the second meaning to the third; while Cresswell's, 1973, easy-
going switch from semantics to "metaphysics" does not seem to make
any distinction between the third and the first meaning, nor do many
other contemporary "metaphysical" considerations based on model the-
ory). In order to be able to understand the proper role of the concept
of interpretation within the enterprise of formal logic and logical seman-
tics, we must first clarify the basic tenets of logical formalization.

2. TWO MODES OF DOING FORMALIZATION

Formal logic is based on the utilization of symbols. Symbols function
as substitutes for natural language expressions; it is the utilizations of
symbols that help us to ignore the irrelevant aspects of natural language
expressions and to point out patterns relevant for consequence. Thus,
the symbolization is that which helps us, as Frege (1879, p. IV) put it,
"die Bündigkeit einer Schlußkette auf die sicherste Weise zu prüfen und
die Voraussetzung, die sich unbemerkt einschleichen will, anzuzeigen,
damit letztere auf ihren Ursprung untersucht werden könne".

However, symbols may be utilized in different ways. It is especially
important to distinguish between two quite disparate modes of their
employment, between the regimentative mode and the abstractive mode.

Employing symbols in the regimentative mode means no more than
to disregard irrelevant peculiarities of grammar of natural language. To
express the fact that John loves Mary we may use various natural
language statements, e.g. John loves Mary, It is John who loves Mary,
Mary is loved by John; however, on the level of logical schematization
all these ways may boil down to canonical loves(John, Mary), or, if we
employ P to represent loves, T₁ to represent John and T₂ to represent
Mary, to P(T₁, T₂).² Hence regimentation means only the reduction of
redundancies in the lexicon and/or grammar of natural language.

This means that regimentation is simply a kind of sifting of natural
language through the sieve of relevance; what is relevant is unambigu-
ously retained in the resulting formal representation, that which is not,
vanishes. Symbols and their concatenations utilized for the purposes of