

# Ontological definition

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*'Because words are the signs of our ideas, the system inherent in natural language must be based on the system inherent in our knowledge.'*

Etienne Bonnot de Condillac, *Grammaire*, Chapter II.

The operationalization of terminologies in a data processing context has once again placed the primacy of the concept in the foreground and raised the issue of how it can be defined and computationally represented. Within this scope, ontologies, in the sense of knowledge engineering (i.e. a formal specification of the conceptualization of a subject field), pave the way towards modeling the notional system. By the same token, however, putting ontology at the heart of and making it the starting point of terminological work also means rethinking terminology's very principles and methods, thus reminding us of the fact that knowledge of the subject field must also be taken into account. Terminology is more than just specialized lexicography, in the same way a concept, by its extra linguistic nature, cannot be reduced to the terms speaking of it. By recognizing terminology's double conceptual and linguistic dimension – terminology is both a science of objects and a science of words – ontology yields a distinction between the *definition of a term written in natural language* (i.e. a linguistic explanation of a term) and the *definition of a concept written in a formal language* (i.e. a formal specification of a concept, its *ontological definition*). It is the only one to be standardized vis-à-vis the knowledge of the subject field and thus upholds linguistic diversity.

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## 1. Information society: Why terminologies must be operationalized

Today's digital society has profoundly changed our working methods. It has paved the way for new data processing practices revolving around terminology: translation tools, semantic and multilingual search engines, knowledge management, digital libraries, specialized encyclopaedias, etc., all of which rely on terminology *operationalization*, i.e. a computational representation of their concept system. We should, indeed, not limit ourselves to processings – however complex – of the lexical dimension of terminology without also taking the terms' meaning into account. Finding data thus, and increasingly so, goes beyond merely looking up key words, even linguistically and