Computer Assisted Cross-textual Semantic Analysis

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We present the main theoretical aspects of the development of a system aiming at operationalizing the comprehensive competence of a cognitive agent dealing with texts in an intertextual environment. By this last, we wish to announce that we subscribe to the conception according to which the correct description of meanings contained in a particular text has to be carried out by a systematic cross-textual analysis. In other words, whatever the cognitive processes might be, the access to some meaning of the text necessitates a distributed textual material, defined over a class of texts. Clearly, such an assumption needs theoretic foundations in a framework where the notion of textuality is taken as primitive. For this, we have chosen the theory of Interpretative Semantics (Rastier, 1987).

Structuralist in its origins, this semantic theory envisages every semantic phenomenon in language as a special case of an hermeneutic process. It takes thus into account the top-down hermeneutic principle according to which the local semantic structures are constrained, and even decided, by a global semantic information (and not the converse). Globality levels are uniformly carried out by different levels of textuality. Indeed, the fundamental and rather autonomous entity considered by the Interpretative Semantics is the text.

We extend this postulate including intertextual considerations. Our foundational claim is that the meaning of a text has to be uniformly considered in connection to other texts, forming something loosely equivalent to a *"society of texts"*. In particular cases, such a textual "society" may be explicit and takes the form of an operational textual context. This textual context is precisely defined in our paper by the technical term, *"anagnosis"*, a specific interpretative structure defined over an identified set of texts. The first hypothesis is that any particular meaning, at whatever level of syntactic complexity it appears, comes from a dual determination, giving rise to a combined emergence effect: *(i.) "intratextual"*, as a meaning structure set up of selected textual information ; and *(ii.) "intertextual"*, as a meaning constraint over the intratextual structures, operationalized by the notion of anagnosis. Thus, the concept of anagnosis reconsiders any particular text as part of a restricted society of texts. Consequently, the semantic identity of a text is established and achieved only in relation to other texts, building with them the anagnosis itself. Quite different texts may form an anagnosis; but a particular anagnosis is not formed by a random selection of texts.

The anagnosis constrains and organizes the semic analysis, by projecting the intertext on the considered text. Indeed, the same text inside another anagnosis will in general be tagged by different semes, *i.e.* the semantic identity of a text is intertext-dependent. A text which is not positioned inside an anagnosis should not be semantically tagged.

We tried to make such a conception tractable into conventional computer environments. Clearly, as far as the user determines the key entity (the anagnosis), the only envisageable development is the anthropocentric one. The proposed prototype may be useful to scholars of classical or modern philology, historians, philosophers, sociologists, etc. as far as their work is conceived as a hermeneutic enterprise. Computer implementation is intended to help the user-reader to set his (or her) interpretative processes up, *i.e.* to facilitate his (or her) interpretative task. Such a project aims not only at accelerating the rationalization of the comprehension process but also at improving its quality; and, furthermore, at making interpretations reusable and directly linked to explicit corpora.

As an example we have been interested in the term of *"dialectics"* in Plotinus' works and we have shown how illusory and rather deceptive an interpretation of the term outside the neoplatonic corpora may be. Generally, a detailed examination of the comprehension of the term requires the creation of an oriented analysis. Even more, depending on how the last is established, the meaning may differ considerably (taking into account the platonic notion of dialectics or not, using textual material out of the aristotelic corpus or not, etc.)

The anthropocentric architecture underlying our understanding of human/machine cooperation in our case assigns to the machine a somehow "catalyst" position. As such, the machine becomes the medium likely to facilitate the rationalization of the semantic identity of an entity. Its place is better understood as a suggestive device rather than an automatic procedure. What is automatically computed, is the formal connection of the textual material with the intertextual framework, the coherence of the established interdependence, as well as the propagation of semic attributions to localized textual portions. *Hermeneia is definitely user-dependent.*

References

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