Préservation des mémoires numériques

Apports du terme et du concept

Christophe Roche

ABSTRACT: Beyond the material dimension (physical support, encoding format, reading system), digital memories are preserved, if they are accessible. As a matter of fact, in today’s information world, to exist is to be visible and accessible. How to represent information and render it in a readable format, but also how to organize and classify it, so that it is accessible? But also how and what to look for? How then to find it? These issues, all the more important than data, through the internet and beyond the barrier of languages and cultures, are more and more open and interlinked through multiple relationships in an inextricable web (open and linked data). Facing these issues, the “knowledge” of the domain, whether linguistic, through the terms used to describe digital memories, or conceptual, through the ideas that we have of them, appears as a panacea. Domain knowledge, sometimes also called “metadata” or “semantics”, aims to organize and structure our memories, identify the most suitable terms for describing them, and thus preserve digital heritage, since we will then know how to access it. This approach falls under four main disciplines: Information Sciences – Thesaurus to be more precise –, Terminology, since term and concept are involved, Linguistics to some extent, and, most importantly, Knowledge representation; four disciplines also heavily impacted by the latest advances in digital. The web has become semantic, and knowledge bases are rethought as ontologies. The latter notion has also permeated Terminology and Thesaurus, as well as the ISO international standards on Terminology (TC 37) and Information and documentation (TC 46).

This talk will present the notions of Terminology, Ontology and Thesaurus from the perspective of term and concept, what these approaches have in common, but also how they differ. Indeed, if a terminology or an ontology can be used for information management, that does not mean it can be considered as a thesaurus, nor should it be taken for one. However, combining terminologies, thesauri, and ontologies into a new paradigm, which remains to be defined, opens up new perspectives, as suggested by one of the topics of this conference (“thesauri and ontologies”).

The final part of the talk will be dedicated to the notion of ontoterminology, i.e. a terminology whose concept system is a formal ontology. Such an approach allows an information management system to take multilingualism and multiculturalism into account. It also offers new paradigms of interactive navigation and semantic search. This will be illustrated by means of an example of an ontology-oriented CMS (Content Management System). The paper will close with the presentation of a software environment for multilingual ontology-oriented thesauri building carried out under the umbrella of a European project in Cultural Heritage (FP7 AthenaPlus).

Keywords: Terminology, Ontology, Thesaurus, Ontoterminology, Digital heritage.

* Condillac Research Group on “Terminology & Ontology” – LISTIC Lab, University Savoy Mont Blanc, Chambéry, France. christophe.roche@univ-savoie.fr.