THE READING EXPERIENCES ONTOLOGY: A USE-CASE FOR ONTOME.

François Vignale*[1], Francesco Beretta[2], and Vincent Alamercery[3]

[1]Langues, Littératures, Linguistique des universités dÁngers et du Mans – Le Mans Université : EA4335, Université d'Angers : EA4335 – France

[2]LAboratoire de Recherche Historique Rhône-Alpes - UMR5190 (LARHRA) – Université Pierre Mendès France - Grenoble 2, École Normale Supérieure - Lyon, Université Lumière - Lyon 2, Université Jean Moulin - Lyon III, Centre National de la Recherche Scientifique : UMR5190 – Institut des Sciences de lHomme - 14, avenue Berthelot - 69363 Lyon cedex 07, France

[3]LAboratoire de Recherche Historique Rhône-Alpes - UMR5190 – École Normale Supérieure - Lyon – France

Abstract

This paper aims to present the development strategy of the ontology proposed in the READ-IT project and the contributions it makes to the conceptual description of reading experiences and, more broadly, to the description of intangible heritage and other "experiential" phenomena. In this regard, we will focus on the general framework and the way in which both alignments of CIDOC CRM with READ-IT's data model and creations of classes - when needed - have been carried out, as well as the benefits derived from the use of OntoME (ease of use, reliability of alignments, exports).
In recent decades, knowledge about the history of reading practices has increased considerably about " what " and " when " texts were read, but fundamental questions remain, such as "why" and "how" people read. Through the exploration of digital sources (diaries, letters, memoirs, computer mediated communications such as tweets, blog posts...) in search of traces of reading experiences from the 18th century until today, the READ-IT project (Reading Europe Advanced Data Investigation Tool, https://readit-project.eu) aims to better understand these phenomena with the help of exploration tools developed within the project. Among other challenges, READ-IT is facing the double difficulty that (1) the reading activity does not leave direct traces and is based on indirect testimonies and must therefore be considered intangible heritage, and (2) that some key notions (privacy, mass culture) have undergone considerable variations in time and space in Europe. READ-IT is funded by the Joint Programming Initiative for Cultural Heritage (2018-2021) and involves 5 partners (Le Mans Université, IRISA, France; Open University, UK; Universiteit Utrecht, Netherlands; Institute of Czech Literature, Czech Czech Republic) from 4 countries (France, United Kingdom, Netherlands, Czech Republic).

By combining different conceptions (Jauss 1982; Iser 1978) and following a source-based approach, we obtained a theoretical model proposing a minimal description where the reading experience is defined as a temporal phenomenon where a cognitive activity is occuring, in which a person interacts with a written content through a medium (Vignale et al. 2019).

*Speaker

This phenomenon can be preceded by premises (specific dispositions such as circumstances, habit, aim or reading skills) and followed by outcomes (effects such as achievement, feeling, belief, judgement ...).

With regard to the alignment strategy, since this project is about cultural heritage, the conceptual framework offered by CIDOC CRM and its extensions (Doerr 2005) has emerged as a pivot because it proposes classes describing central elements of READ-IT's model such as the concepts of activity (E7) and person (E21) despite the fact that the "experiential" dimension, essential to READ-IT, is not taken into account by CIDOC CRM. Besides that, its logic of interoperability and data integration imposes to remain at a high level of abstraction while data production needs for READ-IT require to model and create specific classes.

These alignments and creations were carried out with the OntoME (Ontology management environment - https://ontome.dataforhistory.org/) online application developed by LARHRA's Pôle Histoire Numérique. This application offers research projects the possibility to manage their ontology in an open and collaborative way. OntoME is a key element of the European Data for History consortium whose purpose is to improve the interoperability of geohistorical data in the data web (Beretta 2018; Beretta et al. 2019).

Among the dimensions absent from CIDOC CRM - but crucial for the manipulation of historical data, there is, for example, the way to take into account variations in the individual features attached to the actors (age or occupation of the reader at the time of the act of reading...) which require the creation of classes defining characteristics specific to an individual valid only at a time T. Here, we are reusing already existing classes defined in CIDOC CRM Generic Extension for Historical Data Management and Interoperability (histDMI) such as Gender (histC28), Name in a given langage (histC10) and Occupation (histC34). We are also contributing to the definition of other classes such as Religion (temporal entity) or Nationality (temporal entity), which might be ultimately implemented in histDMI.
There is also, regarding the act of reading, the fact that CIDOC CRM does not deal with the transitional dimension of the experience and the transformations (if existing) due to the cognitive activity of reading. These constraints require the creation of a specific namespace for READ-IT which should lead to the providing of an extension dedicated to the project for CIDOC CRM (http://ontome.dataforhistory.org/namespace/38). The Reading Experiences Ontology (REO) currently under development is integrating the many facets (circumstances, environment, specific conditions, premises, effects...) that characterize most of the "experiential" phenomena. It is therefore meant to be reused in the future.

Keywords: OntoME, CIDOC CRM, Ontology engineering