A Procedural Analysis of Users' Image Seeking Behaviour in Multilingual Environments

Evgenia Vasilakaki

Abstract

The wide spread adoption of the World Wide Web (WWW) and the passage to Semantic Web, the increasing amount of information daily produced in various languages and the growing need to gain access to multilingual information have generated interest in the development of techniques for Multilingual Information Retrieval (MLIR). MLIR is defined as the task of searching either a specific database or a set of databases, or the web for relevant information by using criteria in a chosen language (preferable in mother tongue) and retrieve all documents which match all the search criteria, regardless of the language of the documents or the indexed language and present them in a unified list.

This study aimed to investigate users' experiences when searching for images in multilingual environments. In particular, it aimed to explore users' specific behaviours and search strategies while searching for images in different languages and the factors that affected and/or informed these behaviours. In this context, FlickLing a basic cross-language search front-end to the well-known web application Flickr was adopted as a test object. The task assigned to 24 users was to search for the first three known, non-annotated images in FlickLing. The users did not know in advance in which of the six languages (English, German, Dutch, Spanish, French, Italian) supported by FlickLing the three images were described in forcing them to use both monolingual and multilingual modes to search for these.

In this context, an Inductive approach was employed and Grounded Theory (GT) served as the methodology for carrying out the data collection and analysis phase. In terms of data collection, Mixed Methods Research was adopted aiming to offset, complete and triangulate the data collected by four different methods such as questionnaire, observation, retrospective thinking aloud and interview. In terms of analysis, coding in process as described in Straussian GT was employed. This presentation will focus on the procedural analysis undertaken. In particular, details regarding the way in which all the data collected were analyzed during the three phases (open, axial and selective coding) are presented.