CULTURAL IMPACT ON KNOWLEDGE REPRESENTATION AND ORGANIZATION IN A SUBJECT DOMAIN

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INTRODUCTION

It has been claimed that culture affects the way in which knowledge is represented and organized. This is true even for subjects that are somehow considered as more neutral as it is the case of technology and science (Hassan, 2003). On the other hand, there is a demand for integration of cultural views in Knowledge organization systems (KOSs) in order to enrich the standard cultural and social perspective that these systems usually have (Srinivasan, 2007; Rao, 2006; Kargbo, 2005; Muswazi, 2001; Liew, 2004 and Doyle, 2006; Zeng, Kronenberg & Molholt, 2001). Cultural warrant in KOS (Beghtol, 2002) can be considered as a quality indicator that would allow universal use (Hunter & Beck, 2000; Treitler, 1996). In order to allow cultural differences to be represented and organized in KOSs in an integrated way, it is needed to get to know said differences so they can be represented and integrated to other views pertinent to the KOS that it is intended to be built.

OBJECTIVES

This study aims to unveil how different cultures, in this study Spain and Uruguay, can impact in the developing of a subject field such as that of Gender Studies, and how this may affect to knowledge representation and organization in KOS. Detecting differences in terminology, categorization and conceptualization of the field studied in order to suggest an integrated and supranational proposal for knowledge representation and organization in KOS is the final objective. To get this goal, an analysis of the domain has been conducted in order to know the dynamics and the content of Gender Studies in the two cultural areas studied.

MATERIALS AND METHODS

Primary documents on Gender Studies have been identified for the studied cultural areas. It has been considered all published between 1990 and 2005. The documentary typology is as follows: Monographies, Periodical publications, Conferences proceedings, and Research and Political Reports.

The methodology is based in the following claims:

1) Published documents in a subject area show actual knowledge in that area and they also give notice of the epistemology of said area. (Hjorland, 2002)

2) Indexing and terminological studies in a specialty are both methods for domain analysis (Hjorland, 2002).

Relevant terminology was pulled from selected sources by assigning free descriptors after making a content analysis. The terminology so obtained was located in an Access database that was designed for the purposes of this study. It has seven fields: name of term, identification number, source of term provenance, source code, onomasiological variants, semasiological variants and context. This database can give results on request that are very helpful for this type of study, such as lists of terms in excel, frequencies of terms, sources of the terms, etc.
Terminology in the data base was later examined according to a quantitative methodology based on the frequency of the terms' appearance in the documents. The assessment of this indicator was important because the the studied specialty in an interdiscipline in the process of consolidation, meaning that its terminology is unstable to a considerable degree. The higher or the lower impact of the selected terms within the domain will provide important information.

Finally, a comparative study between terminology coming from Uruguayan and Spaniard sources was made in order to find out possible cultural differences between both domains and to suggest ways of integration in a conceptual structure.

This procedure helped in the identification of different kinds of terms, many of them closely related to their original disciplinary provenance, and which showed how these “outsider” terms were incorporated into the interdisciplinary domain, according to the Gender epistemology. It also allowed to the identification of terminology representative of the cultural areas studied and of different terms categories and the possibility for an integrated knowledge organization structure.

RESULTS

After processing the terminology representing the studied cultural domains in the way describe above, the following results were obtained:

1) Terminological problems linked to local expressions spoken in each country were detected. Different terms used to name similar concepts was a remarkable problem.
2) Conceptual differences related to sociocultural development in each culture were also identified. There were found concepts that exist only in one of the studied countries.
3) It also has been evident that the thematic map for Gender studies has differences comparing the two cultures. Each culture shows not only a different tematic composition for Gender Studies, that is a different number a subjects in its composition, but also a different representation (importance) of some themes in the Gender domain.
4) A joint, integrated proposal could be suggested to allow both cultures to be represented in KOS without loosing their terminological and conceptual special features.

CONCLUSIONS

The claim that it is neccessary for KOS’s to integrate the cultures participating in those systems in order to warrant public access is assessed in this study. It is also a way for KOS’s to have cultural warrant which should be considered as a quality indicator.

The study of terminology representing specialized, primary documents published in the two studied countries has been found appropriate to detect cultural differences in countries sharing the same language.

The two sets of terminology studied show that cultural differences go sometimes tied together with linguistic ones eventhough a common language is shared as it is the case of Spain and Uruguay.

Integration of cultural differences in Knowledge organization systems needs for a recognition and representation of the possible differences in first place in order to allowed, in a second step, integration in a shared structure.
It is possible and desirable to avoid standardised knowledge representation and organization when a variety of socio-cultural domains are implied in a system. There is a need for building KOS based on integration of cultural and linguistic differences.

REFERENCES


