

THE PROBLEMATIQUES OF THESAURUS CONSTRUCTION IN IRAN FROM THE POINT OF VIEW OF THESAURUS MAKERS

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Introduction. The present research attempts to study the theoretical foundations of thesaurus construction before and after internet and also the problematiqués of thesaurus construction in Iran from the point of view of thesaurus makers and translators of the published thesauri.

Method. The research population are 6 thesaurus makers being responsible for 12 thesauri published until 2003 in Iran. The research method is a qualitative one which is applied for the first time in the academic environment of LIS in Iran. In order to gather the information from the respondents, an in-depth interview was performed, and despite the positivistic quantitative studies, the interview had dialogic nature. After interviewing the research population and studying the related literature, the data were classified into different groups and then analyzed according to the measures which were mostly grounded theory measures.

Results. We could conclude from the results of the study that: 1) the theoretical foundations of thesaurus construction have changed after the introduction of web and the revolutionized environment of information technology. 2) An innumerable amount of data gathered about characteristics of executives, history and quality of thesauri in Iran, problems of preparation and publication of thesauri, problems related to budget, about the application of thesauri, and the budget allocated to them.

Conclusion. There is a deep gap between our theoretical foundations and foundations in developed countries. Most problems experienced by the respondents had managerial and administrative nature, that is, almost all of the thesaurus makers suffered from the lack of adequate and proper interaction with the responsible institutions, at the institutional and national scale. The other problems could be enumerated as: weakness of storage and retrieval systems, the undocumented queries in reference departments of the libraries and information centers, unorganized literary and user warrants, weakness of information literacy of subject specialists, budget insufficiency and lack of appropriate evaluation measures and thesauri criticism in the LIS environment.

Introduction

The rapid growth of networked information resources together with changes and innovations in the ways in which information is represented have necessitated a reassessment of the tools and techniques used for information management (Shiri and Revie, 2000). Technical evolutions influenced not only the information processing but also the users' trends and at least causes the philosophical and psychological crisis among users. Librarians like other men encounter these evolutions and also postmodern clients. In this time, libraries found the necessity of evolution.

Therefore, predominant values on the libraries varied and the institutional image of the library changed to a dynamic and progressive image. Role of libraries changed and the duty of libraries transmutes from distinguishing information to commuting information into knowledge (Rahadoost, 2003). This transmission is the cause of paradigm variation. Results of the research demonstrate the evolution not only in the theoretical foundations and its definitions but also in the systems, their function and their tools, like thesauri. So that in the new information paradigm, **the interaction among information and clients** is important instead of the conformity among information and the needs of users. Today, we are the evidence of initiations of multi-thesauri and meta-thesauri simultaneously with the advent of internet and World Wide Web which presents new culture and theories and opens new horizons into the eyes of users.

Initiations of meta-thesauri and multi thesauri and evolution of users needs who are using new Media and internet demonstrates the necessity of compatibility of Library and Information Science with these variations. But this compatibility did not take place in our country according to the literature of LIS.

The construction of the first thesaurus was about the year 1852 which created by Peter Roget, by the name of Thesaurus of English Words and Phrases. While, the first thesaurus in Iran published in the year 1978 which was the translation of Thesaurus of Information and Documentation by Mohammad Hossein Daneshi and Abdolhossein Azarang. Since that time till 2003 just 14 thesauri have been constructed in Iran however 6 are translations and this number is not appropriate with the needs of this country, before and after the Iran revolution. We could not see sufficient qualitative revolution in our country especially in theoretical foundations. In fact thesaurus construction in Iran is still traditional, and has many problems and that is in the situation that Iran, as a developing country, needs information while the thesauri are the keys of information revolution and dynamism of National Information System. With many advertisements for Sustainable Development Programs, there is not adequate planning for dynamism of information storage and retrieval systems and not either for thesauri and meta-thesauri, there is no adequate program to introduce thesaurus and not for demonstrating the significance of that and the result of this negligence is that thesaurus and thesaurus constructions are weak in quality and quantity.

Considering to the ample of time and money that thesaurus construction needs, it is significant to study the problems of thesaurus construction.

Definitions and Descriptions

Thesaurus Construction: The process of construction of thesaurus which is routinely done by a group and in the places that have information storage and retrieval systems. In the developed countries, this process usually done in the institutional scale. In Iran thesaurus construction implemented as a project by one or some executives.

Thesaurus Makers: In this research thesaurus makers are people or organizations who prepare or translate thesauri and published them in Iran.

Managerial Problems of Thesaurus Construction: Principles of management are planning, organizing, innovation, motivation and control. Mismanagement within each of these principles causes some problems. We considered the managerial problems within thesaurus construction

Problems about Application of thesauri: In this research, application problems are those problems which thesaurus makers encountered with during applying thesauri in indexing, organizing, retrieval and education processes.

Methodology

In this research, we had the following aims:

- Identifying theoretical foundations before and after World Wide Web
- Identifying managerial problems of thesaurus construction in Iran
- Identifying problems of preparation and publication of thesauri in Iran
- Identifying problems about application of thesauri in Iran

Library survey had been used for theoretical foundations and the qualitative method had been proposed for the whole research; in order that, the aim of qualitative method is realization and conception of phenomena.

Research society gathers thesaurus makers in Iran whom their thesaurus had been published until 2003. In this period of time, 14 thesauri published in Iran. Two of interviewees were not available (Naser Pakdaman translator of Cultural Development Thesaurus and Mahnoosh Motaref translator of Sociological Thesaurus). Other thesaurus makers were 6 people whom we had interview with. These 6 were AbdolHosseini Azarang, Abbas Horri, Fatemeh Rahadoost, Fariborz Khosravi, Molookolsadat Beheshti and Mohammad Hadi Yaeghoub Negad.

Data was gathered by using in depth interview which helps us gathering enormous amount of data. Our research tool was a planned interview which is appropriate for the situations that interviewer knows what he is looking forward to know and organize the questions to reach that. The plan for interview has some closed and more open questions; in order that, we want to accumulate more information. We gain profit from some literature and some authorities on thesaurus construction to plan the research tool. Meanwhile, in the part of theoretical foundations we had a deep survey on library documents.

Interview was recorded on the tape and after that written on the paper. We returned to these recorded materials many times. For analyzing the data which were collected from the interviews and library surveys we have to do these processes:

- Data organization: we divided data into descriptive and non-descriptive groups, and summarized them.
- Classifying data, subjects and patterns: Then data were divided into various groups that are proportionate with the aim and questions of research.
- Explanation and interpretation of data: we spend lots of time for explanation and interpretation of data.

Results

Results are divided into groups which are described as follow:

Thesaurus theoretical foundations before and after World Wide Web changed a lot, so that Milstead, Shiri and Revie (2000), Dominich (1997) and Rahadoost (2004) pointed to. In spite of the evolutions which were occurred for storage and retrieval systems and thesauri in developed countries, there are still traditional attitudes in Iran. Theoretical foundations belong to the time before the initiation of Web; this enlightens that there is a deep gap between theoretical and literatures.

Characteristics of executives and thesaurus makers indicated that; first, 4 of these 6 were LIS professionals and 2 others had other professionalism. Second, all these 6 spend ample time and effort to become familiar with foundations and concepts of thesaurus construction. Third, all of the thesaurus makers had academic background; moreover, those two thesaurus makers who were not LIS professionals had administrative positions about thesauri, except thesaurus making. This fact reminded that many professional jobs in LIS in Iran are allocated to non professionals. Fourth, all of the thesaurus makers were working with a group of LIS professionals and a group of subject specialists.

Quality and history of thesauri:

All of the interviewees pointed out that; first, thesaurus construction needs ample of time and money. Second, Thesaurus construction needs plenty of perseverance and interest. Third, it is required that thesauri edition has a significant impact on dynamism of thesauri. Fourth, thesaurus construction required a severe institutional support from an institution or a planner organization. Fifth, all of the thesauri were constructed in response to the needs of their core organization; although, that was not a compulsory for their organization to apply them in their information storage and retrieval system.

- ***Editions:*** The edition of thesauri did not have an ideal condition. Just two of the thesaurus makers were confident about the edition of their thesaurus. One other thesaurus maker was editing her thesaurus which published after our research. Adversely, other thesauri were not edited.
- ***Publication records:*** If we divided thesauri into two groups; one group are those which are translations from the original language, and the others are those which are compilation. The second group consisted of

4 thesauri; 3 of them did not have problem with publication records, just one of them had many problems with that. There are two inferences; first, translated thesauri did not have the complication of adaption to the needs of Iranian specialists. Second, those compiled thesauri which are constructed as a duty of an institution did not have an important problem with publication records.

- **Users' records:** Users' records were ignored by thesaurus maker. Five thesauri did not use user records regularly; just one thesaurus has a kind of record. The causes are that 1) not recording data in reference division, 2) nonexistence of a field for recording users' queries in information storage and retrieval systems, 3) distinguishing thesauri improperly in academic and information environments, 4) not applying thesauri in indexing processes.
- **Subject specialists:** Subject specialists have a vital role in defining hierarchical relations and scientific editions of Farsi descriptors. Interviewees said that personal familiarity had an important role in selection of subject specialists; however the most preferred way for the selection of subject specialists is introduction by professional associations. Unfortunately, professional associations do not have proper functions in Iran.
- **Information resources:** Some of interviewees were pioneers of theoretical foundations in Iran. Most of them had a long track in thesaurus and thesaurus construction. Some are professors in LIS and are familiar with these concepts for years. The two non professional thesaurus makers spend ample time for becoming familiar with the concepts and theories of work. Five of them mentioned that they do not find appropriate Farsi information resources, quantitatively and qualitatively. In addition, respondents pointed out that LIS education in Iran has weakness according to thesaurus conceptions and theoretical foundations.

Problems of preparation and publication:

- Translators and authors indicated some essential problems: 1) Nonexistence of Persian equivalents, 2) Differences among the spellings of terms, 3) Ambiguity in exact definition of terms, 4) Problems about translation of descriptors and concepts, 5) Nonexistence or lack of reliable sources like as special dictionaries and thesauri, 6) Inaccessibility to authorities and live sources, 7) Councils had inadequate role in decision making.
- Selecting the associates and subject specialists and even introducing the foundations and concepts of thesaurus construction was a big problem which all of the executives experienced. In the question asked from all the interviewees, all described that their problem with the subject specialists were: 1) Unawareness of the subject specialists from the concept of thesaurus and 2) Unwillingness, spending inadequate time and not being rationalized.
- One of the problems which had been experienced for all thesauri was software difficulties.
- Stress and work tensions during thesaurus construction are a kind of impressive variable that was in a high range, and its removal depends on the solving of enormous cultural, political and managerial problems.
- The problem that thesauri did not become institutional causes that thesaurus makers usually do thesaurus construction as a treaty and as a model of research project. This persuades executives to tolerate the heavy responsibility of an institution, specially the time when the circumstances of the treaty were not appropriate. Even in the institutional thesauri, executives should spend lots of time and effort to rationalize the organizations.

Problems related to budget

In the publication process, negligence on the publication process and lack of budget was a common problem. Thesaurus publication usually costs a lot and separating the processes of thesaurus construction and publication from the treaty of research project, made the executive do the responsibilities more than it should be.

Problems about the application of thesauri: All the studied thesauri were constructed by the needs of the organization, but this does not describe the necessity of their application in the information storage and retrieval systems. Unpredictably, none of the interviewees informed that where their thesaurus applied.

Criticism and evaluation: All the thesaurus makers mentioned the significance of criticism and evaluation of thesauri; although, there were just a few criticism and evaluation about the published thesauri.

Conclusion

Thesaurus theoretical foundations before and after World Wide Web, The evolutions that occurred after the advent of World Wide Web could be summarized to some changes regarding to 1) Definition and role of thesaurus, 2) Attitude to semantic relationships, and 3) Thesaurus appearance. Standards of thesaurus construction are known and accepted in Iran; however, predominant points of views are still traditional, and there is a deep gap between researches and theoretical foundations of Iran and developed countries.

In the managerial and administrative problems of thesauri, in fact, managerial and administrative problems are the most of the problems of thesaurus construction and publication. All of the interviewees demonstrate that: 1) They do the best and most of their efforts to construct thesauri, and the accomplishment is indebted to their efforts and posses than their institutions' efforts, 2) Institutions related to thesauri are not sufficiently active, 3) There is no managerial in the national level to have the responsibilities of thesaurus construction, 4) Moreover because the lack of unique and general management, there is no relationship among the thesaurus makers or there is some informal and casual relations. In addition there is no relation between the responsible institution of thesaurus and special associations.

Problems of preparation and publication, Data gathering have many difficulties for executives, some are as followed: 1) Weakness and inefficiency of storage systems, especially in indexing and cataloging processes in libraries and information centers, 2) Weakness and inefficiency of retrieval systems, especially within the reference services in library and information centers, 3) Weakness of information literacy of subject specialists and strangeness of identity, application and efficiency of thesaurus for them, 4) There is no national managerial for thesaurus responsibilities, 5) Financial problems. It is specified that even preparation and publication difficulties are depending to managerial problems.

Problems about the application of thesauri: Published thesauri are not applying vast and adequately. Thesaurus as a project which needs ample time and money is still strange and obsolete among the subject specialists, and realizing the advantages of thesauri in information storage and retrieval systems is not possible for most of them. At least, analytical results described that managerial problems are not separated from problems of construction, publication, application, evaluation and criticism. Additionally thesaurus makers had the most and deepest problems, they have some managerial problems with their institutions and some with other institutions affected by the lack of relationship with other organizations and institutions. In this way, some efforts may become duplicate, they can not use the others advices. All the thesaurus makers were involved with software problems and this is the cause of shortage of relationship among the institutions that have the responsibility of thesaurus construction and professional associations also because of their weakness of application.

The responses of interviewees demonstrate that the significance of the information, information science and its relation with development, especially sustainable development, is not realized. Moreover, it shows that the obstacles of dynamism of thesauri in Iran are the causes that threaten the dynamism of information storage and retrieval systems. The causes are multidimensional and closely related to weakness in planning and management. Solving these problems required deep cultural, social and scientific evolutions and just a management coordinated with other managerial sections can affect in all aspects in national scales. This management could recognize the problems of thesaurus construction, stop the duplications, recognize and prevent the problems in devoting of budgets. It is necessary to pursuit the problems of application, weakness of information storage and retrieval systems, insufficient publication and weakness of criticism.

Suggestions:

- 1- LIS education system should revise the curriculums according to the philosophical and theoretical foundations. Also, it is required that this curriculum should pay attention to thesaurus topics.
- 2- Institutionalizing thesauri is an important step in the development of thesaurus construction which makes financial, professional and technical conditions. In this case, institutions could identify thesaurus users to prevent the users and publication records.
- 3- An appropriate competition among various softwares of thesauri could lessen duplicates and help the development of them.
- 4- Making the specialists familiar with the information science and thesauri concepts and their applications by growing the professional associations
- 5- Information storage and retrieval systems should become dynamic by the relationship between the indexing and reference divisions.
- 6- Relationship among thesaurus makers is very profitable for exchanging information and experience.

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