

## A Study on a Plan to Build Korea

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### 1. Introduction

Chinese contents market, despite the global economic crisis, has grown to rank third place in the global contents market with approximately \$1,391.6 billion, which is an increase of 14.1% over 2012, backed by the development of network-based industries and aggressive support policy of government. The future of Chinese economy and contents industry are projected to consistently grow. The expectation in the content industry about Korea-China FTA is high. And there is an increased interest to make headway into Chinese market through the FTA [1]. Although there have been a growing number of people who want to acquire information about China's culture industry, that has not been accessible to people other than China experts due to the language barriers despite floods of information brought on by information digitization are made available. In addition, although some information are made available by translating and various Korea-Chinese dictionaries are published by China experts, invalidated information are more frequent to encounter with the spread of smart devices and network expansion. We are exposed to a situation where misunderstanding may cause problems in the cultural exchange between Korea & China due to the information only translated in terms of dictionary definition, especially if one is taken out of its context. Thesaurus is a terminology book that is used to find the word or words by which an idea may be mostly fit and aptly expressed [2]. Multilingual thesaurus is a thesaurus comprised with more than two languages and the thesaurus referring to the relationship between languages and displaying an array of equivalent words (ISO 5964). Multilingual thesaurus significantly relieves the problem of choice for word in translation which has been relied upon the subjective and arbitrary decision of a translator [3]. Therefore, by enhancing reproducibility and accuracy in the Korea-China culture information exchange and by preventing problems which may arise from incorrect information in advance, and to enable the search of Korea-China cultural information efficiently, a semantic Web that centers on the Korea-China culture information thesaurus, is in need.

### 2. Related studies

An example of Korea-China lingual thesaurus is the bilingual Korea-China cross-language search and automatic translation dictionary by Korea Electronics and Telecommunications Research Institute (ETRI) and as per the related study, the study on an expanded query using thesaurus in Korea-China cross-language search. This study only describes about the efficient query expansion for the Korea-China language search, and though it has frequently used synonym expansion technique using thesaurus in search of monolingual and cross-language related to English, it is significant that it proposed the query expansion first using 'Chinese Thesaurus (同义词词林)' of China as a technique of expansion after converting in the Korea-China cross-language search [4].

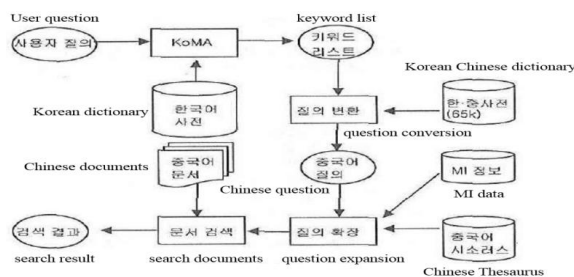


Figure 1. Korea-China cross-language search system configuration [4]

In order to implement the thesaurus, we need to look into the semantic Web technology research. Recently, sponsored by the Ministry of Culture, Sports and Tourism, semantic Web mash-up platform technology study has been carried out for the digital culture content convergence & compound service. Through this study, digital culture content industry promotion, digital culture content distribution and infrastructure preparation, and the indigenous technology of semantic Web procurement, and the national competitiveness in software industry have been obtained. As such, studies on strategies and fundamental technology have been steadily progressing to prepare proactively to the semantic Web technology that is the foundation of future information technology [5], in particular, these technology studies is a good technical foundation to produce high-value convergence/compound contents in the cultural content industries as music, movie, game, e-learning contents, etc. which are based on Web service.

### 3. A plan to build Korea-China culture information thesaurus

Studies aforementioned are about the studies on basic technologies that help search and utilize information more efficiently by assisting culture content industries. And to put the results of studies into practice, the data base centering on Korea-China culture content industry terminology must be built in advance. Culture content industry in Korea is referred to as the Culture creation industry in China, as its concept and scope do not match exactly; there are many cases where related terminologies do not match exactly. Therefore, it is necessary at this time more than anything to build the database for the culture information thesaurus around the concept of culture industry and classification items that are defined by government or by relevant research institutions that are responsible for the culture content industry in Korea & China. [Table 1] shows the concept and classification of culture content industry and culture creation industry based on the data available from Korea Creative Content Agency, the Ministry of Culture, Sports and Tourism, the Beijing Municipal Bureau of Statistics of China, ad Baidu, etc.

[Table 1] Concept and classification of culture industry in Korea and China

|                | Korea   | China   |
|----------------|---|---|
| Concept        | A knowledge-based high-tech industry that creates added-values such as movie industry, games, animation, cartoon, character, music, internet/mobile content, broadcasting, etc. | An emerging industry having the creativeness at its core in the background of economic globalization, for individual or groups by certain principal culture or by cultural elements. It emphasizes that an industry to develop and to operate intellectual properties as a type of industrialization. |
| Classification | Publishing, cartoons, music, games, movies, animation, broadcasting, broadcasting video, independent producers, advertizing, character, knowledge information, content solution | Culture and art, newspaper publishing, broadcasting, TV, movies, software, internet/computer service, advertizing display, art trade, service design, tourism, leisure entertainment, other value-added services  |

As shown in [Table 1], concept and classification definitions are different for two industries though those are commonly translated to mean the same thing. Thus, two terminologies are not the same headword but the equivalence relationship that represents similarity of terminology. And by showing those two terminologies are not the same; we can rectify the incorrect information that Culture content industry is same as Culture Creation industry and help non-experts to understand [6]. As such, in order to build the thesaurus to help culture industries of Korean & China, we need to extract cultural industry related terminologies that are actually used in government and research institutes, academic papers, major search portals, etc. to organize the concept and classification, and finally we need to organize related words, equivalent words, high/low order words, etc. by sharing the use of terminology in Korea and China.

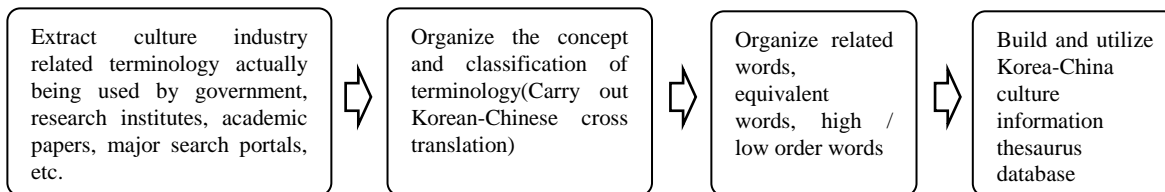


Figure 2. Korea-China Culture information thesaurus build model

#### 4. Conclusion

Cultural content industry exchanges between Korea-China are very active at present. However, terminologies and information of the culture content industry are not shared together yet. If a semantic Web is built based on Korea-China culture information thesaurus, it will serve as guidelines to understand the culture content industry of both countries and lead the business more efficiently. In addition, if related contents are introduced from the semantic Web manufactured, and statistics and local articles, press releases are offered together, a new market to introduce and promote each countries' contents can be formed, the thesaurus made can be used as basic resource to translate relatively more precise in the automatic translation system in the future. If we build this Korea-China culture information thesaurus, a variety of new platforms will be born in which both Korea and China co-exist, it will also serve as a stepping stone for the platform to expand into another creative industry.

#### 5. Reference

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