
Real-time Analysis of Errors in Translation Based on Multimedia Technology

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Abstract

Foreign propaganda translation is an important means for our country's external propaganda. However, there are still some shortcomings in our country's foreign propaganda translation. This article has conducted a preliminary analysis and analysis of its causes. Our country's foreign propaganda and translation undertaking has a long way to go. Only by making concerted efforts from all walks of life can we optimize the dissemination effect by targeting the problems and prescribing the disease, and push our country's foreign propaganda translation to a new height. At present, the problems in China's foreign propaganda translation are mainly reflected in equating expatriate translation with literary translation, over-emphasizing translators' autonomy and creativity, ignoring the thinking habits of target language audiences, and lacking cross-cultural communication awareness in the translation process. To overcome the above problems, the translators should make clear that the foreign propaganda translation is communicative translation and should follow the principle of reader-centered and cross-cultural communication consciousness.

Keywords: Multimedia technology, Foreign language translation, Error analysis

1. INTRODUCTION

With the full development of China's social economy and the strengthening of foreign exchanges, it is necessary to translate a large amount of relevant Chinese information from Chinese into English, and publish it through various media such as books, periodicals, newspapers, radio, television, the Internet, and international conferences. Dissemination allows foreign readers to understand accurately the information conveyed by the translation so as to better understand China. Many scholars have defined external translation from different perspectives. Prof. Zhang Jian has conducted a comprehensive and in-depth study on this and pointed out that "external propaganda translation is a special form of translation. It refers to the purpose of letting the world understand China in the context of globalization, using Chinese as a source of information, and using English. Foreign language is the carrier of information, using various media as channels, and communication activities for people (including foreigners of various types in the country) as objects. Under the premise of following the general principle of translation, foreign propaganda can be translated from a broad and narrow perspective". This article discusses the

generalization of foreign propaganda translation, that is, "all-inclusive", "as long as the source of information is Chinese" translation is the object of this article (Farrus, et al. 2013).

2. TRASLATION MODE MINING

The foreign research on the automatic lexical tagging of English corpora can be divided into the following stages. In the early 1970s, rule-based processing methods were used. Its representative is the TAGGIT system, which mainly uses 3300 contextual framework rules for 10,000 words. The Brown corpus has automatic word class annotations, and the accuracy rate reaches 77%. From the end of the 1970s to the early 1980s, statistical methods of word class disambiguation began to be applied as empirical methods continued to prevail in computational linguistic studies. In 1983, CLAWS, the corpus tagging system, first used the idea of noise channel model to automatically tag the parts of speech. By using the correct corpus training parameters of the corpus, 96% accuracy was achieved. Since then, with the continuous increase in the number of correctly annotated corpora and the continuous improvement of statistical processing techniques, the statistical-based approach has occupied a dominant position in the design of automatic lexical taggers in the English corpora.

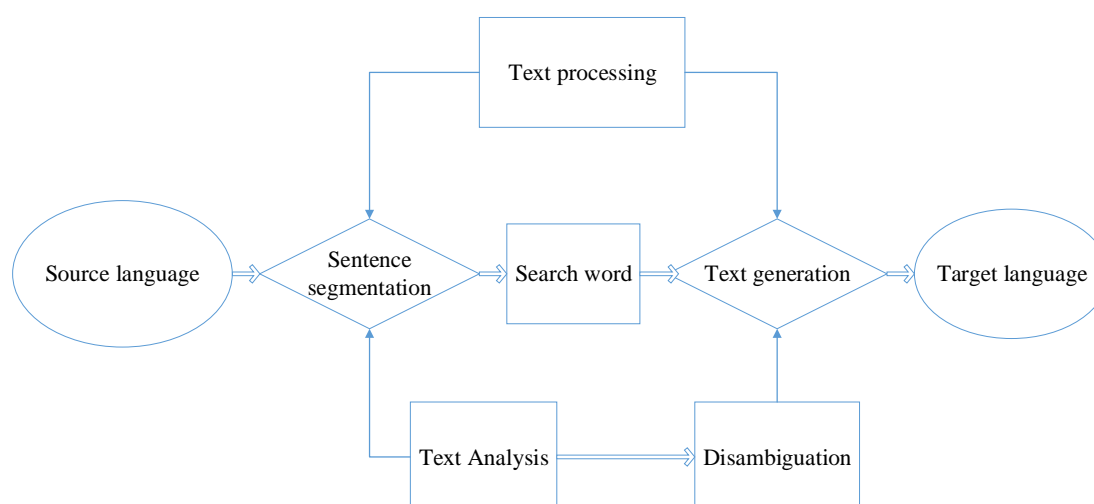


Figure 1. Classic translation mode

3. MISTAKES IN TRASLATION

The foreign propaganda translation shoulders the heavy responsibility of propagating China to the world and letting China go to the world. The quality of foreign propaganda translation will directly affect China's external image. However, for a long time, China's foreign propaganda and translation has been in the predicament of "transmitting unrecognized" and "unobstructed". This is due to the fact that the western countries have the advantage of dissemination under the globalization trend, and it is also due to the fact that the level of translation in China's foreign propaganda is still Need to improve (Farrus, et al. 2013). John Bitter's "Introduction to Communication Studies" visualizes barriers and misinterpretations in communication as translation "noise" and considers the environment, educational background, income, and ideology of the individual as well as the translator's differences. The deliberate distortion is an important cause of noise in the translation of foreign propaganda (Lv, 2016).

3.1. Mistranslation

As early as 1990, Duan Liancheng first pointed out the "Type A disease" and "Type B disease" in the foreign propaganda translation in the "Call for: Asking Translation Colleagues to Pay Attention to Publicity". "Type A disease" is mainly characterized by "white letters", grammatical errors and improper use of words, while "Type B disease" is mainly characterized by spelling and grammar, but foreign readers find it difficult to understand or even understand. Now that 20 years have passed, I still have such symptoms in foreign language translation. In the practice of foreign propaganda translation, spelling mistakes have been greatly

improved, but there is still a tendency in foreign propaganda translation that is excessively sticking to the original Chinese characters, and mechanically interprets the faithful principle of translation as "combination of seats".

3.2. Cultural differences and vacancies

Language is the reaction of culture. Mastering a foreign language requires familiarity with the culture behind it and insight into the differences between it and its own culture. Cultural differences often lead people to different understandings of the same thing or the same rational concept, sometimes causing misunderstandings. President Hu Jintao also pointed out in the "Opinions of the Central Committee of the Communist Party of China on Strengthening and Improving External Propaganda Work under the New Situation," stating that "the external propaganda needs to be 'inside and outside the company', with emphasis on practical results." Although Americans have never stopped fighting since World War II, they have mistakenly read some of our articles that have been literally translated from Chinese. They then mistakenly believe that "Chinese people are better than Americans." This is partly because, because of historical reasons, we are particularly accustomed to using militarized language.

3.3. Different expression habits of source and target language

The different expressions of Chinese and foreign languages lead to differences in the aesthetic habits of the language. Chinese habits are preoccupied with the consequences, and are laid out in terms of arranging and arranging rhymes. English is simple and simple and beautiful. The propaganda

materials are also concise, objective, and popular. Therefore, when translating Chinese-language propaganda materials into Chinese, if the translator is also following the original text, the full-scale literal translation will make the target reader feel puzzled and unable to understand.

4. EXTERNAL RESOLUTION ERROR SOLUTION EMPIRICAL ANALYSIS

The common problems in the translation of foreign propaganda are concentrated on the translation of foreign propaganda as literary translation, and the emphasis on semantic translation and light information dissemination. The translator is the center rather than the target language audience. The translation process lacks awareness of intercultural communication.

4.1. Establish a communicative translation principle.

The first common problem in the translation of foreign propaganda is to equate expatriate translation with literary translations such as fiction, poetry, prose, drama, etc. It is thus considered that expatriate translation is a simple copy of Chinese propaganda material in English. As a matter of fact, foreign propaganda translation belongs to the category of communicative translation. Accurately transferring information and achieving proper translation effects are the primary purposes of foreign propaganda translation. Professor Zhang Jian of Shanghai International Studies University believes: "The effect of translation is an important measure of the success or failure of a communication campaign." In order to maximize the effect of translation, under the premise of grasping the main purpose of the translation and understanding the spirit of the original. All aspects of language are processed, restructured, added, deleted, edited or processed (Lv, 2016).

4.2 Reader-centered translation principles.

The second frequently occurring problem in the process of foreign propaganda translation is to ignore the target language audience's cognition and acceptance habits, and to over-emphasize the translator's autonomy and creativity. In response to Green's criticism, Comrade Deng Xiaoping put forward: "China's foreign propaganda materials are worthy of attention whether it is propaganda or style." In the new era, Comrade Jiang Zemin has also put forward the guiding principles of the propaganda work, "Cannot put a set of content for internal propaganda. And methods are copied to external propaganda." (Chen, 2014). During the

"Eleventh Five-Year Plan" period, Comrade Hu Jintao proposed to pay attention to the translation requirements of "different inside and outside and pay attention to practical results" in the translation of foreign propaganda. The main targets of foreign language translation are foreigners (Koh, et al. 2009).

4.3. Lack of cross-cultural awareness.

The third problem that often arises in the translation of foreign propaganda is that the translator lacks the awareness of cross-cultural communication and knows little about the mode of thinking of foreign audiences. He does not pay attention to the comparison and analysis of the nuances and characteristics of Chinese and foreign cultures and cannot follow the thinking habits of the target audience. In response to this problem in the Chinese translation of foreign propaganda, Mr. Huang Youyi, Secretary General of the China Association of Translationists, put forward the principle of "three close to foreign propaganda translation". (Koh, et al. 2009). In order to achieve the principle of three close to the outside, he put forward two specific requirements for translators: First, to fully consider cultural differences and strive to bridge the cultural gap; the second is to understand foreign language conventions and prevent them from falling into the trap of writing. When strong language is translated into a language of strong culture (mainly English), in order to obtain strong the acceptance and recognition of cultural readers must use content and forms that they are willing to accept. It can be seen from this that the process from weak culture to strong culture is difficult, and it is relatively easy for strong culture to enter a weak culture. When the Chinese traditional culture essences such as dumpling, Kung Fu and Qigong were introduced to foreign countries, they first used the translation principle of alienation and translated them accordingly into "Chinese dumpling", "martial art" and "shadow boxing".

5. MULTIMEDIA APPLICATION AND EXTERNAL TRANSLATION

The application of multimedia network technology in translation work can lead to the change of translators' translation concepts and the renewal of translation methods, and promote the modernization of translation methods. Because computer multimedia has the advantages of high speed of propagation, convenient information retrieval, and high efficiency, the network has the characteristics of large information capacity, fast

and timely content updates, and quick and quick inquiry without geographical space-time limitations. Translators can use these advantages and characteristics to quickly complete the translation process. In each phase of the work tasks, so that the work efficiency has been greatly improved. Although there are many benefits to using computer network technology to assist translation, there are also problems. For example, when translating more complicated sentences and articles, the accuracy of the translation is not high and the ambiguity is unclear, which may be related to the level of translation software. The author believes that multimedia network translation is the development direction of translation, but at this stage can not completely replace the traditional manual translation, it can only be used as an advanced translation tool to assist translators to complete translation tasks (Chen,2014).

5.1. Translation Polymorphism

Why does Yan Fu sigh that “the three dilemmas in translation: faith, decency, and elegance” are all due to the polymorphism of the language: corresponding to the same thing, the language has many forms of expression and there is no uniqueness. The same thing, different nationalities can be expressed in different language symbols. The same ethnic group can be expressed in different language forms and vocabularies. Different authors and translators can express in different languages and different language forms. Although in essence, the world is united in materiality, from a phenomenological point of view, the great world is full of possibilities. The same theme, the same idea, different authors will have different language to express, form different works and original texts; reflected in the translators, the same works, different translators will have different translations. It is a tree structure. For the translation, the original text is unique. A translation of the original text is a branch of the original text. The original text is also a branch of the previous branch. The whole is a polymorphic chain. When people only see the only original text and seek for a faithful translation, it will be confusing. Since translations are diversified, it's hard to avoid opinions (Lv, 2016).

5.2. Conformity and Fashion of Language

Language is a common practice. When translating, the expression of spoken and written language must conform to the habits of the public, namely the so-called linguistic conformity, and only if the translator's translation meets the conformity

of this linguistic expression, then the translation can be more easily understood by the reader and can be achieved. Then, the translator sits at home. China has always attached importance to the accumulation of knowledge and has neglected to cultivate methods and capabilities for finding knowledge. UBM Knowledge became the main form of Enlightenment education. Back-ancient writing, back-Tang poetry, and back-Song words accumulated Chinese culture and contributed to the high standard of Chinese language. However, the scale of convention has implicitly included the translator's knowledge, the scholar's head, the expert's language sense, and other personalization or qualitative measures. However, with the advent of the Internet, we can quantitatively analyze the level of peculiarity of certain language materials and now we can search through the Internet search engine Google, knowing that their respective quantitative relationships are (Chen,2014):

Table 1. Statistics of English Titles of the Book of Changes

Name	Total number
I Ching	1 3 1,0 0 0
The Book of Change	1,0 2 0
The Book of Changes	5,480
Yi Jing	1 2,1 0 0

Obviously the first translation is used most widely. Although for the Chinese, this translation is not as straightforward as the fourth Pinyin translation, we have to accept this agreement, just as Confucius Confucius is translated and cannot be translated into Kongzi. The convention is fashionable. The established conventions may be replaced by new conventions; the conventions in some groups may no longer be accepted. The tools used in traditional translation are dictionary-like tools. The tools such as Lu Gusun's English-Chinese Dictionary and Wu Guanghua's Chinese-English Dictionary will not be updated in a short period of time. However, language is time-consuming and renewed (Lv, 2016). The term Internet has become so popular that it cannot be used anymore. The above large-scale tool books are powerless, and it is even more difficult to understand the changes from Internet to Internet.

Example 1. Translation of “PublicKeyInfrastructure”

1. Public: “public, public, public, public” and so on;
2. Key: “key, password, key, key, key, key”;
3. Infrastructure: “Infrastructure, basic framework, infrastructure, infrastructure, infrastructure, structure, system, architecture, and system”.

Hundreds of translations screened: (1) public key infrastructure (more popular), (2) public key infrastructure (Hong Kong terms), (3) public key infrastructure (Taiwanese terms).

5.3. Multi-discipline of language content

For translators, the content carried by the language is huge. It is impossible for translators to be proficient in all professions. Even a shallow

understanding is not realistic. The method of solving multi-disciplinary problems is the "Trial_and_Error" method, which firstly tentatively gives a translation, and then persists or modifies the original translation according to the retrieval results and the newly acquired background knowledge. According to statistics from the Internet, double helix is more international than double spiral (Figure 2).



Figure 2. Translation of DNA double helix

In the past, when foreign language names and their works were translated, they were often guilty of misconduct. In the case of translators, translators are often unable to obtain foreign language texts from authors, but they cannot use transliteration as transliteration of Chinese names. Chinese translations of works' names into foreign languages can also be "creative", but foreign language works are translated into Chinese. If you translate back into foreign languages, you must find the original text. For this type of translation that requires "turning over and over", even searching for major libraries may not be effective. Novels such as Newton's Mathematical Principles of Natural Philosophy and Euclidean Geometry can be found in the Encyclopedia Britannica, but it is not easy for people who are famous only in a certain profession (Chen,2014).

5.4. Multiculturalism of language

The similarity of Western texts and the convenience of communication in geographical locations make Western writers proficient in several languages. People are often multi-ethnic and multi-cultural in their character creation. The appearance of other languages in their works is common and natural. It is not easy to require a translator to master multiple foreign languages. In addition to working with others, they can also use online machine translation to understand these "insert language". Due to the relatively regular Western language grammar, the quality of the machine translation between them is generally acceptable. The references in this article give some relatively successful free online machine translation websites. In addition to geography and multiple languages, there are historical factors, so-called dead language: ancient Latin, ancient Greek.

Table 2. Use of foreign languages and multi-ethnic culture in masterpieces

Multicultural performance	Example 1	Example 2
Use foreign language in masterpieces	Charlotte Bronte "Jane Eyre" English classics in French	Bacon's Essays on Parenting and Children's Writings in English
The famous works involve allusions, props and other multi-ethnic cultures	Thomas Hardy's Tess of the D'Urbervilles deals with Greek mythology: Satyrs, Pan	Xiao Duma's "La Traviata" is involved in various countries' items: Brazilian rosewood, French Boolean

6. REAL TIME ANALYSIS OF ERRORS USING MULTIMEDIA TECHNOLOGY

6.1. Cause of error

Machine Translation Text Error Analysis The wrong way to analyze machine translation is to

compare the machine translation result with the human translator's translation result. The first thing that should be made clear is that machine translation is a translation method that focuses on the source language; the goal of human translation

focuses on the intelligibility of the target language. Therefore, the results of machine translation are often inaccurate because machine translation takes words from electronic dictionaries and is tied to the translation context defined by the program. So there are various mistakes in machine translation. As mentioned earlier, human translation aims to focus on the target language. If necessary, the translator will adopt a flexible way to convey the meaning of the translation, sometimes using the method of free translation, which is impossible for machine translation to achieve. Since the main goal of machine translation is the comprehensibility of the translation, it does not produce a perfect translation. So when using machine translation, two principles should be followed. One is that translators should be aware that certain specific forms of text, such as poetry, are suitable for machine translation. The second is that when using machine translation, the source language should be perfected so that it conforms to the grammar rules so that it can be easily translated by the machine.

6.2. Computer Aided Translation Tools

Computer-assisted translation in the actual translation process, computer-assisted translation is a complex translation process. According to the needs of the translator, specific translation tools and translation techniques are used. The translator actually participates in the entire translation process, not just the editing of the machine translation results. Through the working platform of computers, translators have access to a large amount of discourse information, tools, and programs. For example, monolingual and bilingual dictionaries, parallel texts, related translations between source and target languages, terminology databases, etc. Translators can create a personal working environment and switch according to

specific translation tasks. Therefore, computer-assisted translation can give translators instant flexibility and freedom of action, and it can always contact a large amount of the latest information, thereby greatly saving the time spent on translation (Koh, et al.2009).

The advantage of rule processing is that it can make full use of the existing linguistic research results. For some special ambiguity combinations, the characteristic information of words, parts of speech, and words in context can be used. The deep and detailed description, get a good disambiguation effect.

The advantage of statistical processing is that its entire knowledge is automatically obtained through the training of parameters of large-scale corpus, so it can obtain good consistency and high coverage, and can objectively quantify some uncertain knowledge. . Therefore, a better approach is to consider combining them to give full play to their advantages. First of all, after the rules are disambiguated, the most common linguistic phenomena are eliminated, and the obvious ambiguity is eliminated. Then, statistical disambiguation is performed to deal with those remaining multi-category words, and part of speech inference of unregistered words is performed. Finally, manual proofreading is performed to obtain results. There are two uses for this result. On the one hand, parameter training is used to obtain different parameters needed for statistical disambiguation. On the other hand, automatic disaggregation of results by machines or statistical disambiguation is used to manually calibrate the machine. Comparing the results, you can find out where the errors are automatically handled, from which you can summarize a large amount of useful information to supplement and adjust the content of the rule base.

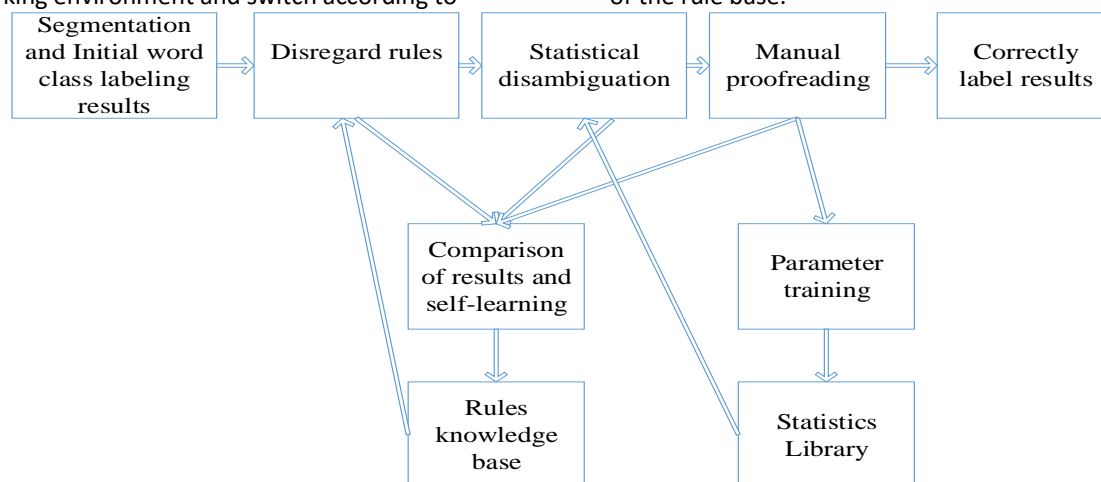


Figure 3. The structure diagram of the combination of rules and statistics

The following are some of the most important tools used in computer-assisted translation:

1) Electronic Dictionaries and Termbases

Using computers to use electronic dictionaries or digital dictionaries does not initially seem to show much difference from traditional dictionaries. However, the advantages of electronic dictionaries are increasingly evident. Using electronic dictionaries to look up vocabularies is much faster than using traditional dictionaries. You can quickly access related data through web links, and you can easily use multiple different versions of dictionaries at the same time. At the same time, the network provides translators with a large number of professional terminology databases, which is of great benefit for the translation of professional materials. (Koh, et al.2009)

2) Network bilingual corpus and translation data storage

Memory Bilingual corpus often includes source language data and its translators' translations. This kind of corpus stored in electronic form is called bilingual corpus. This corpus provides a template for subsequent fixed-expression translations, which accelerates the automation of translation. The accumulation of bilingual corpus increases the help for computer-assisted translation. The machine translation system has a memory function, can remember the operations performed by the translator, and memorize the relationship between the corresponding languages. This greatly simplifies the working procedures of the translator and enables the same type of translation work to do more with less. In summary, machine translation has made a great contribution to translation work. Artificial translation translators can use machine translation as an aid to greatly improve the efficiency of translation and improve the quality of translation. However, from the current technical point of view, machine translation can only be an auxiliary means. It cannot completely replace human translation. Machine translation technology needs to be further improved.

7. CONCLUSION

Under the background of increasingly globalized political and economic world, our country's foreign propaganda translation cannot achieve the goal of propagating national conditions and strengthening exchanges due to various deficiencies. In the process of translation, they often stand on the target language target audience's position. According to the differences in the audience's

expression habits, styles, and styles, they choose words and collocations, adjust the sentence order, and convey the original meaning of the original text as far as possible; cross-cultural communication consciousness. The process of translation has always been the same; at the same time, translators need to constantly broaden their knowledge, update translation theories and methods, improve the business level and cultural accomplishment of translation, establish a good professional ethics, and strive to be meticulously designed and resolutely eliminated in the process of translation. The reason is that, apart from external conditions and historical factors, the most important thing is that foreign propaganda translation has not received enough attention. We should strengthen the training of foreign talents in translation and translation, pay more attention to the research and practice of foreign propaganda translation, and raise our country's foreign propaganda translation to a new level.

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References

- [1] Farrus, M., & Costajussa, M. R. (2013). Automatic evaluation for e-learning using latent semantic analysis: a use case. *International Review of Research in Open & Distance Learning*, 14(1), 239-254.
- [2] Lv, J. (2016). Research of japanese translation teaching based on multimedia network technology. *Journal of Computational & Theoretical Nanoscience*, 13(12), 10375-10379.
- [3] Chen, B. W. (2014). Embedded multimedia technology based on matrix eigenvalue extraction algorithm. *Applied Mechanics & Materials*, 608-609, 585-588.
- [4] Koh, S., & Kim, B. (2009). A study of translation errors in korean-english subtitles in the korean movie " harmony" and the drama " a thousand day's promise" 26(1), 73-75.
- [5] Zou, J., & Wang, S. (2016). Design and implementation of japanese translation information platform based on php technology. *International Journal of Multimedia & Ubiquitous Engineering*, 11(10), 167-174.
- [6] Zhao, Y. (2010). Motivation of Students' Flow Experience and Enhancement of Their Satisfaction to Multimedia-Based Translation

- Classroom Teaching. *International Conference on Multimedia Technology* 10, (1),1-4.
- [7] Aguzzi, M., Albanesi, M. G., Ferretti, M., & Garlaschelli, M. (2007). Query translation based on equivalence classes for heterogeneous multimedia repositories using XML and semantic annotation. *International Conference on Image Analysis and Processing* ,3(2),813-818.
- [8] Arndt, R., Troncy, R., Staab, S., & Hardman, L. (2009). Comm: a core ontology for multimedia annotation. *International Handbooks on Information Systems*, 39(4), 403-421.