The Influence of Schema and Cultural Difference on L1 and L2 Reading

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Abstract

Reading in L1 shares numerous basic elements with reading in L2, and the processes also differ greatly. Intriguing questions involve whether there are two parallel cognitive processes at work, or whether there are processing strategies that accommodate both L1 and L2. This paper examines how reading in L1 is different from and similar to reading in L2. More specifically, factors of cultural difference and schema will also be examined.

Keywords: L1 and L2 reading, Cultural difference, Schema, Reading strategy

Introduction

Reading ability is regarded as the most stable and lasting model of second language study. In other words, although learners can use new skills to learn a language, mostly they have to depend on the already existing proficiency to understand a text. No matter in L1 or L2 reading, it must consist of readers, texts, and the interaction between readers and texts. There are numerous common basic elements in L1 and L2 reading, but reading processes differ greatly. The most intriguing question is whether there are two parallel cognitive processes, or whether there is a processing strategy, which is fit for both language reading.

People should know more about readers' schema and cultural, etc, so to discuss the sameness and difference between L1 and L2 reading and examines how cultural difference and schema affect L1 and L2 reading are especially significant.

1. Background knowledge

Schema is a cognitive construct, which allows for the organization of information in long-term memory, and it consists of three types, which are content schema, formal schema, and linguistic schema. Cultural difference is a complicated thing, and it consists of several types, which brings difficulties for language reading. L1 and L2 refer to reading in mother tongue and in second language (or foreign language) respectively.

1.1 Schema

This part introduces the basic knowledge of schema so as to help readers comprehend the following chapters.

1.1.1 Definition of schema

Widdowson defines schema as "Cognitive constructs which allow for the organization of information in long-term memory"(1994). Cook says stimulated by some key words or context, a new schema will appear in the brain. Both Widdowson and Cook emphasize on features of schema, saying schema connects new information with the existing one. The already existing information includes understanding of the whole world (daily practices, professional knowledge), and linguistic knowledge, including language structure and text format, etc. In addition to helping us effectively organize information and knowledge, schema anticipates whether a spoken or written language will persist. The first part of a text can activate a schema, namely, arousing an uncertain schema. Research on schema strengthens understanding and application of reading strategies.

1.1.2 Types of schema

Researchers have confirmed several kinds of schema, including content schema, formal schema, and linguistic schema. First, content schema is a reader's comprehension of cultural background and the whole world, which is a basis of culture comparison. Second, formal schema, often called text schema, refers to the layout and rhetoric structure of a text; consisting of the literature types, writing style, language structure, vocabulary, grammar, formal and informal literal styles. Formal schema is in the literal level, while linguistic schema (also called language schema) involves word decoding feature, and paragraph organizing format as well. A native reader can understand a totally new paragraph or text by reading an example text from time to time. L2 schema also follows the same rules.

The above discussion indicates that schema plays an important role in L1 and L2 handling system. For example, no matter what language readers speak, as long as they are familiar with content, formal, and linguistic schema, they will comprehend a text very well. However, if readers have no such knowledge, they will comprehend little owing to cognitive elements. The paper will discuss this issue in the following chapter.

1.2 Cultural difference

As we all know, different countries have different cultures. "Culture is the collective programming of the mind which distinguishes the members of one category of people from another." (Hofstede, 1991) This part is about the difficulties cultural difference brings, and the dimension of it.

1.2.1 Difficulties cultural difference brings

One difficulty is the variability of patterns of social interaction across cultures. Some differences can be quite marked, for example, silence can be interpreted differently in different cultures, as can the paralinguistic features of body language and personal space. Once the learner has been made aware of these potential differences, they can become the focus of ethnographic investigation. How long can participants in a conversation endure silence before one feels compelled to speak? How close do participants in conversation stand? What gestures do they make and do they touch each other?

Many cultural differences are, however, subtler; for example, many discourse analysts have argued that males and females in English-speaking societies take different roles in mixed-sex conversations. Males tend to initiate while females tend to support. Learners can also be encouraged to investigate these kinds of interactive patterns not only in the target language, but also in their own culture. Do they have mealtime conversations within their families? If so, who initiates topics for discussion? Who or what provides the content of discussion? How do members distribute? Learning about different cultures utilizes language comprehension.

Language is closely related to culture. Language expresses and embodies cultural reality. If we are in different countries, we must know their cultures, thus, we can use the language freely. On the other hand, language, as a product of culture, helps perpetuate the culture, and the changes in language uses reflect the culture changes in return.

It is inevitable that the cultural difference has impact on language comprehension. For example, when a company has a meeting, the word "table" in American English means to put something on the agenda. But in British English it means to put something off the agenda. This example indicates how the culture affects comprehension.

1.2.2 Dimensions of cultural difference

There are four cultural dimensions that were defined in Hofstede's research. Power distance, Uncertainty avoidance, Individualism, Masculinity, and recently Hofstede adds one more: long-term-short-term orientation. The most significant influence in cultural difference is the power distance. (Hoecklin, 1995.28) It would condition the extent to which language learners comprehend a specific country's language. And then there is also a large discrepancy on the uncertainty avoidance. Hoecklin defines that uncertainty avoidance is the lack of tolerance for ambiguity and the need for formal rules. That means people trying to set up rules to face uncertainty. The third dimension Hofstede indicates is the individualism. It is a concern for you as an individual as opposed to concern for the group. The priority of self-concern or group-concern varies in different cultures. Finally Hofsted pointes out the masculinity. That is about the sexual inequality. According to Hofstede's definitions, masculine societies define gender roles more rigidly than feminine societies. The above four dimensions illuminate the most important cultural differences that affect on reading comprehension. Language learners should pay more attention to intercultural communication. Gudykunst and Kim (1992.13-14) classify intercultural communication as "a transactional, symbolic process involving the attribution of meaning between people from different cultures". Intercultural communication contains language, non-verbal communication, time concept and space concept. Different nations use different languages, so there will be loss or misunderstanding during interpreting. And in some culture, people use implicit words more than others, like China. Thus, the non-verbal communication is important, especially the scenic communication. It includes gestures, body language, eye contacting. The more scenic a language is, the harder for people to transmit and receive information.

The conclusion is that different cultures do cause problems in comprehension. We cannot change or solve the cultural difference. To avoid misunderstanding, clashes, and bias, the language learner should realize and understand the different cultures, adapt themselves to the language environment in order to get the best achievement in language learning.

How to increase students' cultural awareness becomes more and more important in teaching English. Here are some methods of English teaching. First, paying attention to the social environment in which language is used. Second, paying attention to the social meaning of words. Third, creating situational activities in class. Fourth, introducing reading materials to students. Fifth, using modern technological means.

1.3 L1 and L2 reading

Reading is the interaction between readers and texts, because the readers utilize thinking activity to construct text meaning. Every language learners will do L1 and L2 reading in order to master language skillfully.

1.3.1 Means of L1 and L2 reading

L1 refers to one's mother tongue or native language, and L2 is any language excluding mother tongue. L1 and L2 reading mean reading in mother tongue and reading in foreign languages except mother tongue.

1.3.2 Difference and similarity existing in L1 and L2 reading

Both similarity and difference exist in L1 and L2 reading. L1 and L2 reading require the understanding of schema and cultural difference. Reading is the interaction between readers and texts, because the readers utilize thinking activity to construct text meaning. Those behaviors are often called reading strategy or skills. Skillful L1 and L2 readers can consciously or unconsciously take specific action to strengthen the understanding of a text. When readers are reading, they finish these tasks at the same time, such as anticipating the following information, verifying and confirming the anticipation, etc. It is a process where continual sampling from the text goes on. Readers will not comprehend a text word by word, while they utilize background information to achieve comprehension. Nevertheless, as the above research shows, L2 reading actually differs from L1 reading to a large extent. L1 refers to the diachronism of language learning, which is acquired after mastering L1. L1 is a steadily constructed national language, and it is not necessary to speak L2 in home country. Besides, L2 consists of a language basis, which differs from target language in terms of syntax, phonetics, semantics, and rhetoric. In summary, schema plays an essential role in reading comprehension. If a L2 reader is unfamiliar with content schema, or has no linguistic knowledge as L1 readers have, he/she will encounter difficulties in text reading, and the degree of difficulties depends on the differences between two languages. If L2 learners' native language differs much from target language, a higher level of schema must be constructed.

2. The influence of schema on L1 and L2 reading

Schema plays an important role in text comprehension, and different types of schema have various influences on reading and comprehension. In history, many researchers use varieties of methods to study how it works to affect language reading. Those researchers include Carrel, Steffenson and Joag-Dev, Kang, Stone and so on. This chapter mainly discusses their research methods and achievements.

2.1 The experimentations of some researchers

Many researchers have studied the function of schema, whose approaches are more or less similar: to let the subjects read a text and write a text by memory, or do a relative test, including telling text structure. Researchers analyze the preposition and time sequence of a memorized article, and they find different text structures also affect comprehension and memorization. Some researches show two different language-speaking groups' memorization of text structure differs. For example, Carrel's research suggests Arab is good at memorizing exposition, which consists of comparison structure, but their memorization of description article and question-answer article is poor; the memorization of cause-influence article is the worst. While to Asians, the memorization of question-answer article and cause-influence article is the best, and that of comparison structure and description is the worst. Nevertheless, only through further research on interaction between language context and text structure, useful conclusion can be reached. Even if research results are neglected, learning the difference between various text structures under certain context is good for cultural communication.

In 1987, Carrel did an experimentation to study the influence and background of schema. The subjects were Moslemism Arab and 24 Catholism students coming from North America. Those students' language proficiency was at medium level, and they all attended an English training course organized by a university in the Midwest. The experimentation required everyone to read two articles, one was on Moslemism, and the other was on Catholism. After finishing reading, they should do a multi-choice text, and write the content of those two articles by memory. The analysis of the result suggested schema obviously enhanced people's comprehension and memorization, because the students knew content schema and they were familiar with the content of texts similar to their national custom and features, they could easily grasp the reading materials. Further research shows content schema has the greatest influence on comprehension and memorization in the three schema types.

In 1984, Steffenson and Joag-Dev also did a similar experimentation. They chose two articles on wedding, one was American wedding, and the other was Indian wedding. Then they asked two groups of students to read and memorize those materials. The two groups were Indian students whose second language was English and American students whose mother tongue was English. Through analysis, they found comprehension of article on their own country's wedding was more accurate than that that of other country's wedding. Although some students said language itself is easy to learn, unfamiliarity with different types of schema was an obstacle to accurate memorization.

2.2 The revelation of schema theory to language teaching

Schema theory exposes the importance of culture education, but for a long time, under the influence of structure

theory and psychology, the position of culture education is very low, and the foreign language teaching is confined to language structure and format, so language and culture are separated. In recent years, with the development of social linguistics and cross-culture communication theory, people come to realize pure linguistics teaching can't solve problems; culture teaching and language teaching must come together. Language is the product of culture, an important part of culture, and also the external form of culture. It is proved that students' successful cross-culture communication not only depends on the language proficiency, but also connects to culture and schema; i.e., the knowledge structure of a foreign country' history, geography, custom, living style, social regime, value, and religion, etc in one's brain. In America, there is a phrase, which goes like this: When you are down, you are not necessarily out. Many people do not understand it's meaning, because they have no idea of the content schema about this phrase. This is a term of boxing. In the boxing contest, if a boxer is beaten down and can't get up before the judge counts to ten, he will lose the game. From this case we learn that learners should avoid mistakes during communication, and in language teaching, more attention should be paid to the relationship between language and culture; sensitivity and adaptation to cultural difference should be enhanced.

In China, because of geographical elements, language learning is lack of concrete language environment, so it is not practical to make students accept other country's culture naturally. Therefore, teachers need to do more work to input such kind of knowledge, and stimulate students' interest in learning this knowledge. Chinese university students already have had enriching knowledge of schema related to Chinese culture, but to the schema related to foreign culture, they know little. Therefore, the schema that is opposite to or different from Chinese schema is the priority of foreign language teaching. People need to compare and contrast different cultures and schema, which is good for language learning.

3. The influence of cultural difference on L1 and L2 reading

Language study involves culture comprehension. Different countries have different cultures, which will bring different influences on L1 and L2 reading. Researchers have done experimentations on its influence, and constructive conclusions have been reached.

3.1 The experimentations of Antanaitis and Cheryl Anns, and Johnson

Antanaitis and Cheryl Anns' experimentation examined difficulties of foreign graduate students in the field of education as related to classroom practices in the United States, specifically, attending lectures, taking notes, participating in class. The study also examined students' perceptions of the interest and sensitivity shown to them by American professors and students. Responses of students were compared, based on the variables of sex, region of origin, time in the United States, years of English language study, type of program, grade-point average, and undergraduate performance in the home country, to establish whether difficulties were related to these variables. Comparisons were also made between instructional practices in the home country and the United States to examine the influence of cultural differences associated with classroom techniques. Fifty graduate students at the George Washington University, Howard University and the University of Maryland were interviewed, doing a questionnaire formulated by the researcher. Regions represented included Africa, Europe, Australia, Asia, the Middle East, the Caribbean, and Latin America. Results indicated that more than half of the students interviewed were experiencing frequent difficulties in all areas under consideration. Students originating from Asia and the Middle East reported the most difficulties, largely attributed to problems with the English language, while students from the Caribbean, who also reported frequent difficulties, attributed them to problems with American professors. Female foreign students reported more difficulties than males. The period of time that a foreign student had spent in the United States, the number of years of English language study, and type of program only slightly influenced students' difficulties. Students from all regions reported that differences in instructional practices existed between their countries and the United States

The subjects of Johnson's experimentations were 46 Iranian university students at medium English proficiency. Johnson researched how cultural origin affected reading comprehension. Every subject would read two articles—two English stories seeming from Iranian and American folklore. Half of students read original one, and the other half read adapted one. When finishing them they would do a multi-choice test, and this was to identify how much one had understood. Meanwhile he also let 19 American students read and memorize the article so as to do comparison. The result suggested cultural origin was more influential than semantics and syntax in terms of reading comprehension.

The way interactive talk was carried out in different languages was very cultural-linked, and it was difficult to explain the convention that governed it in a foreign language; it was dubious therefore whether it was worth investing very much effort teaching and practicing them. Most researchers believed given specific knowledge of a language-speaking country, people would utilize specific schema and cope adequately with that language.

3.2 The revelation of cultural difference to language teaching

To learn and use a language, one must know the relative culture because language and culture will always affect each other. Here are some methods of utilizing cultural difference to improve language teaching. First, help the students gain some information about the cultures of different countries and learn to communicate cross-culturally. Second, to develop the students' reading skill—using examples to serve several purposes, such as explaining concepts and ideas, supporting arguments and telling interesting stories, helping the students understand the function of the examples used in the text, etc.

Through the above methods, students are expected to become more aware of cultural differences and to be more tolerant of customs in other countries and they are expected to develop the consciousness of cooperation.

4. Reading strategies in L1 and L2 reading

Once people master the knowledge of schema and different culture, they should utilize suitable strategies to help reading. Good reading strategies help people to read in a very efficient way. Using them, one aims to get the maximum benefit from reading with the minimum effort. This section will discuss how to use 6 different strategies to read intelligently.

4.1 Bilingual reader's features

Bilingual reading is reading in two different languages. Successful reading stands for comprehending ability, reading strategy and right judgment of relative language context.. For example, a Spanish and English reader can read two kinds of language text, and also can utilize the following strategies to improve comprehending ability and reading result. Such strategies include browsing before reading, learning context clues, such as title, subtitle, and chart. While reading they seek paramount information and link main points to help comprehend the whole text; they also can activate and utilize the existing knowledge to explain a text, so as to reach new conclusions. To make sure the meaning of new words, check if the comprehension is right, and summarize main ideas of an article are useful procedures. In addition, users can utilize some strategies to memorize a text, such as defining, repeating, recording, summarizing and self-questioning. All in all, readers should clarify the relationship among all parts. When text comprehension can't proceed, they should make prompt change of strategy. Finally, readers can evaluate the quality of a text. Having finished reading a text, they should think over it and handle relative information, also anticipate the future use of the information.

4.2 Reading strategies

Strategy 1: Knowing what you want to know

The first thing to ask is why you are reading the text. Are you reading with purpose or just for pleasure? What do you want to know after reading it? Once you know this, you can examine the text to see whether it is going to move you towards this goal. An easy way of doing this is to look at the introduction and the chapter headings. The introduction should let you know whom the book is targeted at, and what it seeks to achieve. Chapter headings will give you an overall view of the structure of the subject. Ask yourself whether the book meets your needs. Ask yourself if it assumes too much or too little knowledge. If the book isn't ideal, would it be better to find a better one?

Strategy 2: Knowing how deeply to study the material

Where you only need the shallowest knowledge of the subject, you can skim material. Here you read only chapter headings, introductions and summaries. If you need a moderate level of information on a subject, then you can scan the text. Here you read the chapter introductions and summaries in detail. You may then speed-read the contents of the chapters, picking out and understanding key words and concepts. At this level of reading documents, it is worth paying attention to diagrams and graphs. Only when you need detailed knowledge of a subject is it worth studying the text. Here it is best to skim the material first to get an overview of the subject. This gives you an understanding of its structure, which can be fit to the detail gained from a full reading of the material. This is a good technique for getting a deep understanding of a text.

Strategy 3: Active Reading

When you are reading a document in detail, it often helps if you highlight, underline and annotate it as you go on. This emphasizes information in your mind, and helps you to review important points later.

Doing this also helps to keep your mind focused on the material and stops it wandering. This is obviously only something to do if you own the document! If you find that active reading helps, then it may be worth photocopying information in more expensive texts. You can then read and mark the photocopies. If you are worried about destroying the material, ask yourself how much your investment of time is worth. If the benefit you get by active reading reasonably exceeds the value of the book, then the book is disposable.

Strategy 4: How to study different sorts of material

Different sorts of documents hold information in different places and in different ways. They have different depths and breadths of coverage. By understanding the layout of the material you are reading, you can extract useful information much more efficiently.

Reading Magazines and Newspapers

These tend to give a very fragmented coverage of an area. They will typically only concentrate on the most interesting and glamorous parts of a topic - this helps them to sell copies! They will often ignore less interesting information that may be essential to a full understanding of a subject. Typically areas of useful information are padded out with large amounts of irrelevant waffle or with advertising. The most effective way of getting information from magazines is to scan the contents tables or indexes and turn directly to interesting articles. If you find an article useful, then cut it out and file it in a folder specifically covering that sort of information. In this way you will build up sets of related articles that may begin to explain the subject. Newspapers tend to be arranged in sections. If you read a paper often, you can learn quickly which sections are useful and which ones you can skip altogether.

Reading Individual Articles

Articles within newspapers and magazines tend to be in three main types.

(1) News Articles. Here the most important information is presented first, with information being less and less useful as the article progresses. News articles are designed to explain the key points first, and then flesh them out with detail.(2) Opinion Articles. Opinion articles present a point of view. Here the most important information is contained in the introduction and the summary, with the middle of the article containing supporting arguments. (3) Feature Articles. These are written to provide entertainment or background on a subject. Typically the most important information is in the body of the text.

If you know what you want from an article, and recognize its type, you can extract information from it quickly and efficiently.

Strategy 5: Reading whole subject documents

When you are reading an important document, it is easy to accept the writer's structure of thought. This can mean that you may not notice that important information has been omitted or that irrelevant detail has been included. A good way of recognizing this is to compile your own table of contents before you open the document. You can then use this table of contents to read the document in the order that you want. You will be able to spot omissions quickly.

Strategy 6: Using glossaries with technical documents

If you are reading large amounts of difficult technical material, it may be useful to photocopy or compile a glossary. Keep this beside you as you read. It will probably also be useful to note down the key concepts in your own words, and refer to them when necessary.

5. Conclusion

Schema and culture are the fundamental elements for man to learn and understand his surroundings, and man transmits feelings and experience towards outside world and inside heart world through language speaking, and the transmission of concept in memory also depends on languages. When people's schema is connected to the specific language environment they are living in or familiar with, the common language and context will help them communicate smoothly.

Therefore, language teachers should make full use of schema and different cultures in language teaching, and pay more attention to their utility and influence. Teachers should also enrich students' knowledge in this facet. Therefore, they can utilize schema and cultural difference to improve comprehension and memorization of texts. In that case, efficiency of foreign language learning is enhanced.

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