

Availability of Cognitive Context to Chinese-English Bilingual Translation

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Abstract—Language expressions and their stereotyped life scenes are mutually available to each other in language communication, and their connections constitute the main body of the cognitive context. This paper explores, from the perspective of the cognitive context theory, possible strategies of bilingual translation between Chinese and English. Language forms a continuum with conventional expressions at one end and creative expressions at the other. The degree of helpfulness of the cognitive context decreases towards the creative end along the continuum, but will never disappear. The cognitive context makes the processing of conventional language very economical, and also serves as the basis for the understanding of creative language. Translation involves an accurate understanding of the source language text and then a proper choice of the target language text. An access to the cognitive contexts of the source and target language, or both, will greatly enhance the efficiency of translation. But too ready inclination to make use of the cognitive context without a second thought must be guarded against.

Index Terms— Cognitive context; bilingual translation between Chinese and English; strategies

I. INTRODUCTION

In many cases language communication does not depend on the immediate context, but on the cognitive context which is mainly composed of the connections between language expressions and relevant cognitive knowledge. This accords with the principle of economy underlying most human behaviors. The bilingual translation between Chinese and English involves the conversion on the word, sentential and text levels between the two languages, whose widely accepted connections with the correspondent concepts, knowledge scripts and psychological schemata behind them make the main body of cognitive context which matters much to the accurate understanding of the source text and the proper choice of the target text in bilingual conversion. They render the translation of conventional language expressions quite easy, and serve as the clues for the understanding and translation of creative language expressions, too.

II. THE CONCEPT OF THE COGNITIVE CONTEXT

According to Xiong [1], the context of language use mainly refers to the cognitive context, i.e. the structured correspondences between language expressions and their relevant immediate circumstances, which in turn become cognitively structured units and relations. These correspondences will illuminate each other in future

language communications: certain language expressions will remind people of the correspondent circumstances, and vice versa. To put it in plain language, the immediate circumstances are various life scenes, referred to as part of the immediate context of language communication sometimes. Xiong (Ibid) maintains that the cognitive context constitutes the situational knowledge (about specific situations, i.e. the life scenes), the co-text (the language expression itself and those before and after it, in other words, the working memory), background knowledge structures, and the collective consciousness (ways of behaving, thinking and believing stored as social representations in individuals' knowledge structures in a social-cultural community to make their language behaviors suit the social, cultural and political environments) (Ibid, 115-16). According to Xiong (Ibid), the operation of the cognitive context is based on knowledge scripts and psychological schemata. Knowledge scripts are the results of conceptualization and experientialisation of typical structures of states, events and behaviors, i.e. life scenes, in the real world, forming typical and hierarchical internal structures or natural occurrences. The degree of activation of a knowledge script is determined by the need of communication, and is limited by the topic as well. By contrast, a psychological schema is a bigger construct with more social and cultural shades, including the collective consciousness. Undoubtedly, both knowledge scripts and psychological schemata are connections between concepts, i.e. human cognition into real and non-real entities such as human beings, animals, plants, objects, events, actions, time, space, mythological inventions, imagined beings, and so on. It is safe to say that the most fundamental unit of the cognitive context is concepts, followed by knowledge scripts, then by psychological schemata.

Given that translation involves the conversion between words, then between sentences and texts, this paper, based on Xiong's statements, defines the cognitive context as the widely accepted correspondences, or connections, between language expressions and the underlying concepts, knowledge scripts and psychological schemata. Since concepts are so important, this paper attempts to say more about them. Lakoff & Turner [2] ever expounded that slots, properties, relations and knowledge of the source domain concept can be mapped onto the target domain to form a metaphor, and they also mention the high availability of the cognitive force of conventional concepts as the source domain in metaphor. Inspired by their theory, this paper proposes that the components of the semantic domain of a

concept consist of slots, properties, actions, events, states, related social and cultural implications, etc., the concept concerns in that the relations can be broken down into actions, events and states, and knowledge into relevant social and cultural implications, with the former roughly equivalent to knowledge scripts and the latter to psychological schemata. Some of these components will be activated when necessary as part of the cognitive context in language communication.

Xiong's opinion about the cognitive context stands for the best part of the cognitive perspective on context, and matters much to the development of the cognitive pragmatics, and to translation as well. Good translation depends on an accurate grasp of the original meaning of the source text and a choice of proper equivalents in the target text, and neither can be done without the help of the cognitive context. It is unwise to belittle the role of the immediate context, but most language communications occur under conventionalized circumstances, forming stereotyped correspondences, which are regarded as the major components of the cognitive context in this paper. If a conventional context is mismatched with the conventional expression, or the language deviates from a conventional situation, then a new correspondence is very likely to come into being, resulting in creative use of language. Humans can process the new correspondence by referring to their prior knowledge. The new correspondence, once stabilized, will become part of the cognitive context.

In the process of translation, the source language expression will activate the relevant source language cognitive context which in turn activates the target language cognitive context before the choice of the target language equivalent is made. Just as metaphors make a continuum with conventional metaphors at one end and creative metaphors at the other end [3] [4], so do non-metaphor language expressions. And the helpfulness or the availability of the cognitive context increases towards the conventional end, but decreases towards the creative end in language communication. The more conventional a language expression is, the more available the cognitive context is, and the less processing effort is needed, and vice versa.

In Section 3 below, strategies for bilingual translation between Chinese and English with the aid of the cognitive context will be explored.

III. STRATEGIES FOR TRANSLATION

The availability of the cognitive context comes from the Principle of Economy, which is also called the "Occam's Razor" [1]. This principle accords with the Maximum principle of the Relevance Theory put forward by Sperber & Wilson [4]. The principle holds that human beings always attempt to achieve the maximum processing effects at the cost of the minimum efforts. This means quite a lot for human behaviors, and language communication and translation are no exceptions, of course. The more conventional the language expression, the more accessible the relevant concept(s), knowledge script(s) and

psychological schema (t) a will be, and the easier the translation.

A. High availability of conventional language forms

Conventional language forms are so familiar to people that they can help with the understanding of language very readily, even when there are unknown words. Look at the following antithesis:

(1) I love to be employed; I hate to be idle.

The two clauses in the above sentence are antithetical, opposite in meaning to each other. "Love" and "hate" are antonyms, so should "employed" and "idle". The reader only need to know one word in each pair to infer the meaning of the other. So it is easy to get the following equivalent in Chinese:

(1') WO XI MANG WU XIAN.

B. Aid of the semantic domain of a concept

Concepts are part of the cognitive context. It has been proposed above that the semantic domain of a concept consists of its slots, properties, actions, events, states, social and cultural implications concerning the concept. Of course, when a concept signifies a commonly seen entity in the world, its high availability of cognitive force is obvious in that it enhances the high accessibility of the concept to the readers. Look at the following three phrases:

(2a) to hose down the garden

(2b) to hose down the car

(2c) to hose down the fire

When the same verbal phrase hose down is collocated with different objects, the semantic domain of each object will be activated to help distinguish the conventional operation and function of the verbal phrase in relation to the signified in the real world, which ultimately determines the translation of it. In a garden, people use a hose to water flowers, grass and so on, while to a car, people use a hose to pour water onto it to wash it, and to a fire, people splash water on it to put it out. Hence the following translations:

(2a') YONG RUANGUAN JIAO HUAYUAN

(2b') YONG RUANGUAN XICHE

(2c') YONG RUANGUAN MIEHUO

C. Analogies among similar patterns of language use

Human beings cognize similar things in the same or similar way(s), which makes it possible to make analogies between things of the similar pattern. Look at the following examples [5]:

(4a) to feature the arrow

(4b) to blanket the floor

(4c) to paint the wall

In the above four phrases, all the verbs are denominal verbs, i.e. they are derived from nouns of the same form with zero affixation. The underlying syntax of them can be summarized as To MANIPULATE A To/On B, where A refers to the source noun of the verb, while B refers to the object in the surface structure. Based on the pattern, it is easy to get the meaning of

(4d) to pearl the gown

Hence the following translations:

(4a) GEI JIAN JIA YUMAO

(4b) GEI QIANG SHUA YOUQI

(4c) GEI DIBAN PU DITAN

(4d) GEI LIFU ZHUISHANG ZHENZHU

Look at another group of phrases:

(5a) to weed the garden

(5b) to feature the goose

(5c) to scale the fish

(5d) to stone the date

It is easy to find that in our real world, a garden does not need weeds, the feature has to be plucked from a goose before the bird is cooked, and scales must be removed from fish for cooking, thus we can guess the meaning of (5d). So (5a) to (5d) can be translated as:

(5a') GEI HUAYUAN CHU CAO

(5b') GEI E BA MAO

(5c') GEI YU GUA LIN

(5d') GEI ZAO QU HU

What works behind the processing of the above two groups of phrases are the conventional behaviors human beings take to deal with the relevant entities. They form knowledge concerning certain concepts, serving as the basis of inference in information processing.

D. Justified omission of minor details

A psychological schema is often loaded with social and cultural orientations. This makes it sensible to render the prominent part of a schema in translation and omit some minor details for economy of expression or for literary brilliance. Take the title of a classical Chinese poem as an example.

(6) CHUNJIANG HUA YUEYE

Here "CHUNJIANG" means "a river in spring", "HUA" means "flowers", while "YUEYE" means "a moonlit night". So the title can be paraphrased as "A Moonlit Night on the River Lined with Flowers in Spring". Obviously, as the title of a poem, it is too long. I searched on the Internet and found that the famous Chinese translator Yuanzhong Xu translated it into "A Moonlit Night on the Spring River", with "flowers" omitted. At the first sight, I did not regard it as a very proper translation. My reason is that, if a river is moonlit, it must be at night, so to put "night" there is superfluous. But upon deep reflection, I was amazed by the charm of the translation. "Night" must be there, otherwise, the ambience of a lady missing her lover will decrease sharply. "A moonlit night" in classical Chinese literature is a stereotyped scene to fully unfold the sharpness of a lady's heart-aching pain from missing her lover who has long been away, e.g. on business or in service of the army. A quick glance at the whole poem will show that "flowers", the equivalent Chinese character "HUA" seldom appears except in the title. That is why it can be omitted, because its omission almost has no impact on the effect of the whole poem. A word-for-word translation, "Spring, River, Flowers, Moon and Night" can be found online, and its flaw can be recognized almost instantly in comparison with Xu's version.

E. Restoration of hidden information

Look at the following example from Xiubai Qin [6]:

(7) I will decide every day whether I can bear to put my cracked hands into the cold water and strong soap.

There is no problem to put one's hands into "the cold water", but no one can put them into "strong soap" given that soap is a pack of solid material. Our conventional way of washing things is to put the thing for washing and hands into water and then apply soap to the thing with hands. As a result, we should render evident what is missing or implied. So we can translate the sentence into

(7') WO MEI TIAN DOU YAO JIU JIE SHI FOU SHOU DEI LIAO BA JUN LIE DE SHUANG SHOU FANG JIN BING LENG DE SHUI LI, RAN HOU ZAI YOU SHOU QU PENG CI JI XING HEN QIANG DE FEI ZAO.

F. Substitution of a super-ordinate term or hyponym

Due to the differences in cognition and languages, sometimes a super-ordinate term or a hyponym is needed to replace the term in the source text.

(8) He competed for a place at the school, but failed.

The referent of "place" in the above sentence must be clarified before translation can be done: it can be a post for an employer to work there, or a place for a student to study there. Two translations are possible without further reference of a larger context. So "place" can be translated into either "ZHI WEI", or "JIU DU MING'E".

Another example:

(9) YI BIAO SAN QIAN LI

In English, aunt, uncle and cousin are all covering terms. But in China, in the long patriarchal society, people have attached much more significance to the family ties from the father's side than from the mother's side, hence dedicated titles to the people with different family ties. But when such Chinese terms are translated into English, people can only resort to the above-mentioned covering terms, i.e. the super-ordinate terms. Of course, additional information can be inserted when necessary. The operation is reverted when people translate such English terms into Chinese. That is, they must use specific Chinese titles to refer to a certain family tie. The above sentence can be translated as:

(9') Everybody has a cousin three thousand miles away.

IV. CREATIVITY ON THE BASIS OF THE COGNITIVE CONTEXT

Although most language expressions are conventional, creative expressions are the vigor and charm of language and life. Of course, creativity is quite probably based on conventionality and the degrees of deviation of creative expressions from conventionality. According to the Relevance Theory [4], the more creative an expression is, the more processing effort is needed, and the more cognitive effect will be achieved. A few examples will illuminate that.

(10) If Americans view the system as rigged against them and see economic success as out of reach, they might give up on the celebrated *American ideals of hard work and meritocracy*.

In the above sentence, "hard work and meritocracy" are far-reaching values of Americans, the foundation of America as a nation, and the symbol of American Dream.

It can be paraphrased as “If one works hard enough and stands out in his field, he will be prominent in the society someday”. Coincidentally, a Chinese saying “XUE ER YOU ZE SHI (meaning “if one is good enough at learning, he should strive to be an official to serve the people) suggests an ideal dearly cherished by civic scholars in Chinese history, which is analogous in the causal-effect logic. If it is converted into “QIN ER YOU ZE GUI”, it is much more economical and effective than a literal translation of “QINLAO HE JINGYINGJIAOYU”. This kind of creativity based on a similar language form can be much more resonant.

Another example can be more explanatory.

(11) I can already see them behind the bars of their prison, instead of behind the bars of my poverty.

In the above sentence, there are two bars. But the translation of them cannot be the same due to the different collocations. The bars of a prison reminds people of the typical symbol of a barred window in prison, while the bars of my poverty involves a metaphor MY POVERTY IS A PRISON, so what bars substitutes should be enhanced to PRISON instead of the window of prison. As a result, we can translate the first bars into “TIE CHUANG”, and the second bars into “LAO LONG”. Both are elevated to a super-ordinate term.

V. WARNINGS

With no doubt, these stereotyped contents stored in our cognition are very helpful, but at the same time, they can be dangerous, too, because they may allure us into making mistakes by believing, too readily, the regularity of similar structures or the high availability of conventional expressions and life scenes. Look at the following examples:

(12a) go fishing

(12b) go shrimping

(12c) go whaling

In all the above phrases, fish, shrimp and whale as creatures are all the objects of capture by human beings. However, in

(12d) *go hawking*,

The creature hawk is not generally something to be captured, instead, it is a creature used to prey on other smaller animals. So go hawking is more likely to mean “go hunting with a hawk”. As a result, we have the following translations:

(12 a’) BU YU

(12 b’) BU XIA

(12 c’) BU JING

(12 d’) DAI YING DALIE

Now please refer to another group of examples for more evidence.

(13a) a fishing boat: YU CHUAN

(13b) a shrimping boat: BU XIA CHUAN

But

(13c) a hounding dog: LIE GOU

(13d) a sheeping dog: MU YANG QUAN

In (13a) and (13b), fish and shrimp are to be caught, while in (13c) hound is the animal to catch other animals, and in (13d) sheep is the animal to be watched and managed.

VI. CONCLUSION

Our deep insights into the world entities and affairs make the main body of our cognized knowledge, which, joined with a good command of both the source and the target language, will benefit the translation practice. They facilitate a fast understanding of conventional language expressions and a proper translation of them into the target language. What is more important, they provide clues for the inference of creative language expressions and their translation. Human knowledge is almost always founded on prior knowledge. With the aid of language knowledge about the source language and the target language, and the knowledge behind the languages, translators can achieve a much higher efficiency of translation at much less efforts. However, stereotypes are a double-edged sword. While extremely powerful in saving us processing efforts, they can be cheating us into ready use of them without a second thought. Let's be on alert and look for possible evidences against adopting an archetypal use of language at the first sight while making use of them with ease.

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REFERENCES

- [1] Xueliang Xiong, “Cognitive Pragmatics,” Shanghai: Shanghai Foreign Languages Teaching Press, 2000.
- [2] Lakoff, G. & M. Turner, “More than Cool Reason,” Chicago and London: The University of Chicago Press, 1989.
- [3] Lakoff, G. & M. Johnson, “Metaphors We Live By,” Chicago and London: The University of Chicago Press, 1980.
- [4] Sperber, D. & D. Wilson. Relevance: Communication and Cognition,” Beijing: Foreign Languages Teaching and Researching Press, 2001.
- [5] Clark, E. V. & H. H. Clark, “When Nouns Surface as Verbs,” *Language*, vol. 55, (4), pp: 768-811, 1987.
- [6] Xiubai Qin, “New Century College English,” Vol. 5, Shanghai: Shanghai Foreign Languages Teaching Press, 2010.

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