

Semantic Fuzziness and Its Translation Strategies

Zhengling Fu

College of International Studies, Southwest University

Chongqing 400715, China

Tel: 86-135-9419-4776 E-mail: rainbow9119@163.com

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Abstract

Ever since the appearance of fuzziness, it has aroused heated debate among scholars. Fuzzy linguistics, as a newly developed subject, is a science concerning fuzzy language. Fuzziness is the intrinsic feature of every language so the translation of it should be attached great importance. The translation strategies should be proper when they are adopted in translating fuzzy languages. As far as the translation strategies are concerned, the first strategy can be viewed as semantic translation and the second one, communicative translation.

Keywords: Semantic fuzziness, Translation strategies, Semantic translation, Communicative translation

1. The Introduction of Semantic Fuzziness

Since the time of Aristotle, philosophers, scientists, and linguists have been looking for precision in their studies of every class of things. Thanks to their efforts, our understanding of the world has been more and more precise. Yet, the intrinsic imprecision have proved to be of more important as an essential part of our knowledge of the world. The term “fuzziness” comes from American scientist L.A. Zadeh’s fuzzy set theory. In 1975, Zadeh first put forward the concept of fuzziness, and thus signified a revolutionary change in our thinking. Based on the set theory of modern mathematics and the ambiguous boundaries in natural language, Zadeh (1975) established fuzzy sets which refer to a continuously graded degree of membership rather than the binary membership in classical sets. In classical set, membership is a precise concept. Yet in Zadeh’s fuzzy sets, an element can range continuously throughout the interval and is not necessarily restricted to the binary end points of the interval. Fuzziness has aroused heated debate in the academic circle. And as time goes on, fuzziness has developed into a subject relating to mathematics, logics, psychology and linguistics. And with a bright future, fuzzy linguistics, which began to develop in the 1970s, is a new science concerned fuzzy language, especially from the perspective of pragmatics, which is concerned about the language in use and interpreting.

From Aristotle onwards, people tend to classify things by a set of binary features. The boundaries between things are clear-cut. Using this concept, some scientists make a distinct differentiation between sense and reference, denotation and connotation or intension and extension, of which the former can be equated to the definition of the name or the word, while the latter, the set of the objects prescribed by the definition. In short, intension states the fundamental attributes of certain name or word, and extension is the set of objects, which are considered to have these attributes and hence labeled with the word. Obviously, this way of thinking will lead to the conclusion that extension totally depends on intension. But Zadeh (1975) points out that it is hardly possible to classify all objects in the universe precisely, as is well illustrated by such instances as the expressions of “big houses”, “high buildings” and “beautiful women”, for people can not make sure their extensions. Through the research into these linguistic phenomena, he learned that these expressions show that the borderline of some categories is far from being clearly fixed. Obviously, this argument involves the fuzziness in language in terms of the uncertainty of the range of extension. And there is also a fact that the intensions of these names are also uncertain. For example, no one can define such concepts as “big”, “high” and “beautiful” strictly and distinctly. And in other words, the uncertainty of extension is a reflection of uncertainty of intension. Generally speaking, fuzzy words are naturally described as having fuzzy boundaries.

Since most concepts in the real world are of fuzziness, it would be far better use fuzzy theory to deal with semantic fuzziness than traditional semantic theory. Indeed, a fuzzy expression may be described by a fuzzy set with indefinite boundary. An element in the set does not follow the traditional all-or-non trends, but is a matter of degree, that is, an element does not merely fit or not fit the set, but fits it to a certain degree. For example, the meaning of the term “a tall person” can be represented by membership, say 1.68 meters is 70% of a tall person, 1.88 meters is 100%. If we treat truth as a linguistic variable with values such as true,

very true, completely true, not very true, untrue, etc., it would lead to what is called fuzzy logic. By providing a basis for approximate reasoning, that is, a mode of reasoning which is not exact or very inexact, such logic may offer a more realistic framework for human reasoning than the traditional two-valued logic.

An expression is fuzzy if it has a characteristic of referential opacity, as in, for example about 30 students, while its general meaning, 30 plus-or-minus, may not be fuzzy, when we try to work out its denotation, however a gray peripheral area may occur, is 24 in the boundary of 30? The answer varies from individual to individual. In my view, fuzzy is a technical term, which excludes the negative part of its literal meaning, like misused, mistaken, or not well defended. As stated before, the term “fuzzy” is derived from the fuzzy mathematics developed by Zadeh. Zadeh suggests that fuzziness can be formally handled in terms of a fuzzy set, a class of entities with a continuum of grades of membership. Such a set is characterized by a membership function, which assigns to each entity a grade of membership ranging between zero and one, noted as $[0, 1]$. Category membership is not a yes-or-no question, but rather, a matter of degree. Different individuals may have different category rankings depending on their experiences, and their world knowledge.

2. Features and Functions of Semantic Fuzziness

2.1 Features of Semantic Fuzziness

Semantic fuzziness has features of indefiniteness, definiteness, variability and ineliminability.

2.1.1 Indefiniteness

The fuzziness of a fuzzy word lies in that it does not have sharp referential application, that is, the extensional application is indefinite. For example, there is difficulty in drawing sharp boundaries between “Jin Dai”(近代) and “Xian Dai”(现代), or between “tall” and “short”. In the same way, the use of the word “river” and “creek” is fuzzy in their domain of application; there is a fuzzy zone of cases where we cannot say whether we should call the water river or creek. With respect to a concept “A”, we have a domain of things that clearly A (e.g. creek), a domain of things that are clearly not A (e.g. river) and a fuzzy zone in between of things that are more or less A or not A. The indefiniteness of fuzziness is also revealed in the contrary terms. That we say something is big suggests something else is small, and vice versa. The contrary antonyms “big” and “small” are relatively fuzzy. In comparison with it, the complementary antonyms like the pair “single” and “married” are not at all fuzzy. The polar words “big” and “small” are fuzzy just because the boundaries of the words are indefiniteness. We may insert word like “medium” between the words “big” and “small”. However, between “single” and “married”, no graded intermediates can be inserted, hence no fuzziness would emerge. We can say that fuzziness is embodied in the fact that the two sides of a contradiction do not oppose against each other sufficiently or adequately.

2.1.2 Definiteness

By definiteness of semantic fuzziness, we mean the kernel parts of fuzzy meaning are basically definite in comparison with the indefiniteness of the elements of the fuzzy edges.

Suppose, for example, a term covering from March 1st to July 31st, the kernel part of the term “midterm” is definite, i.e. May 15th and May 16th. However, whether the elements which are away from the core belong to “midterm” or not is indefinite.

Not only can the kernel parts of fuzzy semantics be definite, also the elements of the edges can be partly definite. Suppose we name each side of fuzzy boundaries upper limit and lower limit respectively, clearly the upper limit of “the end of a year” (December 31st) is definite, similarly, “the beginning of a year” (January 1st) is definite too.

2.1.3 Variability

By variability, we mean fuzziness and precision can mutually transform to each other in a certain condition.

Precision can be transformed to fuzziness. The point can be best illustrated by the examples of numerals especially in Chinese, “San(三), Bai(百), Wan 万” in Chinese is fuzzy in “San Ge(三个)”, “Chang Ming Bai Sui (长命百岁)”, “Qian Yan Wan Yu (千言万语)”, also, “Qi (七)”, “Ba (八)” often occurs in the Chinese idioms, but the numerals have nothing to do with the concept of number, such as “Qi Ping Ba Wen (七平八稳)” “Qi Ling Ba Luo (七零八落)”, we can also find such expressions in English “couple” is precise when it means husband and wife, but it is fuzzy in the sense of “few, several” (Wu, 1999, p172).

In English, it is interesting that a compound written in the form of open words are fuzzy in meaning and that a compound written in the form of solid word is precise. For example, black bird is fuzzy because there is no sharp boundary to distinguish a black bird from one that is not black. Similar examples are dark room, green house, green stuff, red coat, etc. However, blackbird is precise because it means a European songbird. Similar examples are darkroom, greenhouse, greenstuffs, redcoat, etc. Such phenomenon also exists in Chinese, “Hong (红)” is fuzzy in isolation, but is precise in “Hong Wei Bing (红卫兵)”.

2.1.4 Ineliminability

The feature that fuzziness is ineliminable has been touched upon in the previous chapter, i.e. fuzziness cannot be removed with resort to context. We will, here, examine the issue from other perspectives. Some scholars tried to establish a logically perfect language to replace fuzzy language, but none of them succeeded. As we know, fuzzy language forms a considerable part of language use, it cannot be eliminated though various methods may be applied to render it less fuzzy.

The distinction between fuzziness and precision lies in whether or not it has sharp boundary. Therefore, some argued that unsharp boundaries could be eliminated by stipulations. Fu Dawei holds that fuzzy words like “juvenile”, “youngster”, “the middle-aged” and “the old” are fuzzy just because of the negligence in defining them in various dictionaries. He assumes that fuzziness would be got rid of if stipulations were made by an authoritative dictionary together with the tests of psychology and habits of the users of a language. In his view, there would be no unsharp boundaries if the period of ages for juveniles, youngsters, the middle aged and the old are stipulated as: 10--16(juvenile); 16--35(youngster); 35--60(middle-aged);

more than 60(old). He further argues that it is misunderstanding to say that these words are fuzzy because their boundaries are clear and people never call a middle -aged man an old man (Fu, 1990, p35).

2.2 Functions of Semantic Fuzziness

Joanna Channell (2000) focuses on approximating quantities with approximators, round numbers and non-numerical vague quantifiers. She also touches upon the problem of referring to categories and provide a detailed account of pragmatic significance of vague language. And in the following sections, we will mainly discuss the functions of fuzzy language in the respect of pragmatics and stylistics.

2.2.1 Pragmatic Function

There are two areas of work in theoretical pragmatics which is of particular relevance in the description and explanation of fuzzy language use. The first is the theory of conversational implicature first advanced by Grice (1968) and this notion is “one of the single most important ideas in pragmatics” (Levinson, 1983). Grice's theory of implicature is noticeable for two reasons. The first is that conversational implicature can help us understand and find satisfactory explanations concerning some difficult linguistic phenomena, and second, the general conversational principles have some effects on the English language, i.e. the formation of certain grammatical structures depends on context and intention (He, 2003: 64). Grice's theory assumes that conversation is a cooperative venture, and that the speakers adhere to what he called the Cooperative Principle (CP).

According to Grice (1975), in communication, the speakers must obey the Quantity Maxim, that is, make your contribution as informative as is required and do not make your contribution more informative than is required. But sometimes, for some reason, the speaker wants to withhold some information. And there are many ways to withhold the information, such as deceiving, refusing to answer and changing to another topic, etc. Besides those methods, fuzzy language may be another useful method to withhold information when people are not willing to give sufficient message, or when people intend to convey information beyond the words. For example,

(37) A: Where does the teacher live?

B: Somewhere near the school.

The answer of speaker B violates the Quantity Maxim because speaker B does not provide the information as required. From the answer “somewhere near the school”, speaker A can not have the right idea of the teacher's exact living place. Speaker B may not know the place where the teacher lives or the wants to withhold the information deliberately. So speaker B has to violate the Quantity Maxim in order to obey the Quality Maxim.

2.2.2 Stylistic Function of Fuzzy Semantics

Aside from the pragmatic function mentioned above, fuzzy language also has the function from the respect of stylistic writing. Language is a tool to describe the universe and fuzziness

of language is the spirit of literary works. And in literary works, fuzziness and implicitness are most valuable in showing the beauty and variety of the universe. Fuzziness in English is everywhere. For example:

Soft is the Strain when Zephyr gently blows,
And the smooth Stream is smoother Numbers flows.
But when loud Surges lash the sounding shore
The hoarse, rough Verse should like the torrent roar.

Pope: Essay on Criticism

The former two sentences of this poem uses the word "soft" to modify the word "Strain", "gently" to modify "blow", "smooth" to modify "stream" and "smoother" to modify "Numbers". In this way, the poet, Pope, describes for us a beautiful scene of breeze and mountain stream. And in the latter two sentences, Pope uses "loud" to modify the word "Surges", "Sounding" to modify "shore" and "hoarse and rough" to modify "verse", and "torrent" to modify "roar" to show the reader a fierce scene of a stormy sea and roaring current. And the two entirely different images are realized by using some fuzzy language, such as "soft", "gently", "smooth", "sounding", "hoarse", "rough" and "torrent".

3. Translation Strategies for Fuzzy Language

As is known to all, translation is one of the most effective ways to convey messages. And translation is closely related to the meaning of the messages, because translation is an important way to express the meaning in the original language into the target language. Language users tend to use precise expressions and fuzzy ones to convey their thoughts. And if the thoughts and messages are expressed in a precise way, the translation of the messages or thoughts may be a little easy because the range of the precise expressions is much more limited than fuzzy expressions. But if the thoughts or messages are expressed in a fuzzy way, which is often the case, the translation of them will be more difficult because fuzzy words or expressions always convey vague meanings and change the meanings according to different contexts. And especially in some literal works, the authors are always accustomed to use fuzzy language, in whatever forms, to convey their thoughts to the reader and even need the reader to read between lines. And in communications, just as what we have discussed, the use of fuzzy words and expressions is more effective than precise ones. So both in literal works and daily communications, understanding the meaning of the original language is the first step before rendering the original language into another one. But sometimes, due to the differences in stylistics, it is difficult to achieve the exact equality between the original language and the target one, especially in poems and prose.

And it is well known that a translator acts as a bridge between the writer of the original language and the reader of the target language. In front of a text, a translator should view the process of rendering as two parts. One is to understand the meaning of the original text clearly and correctly, and the other, the clear and correct rendering into the target language. So the translator should make his or her own measure to have the effect of the translation--in

Newmark's opinion--to fulfill the two main aims of translation: accuracy and economy by using semantic translation, communicative translation or mixing them together. Though the translator should not make any addition to or subtraction from the source text, according to difficult situations, the translator can make some addition or subtraction in his or her rendering. Just as Newmark has said, there is no absolute semantic translation or communicative translation, so in the process of translation, a translator should combine the two translation methods together effectively.

3.1 Literal Translation

Literal translation means using the same or similar expressions in the target language. In the target language, if we can find a word or expression, which is identical to the one in the original language, then we can use the method of literal translation.

One type of translation is to use the exact fuzzy words or expressions to replace the ones in the original language in order to reach equivalence. When translating such kind of texts, a translator can use the equivalent fuzzy expressions in the target language to render the fuzzy expressions in the original language, thus maintaining the fuzzy information in the original language. For example,

If a sentence of imprisonment is imposed, there are limits on the term of imprisonment--not more than six months or less than three years.

如对之做出徒刑判决，其刑期也有限制——或不超过六个月或不少于三年。(Liao, 2003)

In the example, the translation from “no more than” and “less than” to “不超过” and “不少于” is an exact example of using the fuzzy expressions in the target language to render the fuzzy ones in the original language.

The other type of translation is to make some changes while the translator renders the fuzzy words or expressions into the target language. Or in other words, when a concept is used to express fuzziness in the original text, the translator can make a change and use a similar or even non-equivalent concept to express the fuzzy concept. Take the following as example,

It has been calculated that AIDS makes hundreds of thousands of people ill every year in the world and kills a large number.

据统计，艾滋病每年使世界上无数人生病，并导致无数人死亡。(Zhou & Chen, 2005)

In the above example, there are two fuzzy concepts—“hundreds of thousands” and “large” bearing the meaning of “many”. But in the target text, the translator does not think the meaning of “many (无数)” can convey the message of the original text, so he or she renders them both into “无数”.

3.2 Free Translation

As we have discussed before, fuzziness is one of the most characteristic features of natural

languages. However, according to different cultures and different social life, there is much difference among different languages, so there must be much difference in fuzziness among different languages. While translating, a translator had better attach great importance to the meaning of the fuzzy words or expressions in the original language. But if there is not any exact fuzzy equivalence in the target language, the translator should make some flexible changes.

Sometimes, the translator may make some addition to the fuzzy concepts while rendering the original language into the target language. Now look at the following examples,

a. Day after day he came to his work — sweeping, scrubbing and cleaning.

他每天来干活——扫地，擦地板，收拾房间。

b. 要提倡顾全大局。

We should advocate the spirit of taking the whole situation into consideration.
(Zhang & Tai, 1998)

In the rendered text of (a), the translator adds “地”，“地板” and “房间” to the original words “sweeping”，“scrubbing” and “cleaning” to make the meaning integrated for the target reader. And similarly, in (b), the meaning of “顾全大局” is fuzzy. So in the translated text, the translator conveys the message effectively by adding another abstract noun “spirit”.

Sometimes the translator can also make some ellipsis while rendering the fuzzy concepts of the original language to the target one. The following poems are well-known to Chinese,

a. 海内存知己，天涯若比邻。（王勃《送杜少府之任蜀州》）

b. Close friends remain friends whether they roam; even at the earth’s end, you would seem next door. (Translated by Zhang Tinchun & B. M. Wilson; Wang, 2005)

c. If you have a friend who knows your hearts, distance can not keep you apart.
(Translated by Xu Yuanchong; Wang, 2005)

The concept of “海内” and “天涯” in (a) are fuzzy. Where is “海内” and where is “天涯”？No one can answer the question. And what’s more, there are no equivalent concepts in English. In (b), the translators use “wherever they roam” and “at the earth’s end” to replace “海内” and “天涯”. But it seems this kind of translation is too precise. And in (c), the translator omits the meaning of “海内” and renders “天涯”, as “distance” which can convey the message of the original text, compared with (b).

4. Conclusion

Natural languages are abundant in the use of fuzzy words, and fuzziness like precision is one of the characteristics of natural languages. No one can deny the fact that fuzziness exists in our language and plays an important part in our communication. Without fuzziness, our language would become extremely barren, dull and monotonous.

There has been a long history of using fuzzy language in speech and writing although the

language users may not even realize it. And then the thesis mentions some functions of fuzzy language, such as in pragmatics and stylistics. And at last, when it comes to the translation strategies, the thesis mainly discusses two different ways. One is literal translation, which is to use the exact concepts of the target language to replace the fuzzy ones of the original language. And the second one is free translation, which is to make some flexible changes in translating, such as addition and ellipsis. As far as the translation strategies are concerned, the first translation strategies can be viewed as a semantic translation, the second, a communicative translation.

The ideas developed in this thesis are by no means perfect. The fuzzy language and its related areas need more exploration. As a booming subject, fuzzy language must arouse scholars' due attention.

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