On the Classification of Semantic Changes in Grammatical Metaphor

Chuhao Lu

School of Foreign Studies, Jinan University, Guangzhou, China

E-mail: 754238187@qq.com

Abstract

In terms of the correlations of grammatical metaphor, semantics and semogenesis, grammatical metaphor is studied as regard to its influence on semantic meanings. Theory of image schema in cognitive linguistic, together with the semantic analysis in semantics, is being adopted into the classification of change in semantic meanings, which is embedded in linguistic and non-linguistic level. Later it was found out that both ideational metaphor and interpersonal metaphor can create these four types of semantic changes, namely, semantic reduction, semantic addition, semantic inconsistence, and semantic reconstruction. Some human's cognitive characteristics and cognitive processes are also revealed by this interdisciplinary approach of combining grammatical metaphor with other fields, such as cognitive linguistics and cognitive pragmatics.

Keywords: Grammatical metaphor, Semogenesis, Semantic changes, Classification

1. Introduction

Metaphor, a vital cognitive phenomenon, reflects that both human languages and human thoughts share some kinds of metaphorical characteristics. As for lexical metaphor, meaning is often embedded in the transition of words, for example, in the sentence, "He has made up his mind. We tried to move him, but it doesn't work." This is a sentence of lexical metaphor by the use of "move". Here, to move him means that we want to change his mind. This meaning is embedded in the use of lexical metaphor.

However, it is still quite common to see that meaning is also encoded in the transition of grammatical structures, which is referred to as the adoption of grammatical metaphor. Therefore, grammatical metaphor can also carry a lot of meanings, both from linguistic and non-linguistic aspects. As we all know that grammatical metaphor can be seen as a tool for semogenesis, semantic changes, as a result of grammatical metaphor, is worthy of being discussed. In this paper, some previous studies on grammatical metaphor and relations between grammatical metaphor and semantics will be reviewed. Then four types of semantics changes caused by the adoption of grammatical metaphor will be discussed and exemplified in details. In the end, a summary will be made to state clear the findings of this paper and the limitations of this paper.

2. Literature Review

2.1 Early Stage of Studies on Grammatical Metaphor

The 1970s saw the revolutionary changes in metaphor study. Metaphor occurs not only at the lexical level but also the grammatical level. Grammatical metaphor, one of the important theories in systemic functional grammar, is put forward by Halliday in his *Introduction to Functional Grammar* (Halliday, 1985: 542), in which he states that "there is a strong grammatical element in rhetorical transference; and once we have recognized this we find that there is also such a thing as grammatical metaphor, where the variation is essentially in the grammatical forms although often entailing some lexical variation as well". This definition is too abstract to understand, and following is the examples provided by Halliday when he tries to explain this definition.

(1) a. On the fifth day they arrived at the summit.

b. The fifth day saw them at the summit.

Sentence (1a) is a material process, and sentence (1b) is a mental process. Sentence (1b) is the metaphor form of sentence (1a) for nominalization and process transition occur.

Later Halliday (1998) notes that lexical metaphor can be seen as "same signifier, different signified", and grammatical metaphor can be seen as "same signified, different signifier". Grammatical metaphor involves remapping across the lexicogrammatical stratum while lexical metaphor does not.

In terms of the categorization of grammatical metaphor, Halliday classifies grammatical metaphor into ideational metaphor and interpersonal metaphor. Ideational metaphor means

that the variation takes place in the process of choices in the transitivity system of a language, including the selection of process type (material, behavioral, mental, verbal, relational, existential), the selection of function roles (actor, process, circumstance, goal) and the selection of sequence of group or phrase classes. Ideational metaphor is realized through two forms: one is through the selection of process types within the transitivity system of a language; the other is through the use of nominalization, whereby any element or group of elements is made to function as a nominal group in the clause, which is seen as "the single most powerful resource for creating grammatical metaphor" (Halliday, 1984, 2005), such as sentence (1b).

Then, interpersonal metaphor can be classified into two subtypes, namely, metaphor of modality and metaphor of mood. Metaphor of modality refers to the speakers' participation into a speech event to express his attitudes or judgments about the truth of a proposition, for example,

(2) a. Maybe he is not Dr. Smith.

b. I don't think he is Dr. Smith.

The embedded meaning of maybe can also be realized by the use of the phrase "I don't think", which is an example of metaphor of modality.

Metaphor of mood refers to the remapping between moods and speech function, which are associated with the exchange system of a language (i.e. giving and demanding information or goods-and-services) (Halliday, 1984, 2005). Sentence (3b) can be seen as a metaphor of mood of sentence (3a) as follows.

(3) a. You should not do that.

  b. How would you do that?

Besides, Martin makes a distinction between the congruent and incongruent metaphorical realizations. He states that "a congruent relationship is one in which the relationship between semantic and grammatical categories is natural: people, places and things are realized nominally; actions are realized verbally; logical relations of time and consequence are realized conjunctively, and so on (Martin, 1991:287)". By contrast, incongruent relationships are those in which actions are realized as nouns, and logical relations are realized as verbs. What should be noted is that all meanings have more than one manner of realization, either congruently or incongruently (Martin, 1991). As mentioned before, sentence (1b), (2b), (3b) are the metaphorical form of the congruent form (1a), (2a), (3a) respectively.

2.2 Studies on grammatical metaphor and semantics

It is widely acknowledged that metaphor is a main study field in semantics. However, with the growing researches in grammatical metaphor, researchers tend to have an interdisciplinary approach towards the study on metaphor. Both cognitive linguistics and cognitive pragmatics can offer new solutions to the study of metaphor. Moreover, the study

of grammatical metaphor from the perspective of semantics can offer a more comprehensible approach for linguists to look into human's cognitive characteristics and cognitive processes.

Lexical metaphor and grammatical metaphor are "the both aspects of the same general metaphorical strategy by which we expand our semantic resources for construing experience" (Halliday & Matthiessen, 1999:234). Halliday argues that the "meaning potential" that underlines the creative power of human language is built upon the basis of reconstruction of human experience. Potential meanings of grammatical metaphor are realized by ideational metaphor and interpersonal metaphor.

It is widely accepted that grammatical metaphor is the incongruent realization of the projection between such domains of different conceptions. According to Xie, J.R. & Peng, S. X.(2004), it is a universal phenomenon that semantic meaning permeates into grammatical structures and grammatical metaphor reflects between of the conversion semantic and grammatical relationships. They state that more insight can be gained in understanding the essence of grammatical metaphor when exploring it by combining cognitive linguistics and semantics.

In terms of the principle of formal similarity and the criteria of semantic change, Cong, Y.X. & Wang, H.Y. (2013) categorize ideational metaphors into three types, namely, semantic reduction, semantic expansion and semantic restructuring. However, they haven't mention interpersonal metaphors, which can also cause a larger number of semantic changes. Therefore, in this paper, semantic changes caused by ideational metaphor and interpersonal metaphor will be categorized and examples for each type will be provided and discussed in details.

There are a number of significant research studies on Systemic Functional Linguistics (SFL) and Grammatical Metaphor (GM) aiming to investigate political or other discourses in various veins and genres as follows.

In their studies, Kazemian, Behnam and Ghafoori (2013) and Kazemian and Hashemi (2014a) have adopted Hallidayan Systemic Functional Grammar to pinpoint and analyze nominalization and the role played by it in a corpus of 10 authentic scientific texts drawn from very influential magazines; the analysis is conducted based on nominalization, its frequency and process types. The analysis displays that Ideational Grammatical Metaphor has permeated scientific texts and the prevailing process types are material and relational types. Consequently, the tone of the writing is more abstract, technical and formal.

In some other veins, Kazemian and Hashemi (2014b, 2017) have introduced an integrated approach to analyze political or other discourses in light of overarching methodological frameworks of Hallidayan Grammatical Metaphor in SFL, Fairclough's perspective on critical discourse analysis and Rhetoric. They have analyzed Mr. Obama's eight speeches from the point of frequency and functions of Nominalization, Rhetorical strategies, Passivization and Modality etc. to first manifest the integrated approach practicality and adeptness through analysis; then by virtue of analysis to unveil how language is manipulated

and distorted by orators in order to convey seamlessly intended messages and political creeds to the audience.

Surveying the recent annals of literature, some other remarkable studies have also investigated various political, advertisement etc. discourses in light of SFL and GM to discern multiple strategies exploited by orators and political pundits and the way they make text/talk persuasive, significant, appealing and obscure, as well as the way they convey their intended objectives to the audience (Cap & Okulska, 2013; Devrim, 2015; Noor et al, 2015 etc.). Prior studies have tended to concentrate on some other genres and discourses. This study is unique in the sense that it attempts to bridge the gap among previous studies by reviewing Classification of Semantic Changes in Grammatical Metaphor and applying image schema theory from cognitive linguistics and semantic analysis from semantics to sort out the semantic changes caused by grammatical metaphor.

3. Semantic Changes in Grammatical Metaphor

As what has been mentioned and discussed above, grammatical metaphor can be seen as a process where semantic meaning generating takes place. The newly semantic meaning is generated from the interaction between lexical meaning and lexicogrammatical meaning. The adoption of grammatical metaphor reflects the multi-mapping relationships both from the lexical level and the lexicogrammatical level. Therefore, this can be regarded as semantic addition. But in terms of the concrete forms of grammatical metaphor, there is more than one kind of semantic changes. We suppose that there would be four kinds of semantic changes, namely, sematic addition, semantic reduction, semantic inconsistence, and semantic reconstruction. The following offers an analysis and understanding of these four types of semantic changes caused by grammatical metaphor.

3.1 Semantic Reduction

Nominalization, a common phenomenon in grammatical metaphor, refers to the use of a nominal form to express a process meaning and an attributive meaning. The example of nominalization can be as follows,

(4) a. We set up this company in the year of 2000.

b. The year of 2000 saw the foundation of this company.

Sentence (4b) is the metaphorical form of sentence (4a). From the perspective of image schema, when a verb is transformed into a noun, there is somewhat a reduction of semantic meaning for it is a process that whole of a thing is reduced to part of a thing. Sentence (4a) is a material process while sentence (4b) is a mental process. Their components can have the following functions respectively as shown in Table 1 and Table 2.

Table 1. Functions of the components of sentence (4a)

We	set up	this company	in the year of 2000.
Actor	Process	Goal	Circumstance: time

Table 2. Functions of the components of sentence (4b)

The year of 2000	saw	the foundation of this company.
Sensor	Process	Phenomenon

By comparing these two tables, it can be found that both the material process and the goal are metaphorized into a phenomenon. At the same time, the circumstance is turned into the sensor while the actor is missing. Therefore, the semantic meaning it has is reduced for it lacks the actual actor who takes this process into action. With regards to the amount of meaning it wants to convey, the semantic meaning of this metaphorical form has also been reduced. From the perspectives of semantic components, the metaphorical form reduces some of the components, or even deletes them. Some of these components are transformed into other components, such as phenomenon or even a modifier. Therefore, ambiguity would arise as a result of using the metaphorical form. It requires the common knowledge shared by both sides of the conversation or the context. Then some other syntactic structures and further explanations can be adopted to disambiguate the sentences.

3.2 Semantic Addition

Both ideational metaphor and interpersonal metaphor can cause semantic addition. For ideational metaphor, it can not only have the impact of semantic reduction but also cause semantic addition. According to image schema, nouns are perceived as an entity that is salience to us. Verbs convey the sense of process and reflect on the relationships between such entities as agent, patient, results and means in a time order. Since the entity cannot stand alone and must occur with other entities, this entity should have a new sense with other entities. Therefore, new semantic meaning has some addition, which can be inferred from the context. Examples shown below are given by Cong Yingxu and Wang Hongyang (2013), which well-illustrate this point.

(5) a. The landscaper seeded the lawn.

 b. The chef seeded the grapes.

In sentence (5a), "seed" has the meaning of sowing while in sentence (5b), "seed" has the meaning of getting rid of seeds. Since this type of semantic addition depends more on the context, it is common to see them in advertisement, television, and newspapers, which are more alive and share more contextual information (Cong Yingxu and Wang Hongyang, 2013).

As for interpersonal metaphor, semantic addition is more common to be seen, taking sentence (6a) and sentence (6b) as an example,

(6) a. Perhaps he will never come back.

b. I don't think that he perhaps will come back.

This is an example of metaphor of mood, as one type of interpersonal metaphor. Their components can have the following functions respectively as shown in Table 3.

Table 3. Functions of the components of sentence (6b)

Maybe			he	will	never	come back.
Mood			Subject	Mood	Determiner	Predicate
I	don't	think	that he	perhaps	will	come back.
α→β						
Subject	Determiner	Predicate	Subject	Mood	Determiner	Predicate

From Table 3, it can be seen that the mood of possibility, which is performed by the use of "maybe" and "never" in sentence (6a), is realized by "I don't think" and "perhaps" in sentence (6b). However, sentence (6b) also has some semantic meaning that it is more subjective while sentence (6a) doesn't this subjective meaning as a result of the metaphor of mood. Also this meaning addition can cause semantic inconsistence, which will be discussed in the following, 3.3.

3.3 Semantic Inconsistence

Semantic inconsistence mainly takes place in the use of interpersonal metaphor. Still metaphor of mood is concerned here. According to Halliday and Matthiessen (1999), mood can be realized by orientation, which can be subjective or objective. Orientation can be divided into four types, namely, explicit subjective, implicit subjective, explicit objective and implicit objective. Both explicit subjective and explicit objective are metaphorical, which are expressed by clauses. By contrast, implicit subjective and implicit objective are realized by modal verbs or modal adverbs. The following four sentences can be used to illustrate this point.

(7) a. I think John is ill.

b. John must be ill.

c. It's likely that John is ill.

b. John is probably ill.

The orientations and metaphorical uses of these four sentences can be shown as in Table 4.

Table 4. Orientations and metaphorical uses of sentences (7)

	Explicit	Implicit
Subjective	I think John is ill.	John must be ill.
Objective	It's likely that John is ill.	John is probably ill.
	Metaphorical form	Congruent form

From Table 4, we may see that the metaphorical forms have some semantic meanings that are inconsistent with the congruent form. For example, the sentence "I think John is ill" conveys a semantic meaning that this possibility is made by the speaker himself. It is quite subjective to make such an assertion. This semantic meaning is quite inconsistent with the original meaning of the sentence "John must be ill". Therefore, metaphor of mood can also cause semantic inconsistence.

3.4 Semantic Reconstruction

Both ideational metaphor and interpersonal metaphor can cause semantic reconstruction. The following sentences (8a-d) can be used to exemplify how both ideational metaphor and interpersonal metaphor can create semantic reconstruction.

(8) a. I am fond of a yearly travel to the South.

b. I am fond of travelling to the South every year.

c. They were narrow-minded and I don't like it.

d. I don't like their narrow-mindedness.

Sentences (8a, 8b) are examples of the congruent form and metaphorical form of ideational metaphors. To analyze the semantic meaning of these two sentences would be a little different although their semantic meanings are the same. In sentence (8a), "yearly" is an adjective which is used to modify the noun "travel". But in sentence (8b), the verb "travel" is modified by the adverbial phrase "every year". This is a phenomenon of semantic reconstruction in which we perform different cognitive processes to get the semantic meanings of these two sentences. By comparison, sentence (8c) and sentence (8d) are of the same way to cause semantic reconstruction. In sentence (8c), the speaker may want to emphasize the fact that "they were narrow-mindedness" while in sentence (8d), the speaker's emotions and feelings are under salience. The semantic meanings of these sentences all need to be reconstructed before being understood by the hearers.

4. Summary and Discussion

Grammatical metaphor is worthy of being discussed and a great number of researches should be done on grammatical metaphor, not only for its position in systemic functional grammar, but also because it correlates both form and meaning of linguistic units, which should be regarded as an important task for linguists to find out. This paper tries to apply image schema theory from cognitive linguistics and semantic analysis from semantics to sort out the semantic changes caused by grammatical metaphor. As for ideational metaphor, nominalization can both create semantic reduction and semantic addition. As for interpersonal metaphor, semantic changes are common to be seen in that it can create semantic addition and semantic inconsistence. Moreover, semantic reconstruction can occur under the influence of ideational metaphor and interpersonal metaphor. However, due to the limited corpus that has been collected and limited knowledge of the writer, this paper still cannot cover all the semantic changes caused by grammatical metaphor. What's more, textual metaphor, which hasn't been mentioned in this paper, may also create semantic changes. Therefore, further study on the correlations of grammatical metaphor, semantics and semogenesis still need to be conducted to look into human's cognitive characteristics and cognitive process.

Acknowledgment

grammatical metaphor. With her professional guidance and suggestions, this thesis can be finished.

References

Cap, P., & Okulska, U. (Eds.). (2013). *Analyzing genres in political communication: theory and practice* (Vol. 50). John Benjamins Publishing.

Cong, Y. X., & Wang, H. Y. (2013). Recategorization of Ideational Grammatical Metaphors Based on Semantic Change. *Modern Foreign Languages (Quarterly)*. (2), 33-39.

Devrim, D. Y. (2015). Grammatical metaphor: What do we mean? What exactly are we researching? *Functional Linguistics, 2*(3), 1-15. https://doi.org/10.1186/s40554-015-0016-7

Halliday, M. A. K. (1984/2005). Grammatical metaphor in English and Chinese [A]. In J. J. Webster(ed.). *Studies in Chinese Language* [C]. London /New York: Continuum, 325-333.

Halliday, M. A. K. (1985). *An Introduction to Functional Grammar.* (1st edition). London: Edward and Arnold.

Halliday, M. A. K. (1998/2004). Things and relations: Regrammaticizing experience as technical knowledge [A]. In J. J. Webster(ed.). *The Language of Science* [C]. London /New York: Continuum, 49-101.

Halliday, M. A. K., & Matthiessen, C. (1999).*Construing Experience through Meaning: A Language-base Approach to Cognition*. London: Cassell, 234.

Hu, Z. L., Zhu, Y. S., Zhang, D. L., & Li, Z. Z. (2005). *An Introduction to Systemic Functional Grammar*. Beijing: PekingUniversity Press.

Kazemian, B., & Hashemi, S. (2014a). Nominalizations in scientific and political genres: A systemic functional linguistics perspective. *International Journal of Humanities and Social Sciences, 3*(2), 211-228. https://doi.org/10.14662/IJHSS2014.32.211-228

Kazemian, B., & Hashemi, S. (2014b). Critical discourse analysis of Barack Obama's 2012 speeches: Views from systemic functional linguistics and rhetoric. *Theory and Practice in Language Studies (TPLS), 4*(6), 1178-1187. https://doi.org/10.4304/tpls.4.6.1178-1187

Kazemian, B., & Hashemi, S. (2017). A Radical Shift to a Profound and Rigorous Investigation in Political Discourse: An Integrated Approach. *International Journal of English Linguistics, 7*(3),115-128. https://doi.org/10.5539/ijel.v7n3p115

Kazemian, B., Behnam, B., & Ghafoori, N. (2013). Ideational grammatical metaphor in scientific texts: a Hallidayan perspective. *International Journal of Linguistics, 4*(4), 146-168. https://doi.org/10.5296/ijl.v5i4.4192

Martin, J. R., & Matthiessen, C. (1991). *Systemic typology and topology* [A]. In F. Christie (ed.) Literacy in social processes (286-344): Centre for Studies of Language in Education.

Noor, M., Ali, M., Muhabat, F., & Kazemian, B. (2015). Systemic Functional Linguistics Mood Analysis of the Last Address of the Holy Prophet (PBUH). *International Journal of Language and Linguistics, 4*(1-1), 1-9. https://doi.org/10.11648/j.ijll.s.2015030501.11

Xie, J. R., & Peng, S. X., (2004). Semantic Analysis of Grammatical Metaphor [J]. *Journal of Chongqing Jiaotong University (Social Sciences Edition)*, (3), 112-115. https://doi.org/10.3969/j.issn.1674-0297.2004.01.035

Copyrights