Review Article

A Meta-Functional Analysis of Interpersonal Grammatical Metaphor in Biden's State of the Union Address

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Abstract

This paper is a tentative endeavor to analyze the functions of interpersonal grammatical metaphor used in Biden's 2022 State of the Union Address based on the theoretical framework which is composed of interpersonal grammatical metaphor theory and the theory of meta-functions within systematic functional grammar. The interpersonal grammatical metaphor used in this speech is examined from two aspects as metaphors of mood and modality. Quantitative analysis and qualitative analysis are both employed to reveal the linguistic characteristics as well as the interpersonal meaning hidden in the speech, aiming at explore the meta-functions of interpersonal grammatical metaphor so that the understanding of the speech content is deepened. The research has found out that metaphor of modality is the preferred type of interpersonal grammatical metaphor in the chosen linguistic text, which mostly serves to express the speaker's evaluation of a proposition. The metaphor of mood accounts for a lower proportion, which is mainly used to express the address function. The functions of these two types of interpersonal grammatical metaphor are mainly within the scope of interpersonal meta-function, which relates to interact with others in order to establish and maintain the social relationship. This linguistic research proves the necessity and significance of the existence of grammatical metaphor theory and to some extent enriches the research of interpersonal grammatical metaphor in spoken discourse.
Keywords: Interpersonal Grammatical Metaphor, Metaphor of Mood, Metaphor of Modality, State of Union Address, Interpersonal Meta-function.

1. INTRODUCTION

Grammatical metaphor (GM), as a widespread and unique linguistic phenomenon, commonly exists in various kinds of discourse. In 1985, the theory of grammatical metaphor was first introduced in Halliday's work: *An Introduction to Functional Grammar.* He made a statement that the uniqueness of GM was that it broke the traditional definition of metaphor, as a linguistic phenomenon existing at the lexical level. With the appearance of GM, the research scope of metaphor has been extended from the lexical level to the grammatical level. Halliday argues that language possesses three metafunctions: ideational, interpersonal and textual. Interpersonal function is the most important one among social functions of language. It lays heavy emphasis on the mutual relationship between the speaker and the listener, which, to certain extent, determines how the speaker uses his words efficiently to meet the purpose of his communication. Interpersonal GM, however, is the most efficient way to achieve the communicative purposes, and the most important means of performing interpersonal function.

Interpersonal GM, just like the generation of ideational GM, is the phenomenon resulting from the employment of atypical or marked expressions, i.e. incongruent expressions during the process of role-performance of modality system and mood system which reflect the interpersonal function. Since interpersonal GM is generated through modality and mood, it can be further classified into two types: metaphor of modality and metaphor of mood.

Considered as one of the most important addresses released by American presidents, the State of the Union Address (SOUA) is a representative political discourse, which mainly concerns major issues on the national and international affairs as well as measures that will be taken to deal with domestic problems over the past years. It also portrays the president's political ideology and implies his intentions or attitudes toward the current international situation. The SOUA has long been the research focus in the field of political discourse analysis, through which the president's hidden meaning is revealed. The text that this paper attempts to

analyze is an excerpt from the SOUA, which is obtained from the American authoritative website. It will be analyzed from the two aspects as the metaphor of mood and modality in terms of interpersonal grammatical metaphor. The whole study is supposed to answer the following two questions: 1)How interpersonal grammatical metaphor is used in SOUA? 2)What are the functions of these types of used interpersonal grammatical metaphor in SOUA?

Both quantitative and qualitative approaches are adopted to figure out these research questions. Through quantitative analysis, the occurrence frequency of each type of grammatical metaphor is taken into calculation. According to the statistical data, the first research question is settled. Through qualitative analysis, the functions of the preferred types of grammatical metaphor in Biden's State of the Union Address are discussed on basis of the theory of grammatical metaphor and meta-functions.

This research on the functions of interpersonal grammatical metaphor in Biden's SOUA has both theoretical and practical significance. Theoretically, it demonstrates that the application scope of the theory is expanded from written discourse to spoken discourse. Although some studies of grammatical metaphor are dedicated to exploring the linguistic features of interpersonal grammatical metaphor in political discourse, few of them concentrate on the functions of interpersonal grammatical metaphor. Therefore, this study is expected to shed light on the research field of interpersonal grammatical metaphor in spoken speech. Practically, it proves that interpersonal grammatical metaphor abounds in spoken political speech and performs many functions in language communication. By making the analysis, the hidden information can be better understood. In this way, this study to some extent will benefit the understanding of the original English learning resources.

2. Theoretical Framework and Literature Review
2.1 Theoretical Framework of this Study

The theoretical framework of this paper mainly consists of two important theories: grammatical metaphor theory and the theory of meta-functions. According to grammatical metaphor theory, the selected excerpt is analyzed and the data needed is collected. The meta-functional theory is applied to explain the functions of interpersonal grammatical metaphor in SOUA. Considering that this paper aims to investigate the interpersonal grammatical metaphor, thus only the relevant theory will be illustrated in detail here.

2.1.1 Interpersonal Grammatical Metaphor
Grammatical Metaphor Theory is an essential theory in functional linguistics, and it is first put forward by distinguished linguist Halliday (1985) in his work *An Introduction to Functional Grammar.* Different from lexical metaphor, grammatical metaphor is regarded as variant of the expression of a given meaning, which exists not only in lexical stratum, but also in grammatical stratum, in other words, it is lexiogrammar-related phenomenon. In this research, Hallidayan (1996) reclassification of grammatical metaphor is adopted. According to that, the interpersonal grammatical metaphor can be divided into metaphor of mood and metaphor of modality.

Modality, according to Halliday, is defined as those various kinds of indeterminacy of meaning that fall between the positive and negative poles or between yes and no, which consists of four types: probability and usuality, obligation and inclination. Probability and usuality are in the category of modalization. Obligation and inclination are categorized as modulation. Halliday (1985:336) argues that the basic distinction which determines how each type of modality will be expressed is the orientation, i.e. the distinction between subjective and objective modality, and between the explicit and implicit variants. It can be seen that there are four possible orientations: explicit subjective, implicit subjective, explicit objective and implicit objective. The type and orientation of modality together contributed to different expressions of modality. This is plainly illustrated by the following table 1 with examples. (Halliday, 1994:358)

Table 1 Modality: Examples of 'Type'

Orientation Type (with examples)	subjective explicit	subjective implicit	objective implicit	objective explicit
Modalization: probability	I think Mary knows.	Mary'll know.	Mary probably knows.	It's likely that Mary knows.
Modalization: usuality		Fred'll sit quite quiet.	Fred usually sits quite quiet.	It's usual for Fred to sit quite quiet.
Modulation: obligation	I want John to go.	John should go.	John's supposed to go.	It's expected that John goes.
Modulation: inclination		Jane'll help.	Jane's keen to help.	It's pleasure for Jane to help.

Halliday(1994:362) claims that "the explicitly subjective and explicitly objective forms of modality are all strictly speaking metaphorical, since all of them represent the modality as being substantive proposition."

Mood is the system for the exchange of commodities, information and goods-&-services between the speaker and the listener. And an exchange involves the speaker's orientation, either giving or demanding, which determines the four primary speech functions of statement, question, offer and command. These speech functions are basically realized by the corresponding mood system, with statement corresponding to declarative clause, question matching interrogative clause and command presented by imperative clause. Metaphor of mood occurs when there is a mismatch between the pairings (e.g. a statement is realized by an imperative, a question is realized by a declarative, or a command is expressed by an interrogative). Viewing the mismatch between speech functions and mood system as a form of GM allows people to understand it in terms of a broader phenomenon. This can be clearly shown in the following table 2.

Table 2 Metaphorical Realizations of Mood

Metaphorical Realization						
Mood	Declarative Mood		Interrogative Mood		Imperative Mood	
Speech function	Question	Command	Statement	Command	Statement	Question

2.1.2 The Theory of Meta-functions

Halliday (1994) proposes that there are three meta-functions of language, including ideational meta-function, interpersonal meta-function, and textual meta-function, which is the core idea of systemic-functional grammar. The functions of metaphor of modality and are mainly within the scope of interpersonal meta-function. Thus, here only interpersonal meta-function is introduced. Interpersonal function refers to language purposes to establish and maintain the relationships among people in social interaction. A further understanding is that interpersonal function can be defined as the function of language through which a speaker can interact with the hearer so that the speaker can express attitudes and judgments, and can affect the attitudes and behaviors. Meanwhile, the interpersonal function can reflect the degree of intimacy between the speaker and the hearer.

2.2 Previous Studies on Interpersonal Meta-functional Analysis

Interpersonal grammatical metaphor has been applied to the analysis of different kinds of discourse and genres, including the business negotiation discourse (Song & Yang, 2019), academic discourse (Huang & Yu, 2021), EFL writing (Afifi N., 2021), translation text (Si & Wang, 2021) newspaper editorials and so on.

Besides, Interpersonal GM has always been used by politicians in their speeches for its role in improving accuracy and making the image visualization attractive. In the previous studies, there is a certain amount of researches on interpersonal grammatical metaphor in political discourse (Zhao, 2014; Cheng, 2021). Most of the relevant researches mainly focus on the distribution of interpersonal grammatical metaphor while few of them pay attention to the function. Besides, the analyzed texts are usually from written language, such as news and reports, and few are from spoken language. Up to now, Biden's 2022 SOUA is one type of the newest corpus in linguistic study, which means it hasn't been analyzed by many researchers. Thus, this study is designed as a tentative endeavor to analyze the functions of interpersonal grammatical metaphor in Biden's State of Union Address based on the theoretical framework which is composed of grammatical metaphor theory and the theory of meta-functions.

3. Distributional Analysis of Interpersonal GM in SOUA

3.1 Data Collection and Processing

In order to guarantee the preciseness of this research, the research material SOUA is obtained from the authoritative website: https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/03/02/remarks-by-president-biden-in-state-of-the-union-address/. It's a transcript of President Biden's first SOUA since he was inaugurated, with a total of 7779 words. The reasons why this text is selected are as follows: (1) It's the first State of Union Address from Joe Biden. (2) It implies his real political intentions and standpoints toward the domestic and foreign affairs. (3) It will have a significant impact on the world political structure, especially on the developing countries including China.

Based on interpersonal GM theory and the classification of it introduced in the theoretical framework, the interpersonal GM can be picked out in President Biden's 2022 SOUA and it's mainly grouped into metaphor of modality and metaphor of mood. Then the frequency and the percentage of occurrence of each type can be calculated, in this way it can be obviously figured which type is more frequently used interpersonal GM and which is less in this speech. In other words, the distribution of interpersonal GM in this speech can be clearly figured out by the statistics data. After the collection of data, it is possible to make a further analysis of the metafunctions of these two types of interpersonal GM based on the introduced theory in theoretical framework.

3.2 Distributional Analysis of Interpersonal Grammatical Metaphor in Biden's 2022 SOUA

Data analysis is used here to prove the presence of interpersonal GM, which can be classified into metaphor of modality and metaphor of mood. The

percentage occurrence of interpersonal GM and the two types of it are also presented, thus revealing the share of Interpersonal GM and the two types of it in Biden's

2022 SOUA from the overall perspective. Table 3 is a statistic analysis of interpersonal GM in President Biden's 2022 SOUA.

Table 3: The Frequency and Occurrence Percentage of Each Type of Interpersonal GM

	Frequency	The total number of Sentence	Percentage
Metaphor of Modality	28	504	5.56%
Metaphor of Mood	10	504	1.98%
Interpersonal GM	38	504	7.53%

In order to understand the table 3, first of all, the conception of sentence should be made clear. In this research, the definition of sentence in Oxford Advanced Learner's English-Chinese Dictionary(2009) is adopted, which is "a set of words expressing a statement, a question or an order, usually containing a subject and a verb. In written English, sentences begin with a capital letter and end with a full stop period(.), a question mark(?) or an exclamation mark(!)." According to the definition, sentence can be identified from the transcript and the number of sentences in the transcript can be counted up. As it indicates in the table, the total number of sentences in this speech is 504. And here in this table, the frequency in column 2 exactly means the number of sentences that has been metaphorical expressions. The percentage in column 3 is presented by dividing the two quantities.

It can be observed from the table that the number of interpersonal GM is 28, accounting for 7.53%. The frequency of metaphor of modality is 18, occupying 5.56% while the frequency of mood is 10, taking up 1.98%. By comparison, it can be found that the metaphor of modality account for a higher proportion than metaphor of mood. Therefore, table 3 shows us the existence of interpersonal GM and the types of it and how frequently it occurs in President Biden's 2022 SOUA. Moreover, the preferred type of interpersonal GM in the SOUA is also revealed.

3.2.1 Analysis of Modality Metaphor

It is obvious that metaphor of modality is more frequently used in this speech. According to Halliday, modality is a tool for the speaker to show his or her personal judgment or attitude in the communication process. Metaphor of modality can be seen as a kind of linguistic strategy, which is helpful for users to convey interpersonal meaning in communication. SOUA is an important way for president to communicating with the public. The use of metaphor generates positive influence on achieving the purposes desired. Modality can be expressed by either explicit or implicit forms, and either subjective or objective forms, therefore it can be concluded that there are four types of modality: explicitly subjective, explicitly objective, implicitly subjective and implicitly objective. Halliday (1994) claims that both explicitly subjective and objective forms are metaphorical expressions, which encodes the subjectivity and objectivity into a projecting clause expressing the speaker's evaluation of the effectiveness

and correctness of a proposition. Here provides two examples in conformity with the two forms of modality metaphorical expressions.

(a) But _I want you to know: We're going to be okay. We're going to be okay._

(b) That's why _it was so important_ to pass the Bipartisan Infrastructure Law.

From the table 2 above, it's not hard to find out sentence (a) is explicitly subjective and sentence (b) is explicitly objective. In the public addresses, sometimes the presidents hope to show their personal desires; sometimes the presidents need to show the objectivity towards something. Exactly suited to such a situation, different types of modality metaphors can meet the presidents' different needs. The explicitly subjective sentence (a) belongs to the category of modulation, referred to as obligation, which means the speaker expresses the meaning to his audience at a comparatively strong position. Here President Biden attempts to mold a powerful and calm image with an intention to reassure the public's tense feelings aroused by the increasing gas price and volatile stock market which is mainly caused by the response of the Russian government to the sanctions and penalties imposed by the US governments on Russian people and currency. The explicitly objective sentence (b) also indicates obligation, but presented in a more hidden way. President Biden made use of the expression _"It was so important…"_ to gain people's trust in the law.

3.2.2 Analysis of Mood Metaphor

Mood is a means to carry out the speech functions of statement, question, offer and command, which can express the speaker's intentions. In general, statements are naturally realized by declarative mood, questions by interrogative mood, commands by imperative mood while offers can be realized by various moods. However, in real life, as discussed earlier, the choice of mood does not always go one-to-one with the speech functions. Here presents an example cited from the speech.

(c) _You think the deer are wearing Kevlar vests?_

Sentence (c) is supposed to be declarative mood which always ends up with a period(.), but it turns out to be ended up with a question mark(?) which is the semantic feature of an interrogative mood. This sentence appears as a mood metaphorical expression.

By using the mood metaphor, President Biden aims to increase people's awareness of the gun control.

4. Meta-Functional Analysis of Interpersonal GM in SOUA

4.1 Meta-functions of Interpersonal Grammatical Metaphor

Language is not only a method to communicate with others but also a resource for making social meaning and performing functions. Political speech is a language communication activity. As a genre of speech, it embodies political and class characters. Speakers achieve their desired political purposes by taking the form of speeches. State of the Union Address is an important political speech annually delivered by the US president before a joint of Congress in which the president mainly expounds on the domestic and foreign situations and the measures to be taken by the government. Through this speech, the president needs to propose a legislative agenda and win the approval of Congress and the public, which is the process of realization of the interpersonal function of language.

Interpersonal grammatical metaphor can be seen as a special linguistic strategy that is usually used in political speech, which is helpful for speakers to convey interpersonal meaning in communication. The use of interpersonal grammatical metaphor generates a positive influence on achieving the purposes desired. In Biden's 2022 SOUA, in order to accomplish the goals of communication or address purposes, the president adopts the interpersonal grammatical metaphor to enhance the interaction with people, of which the main functions are interpersonal functions: encouraging people, showing determination, achieving objectivity. These three functions will be illustrated with some reasonable examples from the linguistic text.

4.2 Meta-functions of Modality Metaphor
4.1.1 Encouraging people

The United States had suffered lots of difficulties and challenges since the pandemic and the people have increasingly lost their confidence in government more and more. Biden, as the newly appointed president who delivered his first SOUA speech, is expected to encourage people to face the difficulties and challenges bravely and to rebuild their belief in the government. It's well known that language is the "powerful weapon" of diplomacy. If a speaker wants to inspire his audience in address, he needs to be full of passion. In this speech, he used explicitly subjective expressions which are useful to deliver intense emotion and encourage the public. The following are some example sentences:

(d) *Seventeen Nobel laureates in economics said my plan will ease long-term inflationary pressures. Top business leaders and, I believe, most Americans support the plan.*

(e) *And I know you're tired, frustrated, and exhausted.*

(f) *But I also know this: Because of the progress we've made, because of your resilience and the tools that we have been provided by this Congress, tonight I can say we're moving forward safely, back to a norm- — more normal routines.*

In the sentences above, "I believe" "I know" are typical explicitly subjective expression of metaphor of modality, which is followed by a clause and used to confirm the content of the following propositional clause. President Biden uses this kind of grammatical structure to emphasize subjectivity of his belief or resonate with the public. In this way, people can be easily inspired and encouraged by what the president says.

4.1.2 Showing Uncertainty

Explicitly subjective metaphor of modality is usually used to highlight the subjectivity of his viewpoint, in other words, which shows the uncertainty of his judgement or opinion. In this way, there is more space for him to absolve governments and regulators of responsibility.

(g) *I say that we never will just accept living with COVID-19; we'll continue to combat the virus as we do other diseases.*

In the sentence (g), "I say" is used to express the idea is idealistic because the future situation of pandemic can't be predictable.

4.1.3 Achieving objectivity

Halliday points out that there are two effective ways of achieving objectivity, of which one way is to use the explicitly objective expression of modality. In Biden's 2022 SOUA, in order to achieve objectivity of his words, he adopts an explicitly objective metaphor of modality several times. Here just provides one example to explain.

(h) *That's why it's so important to pass the bipartisan Innovation Act sitting in Congress that will make record investments in emerging technologies and American manufacturing.*

In the given example sentence (h), "it's so important…" used to be the subject in a projecting clause, by which modality appears to be more impersonal and acceptable. By using the projecting clause, the President's opinion is made to appear to be common sense that is inherently objective and cannot be queried. As the president of America, Biden should be cautious in the choice of his words, otherwise it will affect the effectiveness of his words and bring bad fame to himself.

4.3 Meta-functions of Mood Metaphor
4.3.1 Gaining support

Facing the current complicated international situations, especially at this point when political

tensions have been aggravated around the world, the US has gradually obeyed the big trend of world peace, which directly made the US government and administration lose its credibility. Even its own people lost confidence in government. As the president, Biden expects to gain support to rebuild their belief in the government. In Biden's 2022 SOUA, he uses some imperative mood sentences as the mood metaphor which are useful to deliver intense emotion and encourage the audience. To achieve his intention of gaining support, the speaker should make what he says more inspiring so that the audience will more easily believe and accept the information given to them. In Biden's SOUA, it has been observed that he would use the imperative mood to perform the function of declarative mood to highlight his support for Ukraine from his point of view when it comes to the relevant issues. The following are some example sentences:

(i) Let each of us if you're able to stand, stand and send an unmistakable signal to the world and Ukraine.

(j) So, let us continue to draw inspiration from the iron will of the Ukrainian people.

In the above sentences which concerns the parts of Russia-Ukraine conflict, political intention or standpoints are both revealed that America and Ukraine are on the united side. They are actually working to convey the intended political meaning. By means of mood structure, the declarative mood was applied instead to emphasize the hidden meaning and to persuade the Ukrainian people, and the American people, to support Biden's government and administration.

4.3.2 Showing Euphemism
Sometimes the president uses mood metaphor to present the speech content in a gentler way and then makes their speech points more acceptable.

(k) But let me be clear: Our forces are not engaged and will not engage in the conflict with Russian forces in Ukraine.

In the sentence (k), the use of the special structure in imperative mood "Let…" is made the sentence a statement more than a command. President Biden tried to disguise the US as a neutral party in the international affairs by saying so.

5. CONCLUSION
Through the detailed analysis and discussion, it is proved that there is absolutely a certain amount of existence of interpersonal grammatical metaphor in the SOUA, and they perform significant functions in communications, which contributes to expressing President Biden's political intentions and hidden meanings. However, due to the limited text and lack of time, it still has some limitations.

Firstly, this study only selected one speech that was delivered by President Biden in 2022.03.01. It is not sufficient. More corpora can be selected to conduct more convincing research and it can also be compared with similar speeches delivered by other president. Secondly, the study only investigated the Interpersonal GM that appeared in the speeches. The ideational GM in the speech haven't been analyzed yet, which makes it hard to make a comprehensive and exhaustive research of grammatical metaphor. There are also other aspects deserving much attention and further study in future research.

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