

Critical Discourse Analysis of an Inaugural Speech Based on Halliday's Systemic Functional Grammar

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Abstract. This study, from the perspective of critical discourse analysis (CDA), based on Halliday's Systemic Functional Grammar, analyzes Biden's inaugural speech from both macro and micro levels. At the micro level, it focuses on the language strategies used in the speech, analyzes the subject words of high frequency, transitivity and modality concerning textual meta-function, ideational meta-function and interpersonal meta-function of SFG. At the macro level, the interrelationship between language, power and ideology behind the text features is investigated and discussed. On the one hand, this study attempts to dig out the choice and usage of words by showing the distribution of subject words of high frequency and modal words. On the other hand, it tries to delineate how the language works to construct a privileged public speaker, thus to indicate the interrelationship between discourse, power and ideology. Transitivity analysis discloses Americans' hegemony ideology as the leading power in the world stage. Subject words of frequency reflect that "freedom" and "democracy" have been used as tools to manipulate the power. Modality analysis reveals that Biden was trying to maintain and consolidate his power. The study of the interrelationship between language, power and ideology is conducive to exploration into the ideological construction behind discourse, and thus reveal the truth of political discourse.

Keywords: Critical Discourse Analysis, subject words of frequency, transitivity, modality.

1. Introduction

Since the founding of America, every American president would deliver their inaugural speech at a public ceremony. A speech of about 2,000 words embodies profound cultural tradition and rich political wisdom. When addressing the speech, the president commemorates the past history, looks forward to the future and tries to set the tone for his future term while focusing on the present. The speech reflects American values and policies, and presents a governing overview of the new administration, its policy program for social development and foreign policy of the current administration. Research on inaugural speech is conducive to better grasp the president and the new administration's governing philosophy, political values and intentions, stances and policies etc. From the linguistic point of view, presidents' inaugural speech is concise, intended to attract the public, and has high interpersonal significance.

Critical Discourse Analysis (CDA) mainly gained the theoretical support based on Critical linguistics (Kress & Hodge, 1979; Fowler et al., 1979). By combining the research achievements of Linguistics, Sociology, Psychology and other disciplines, it has developed to be a specific linguistic theory and a branch of Linguistics (Kress, 1990). CDA focuses on analyzing the interrelationship between linguistic signs and meaning, revealing the interaction and dialectical relationship between language and social ideology.

Fairclough is the first scholar to use the term of critical discourse analysis, who concerns the dialectical relationship between language and society (1997, 2001, 2003). According to his social-cultural analysis, discourse is a form of social practice (Fairclough, 1989). Van Dijk (1988) believes that the production and consumption of discourse are closely connected with social cognition, and social cognition should be included in CDA method, aiming to find the interrelationship between language, social cognition and society. Wodak & Ludwig (1999) also emphasize the dialectical relationship between language and society, but they claim that any discourse is produced in a specific context. Therefore, a multi-level analysis of discourse context plays an important role in analyzing discourse and revealing the relationship between ideology and power. Critical discourse analysis has

become a common method to analyze various forms of media discourse. However, Harrison and Young (2003) hold that CDA is neither a research method nor a linguistic theory, but a perspective to examine the social problems reflected in discourse.

Halliday's Systemic Functional Grammar (SFG) breaks through the constraints of structural linguistics (Halliday, 2001) and takes context as a reference to study language structure. Systemic Functional Grammar not only exerts theoretical basis for critical analysis, but provides a methodological perspective for discourse analysis. Halliday proposed three metalinguistic functions of language: ideational meta-function, interpersonal meta-function and textual meta-function. According to Halliday (2012), ideational function of language is the process to express world experience. Implementing ideational function is to deconstruct experience into different processes, and transitivity system is the process of understanding this experience world. Interpersonal function expresses a speaker's identity, status, attitude, motivation and inference, judgment, and evaluation of things. Lexically and grammatically, interpersonal functions are mainly expressed through two semantic systems of mood and modality. Textual function of language can indicate how much people attach importance to the topic, and the interior connotations of the discourse can be identified by examining the frequency of the subject words in the discourse.

According to systemic functional grammar, transitivity system in ideational function of language reflects how people perceive the world, while modality in interpersonal function of language reflects the speaker's attitudes towards the matter being discussed and their relations with listeners. At the textual level, subject words of high frequency in the discourse indicate how much the speaker attached to the topic being discussed. By investigating subject words of frequency in the discourse, researchers can identify the internal meaning of the discourse, or analyze ideology hidden in language forms, vocabulary and grammar.

The role of Systemic Functional Linguistics as an analytical tool for discourse is continued in Fairclough's CDA. It provides a linguistic methodological support for critical discourse analysis to interpret the ideological meaning contained in political discourse.

In conducting a study, critical discourse analysis requires textual analysis and social analysis of discourse. Textual analysis is conducted to examine linguistic features of discourse, as a text; social analysis is conducted to discern how the textual features reveal power and ideology, and explain the purpose and motivation of choosing these linguistic features to convey internal meaning in communication (Khosravini, 2010). Critical Discourse Analysis presents its interdisciplinary characteristics, its integration of Linguistics and other social science disciplines, such as Sociology, Politics, International Relations, etc. (Zhang & Tian, 2009).

There have been large number of critical discourse studies that analyze political discourse and presidents' speeches. In addition, it is an effective focal point to study American social values and politics. Hart (1984) adopted quantitative analysis method to analyze discourse style of inaugural speech. WAUDAG (1990) studied the relationship between presidential inaugural address and ideology. Li (2004) adopted discourse markers in American presidential inaugural addresses as analytical data to reveal that discourse markers, as an important cohesive device, are strategic reflection of meta-pragmatic awareness in the production of discourse. Oddo (2011) conducted discourse analysis of four American presidents' speeches. In China, critical analysis of American presidents' speeches are numerous (Feng, 2013; Liu & Wu, 2019; Zeng & Huang, 2009; Zeng, 2009). However, no research is concerning Joe Biden's inaugural speech (see Appendix) since he is newly elected president. In view of these, a tentative study is carried out to explore how Biden's new administrative government convey their political arguments.

From the perspective of critical discourse analysis, the study focuses on Biden's inaugural speech, under the framework of systemic functional linguistics, respectively from the textual function, ideational function, and interpersonal function to analyze subject words of frequency, transitivity and modality, and delineate the ideology implied in the speech text, as well as the interrelationship between language, power and ideology. The study intends to achieve the following objectives:

- (1) At textual level, examine subject words of frequency and expound ideology and power in Biden’s speech;
- (2) Ideationally, identify linguistic features in terms of transitivity and discern interrelation between language, power and ideology;
- (3) Interpersonally, determine linguistic features in terms of modality, and disclose power and ideology hidden in speech text.

2. Methods

This study is conducted from both macro and micro levels. At the micro level, it focuses on the language use in the speech text, and analyze the subject words of high frequency, transitivity and modality in Biden’s inaugural speech; at the macro level, it explores the ideology and power behind the speech text. On the one hand, this study attempts to dig out the choice and usage of words by showing the distribution of high frequency words and modal words in figures and tables. On the other hand, it tries to disclose connotation behind speech text and therefore indicate the relationship among discourse, power and ideology.

Voyant tools is used to analyze subject words of frequency. Voyant tool is a web-based reading and analysis environment for digital texts. Transitivity is analyzed based on Halliday’s Systematic Functional Grammar and the criterion for the types of transitivity process (Halliday, 1971). Modality words are marked for further investigation after being identified by the researcher.

3. Results and Discussion

3.1. Subject words of frequency

Word frequency refers to the frequency of a word used in a specific range of language materials. The importance of a word is proportional to the number of times it appears in the material. In this study, the twenty most frequently used notional words in Biden’s inaugural speech are identified. Subject words can reflect the content and focus of discourse which represent the theme of discourse.

In the American history of the past two hundred years, there has been a remarkable continuity in both domestic and foreign policies. The president may have power which is both restricted and infinite. The day when Joe Biden was elected president, America was showing it as a society with serious political division, the increasing gap between rich and poor, a more rampant COVID-19 epidemic, a country in turmoil with rising racial discrimination. Analysis of the subject words of frequency in his inaugural speech may reveal the new administration about their governing concepts and philosophy. see the result by way of Word Cloud below.



Fig. 1 Subject words of high frequency in the speech

The size of word font in the above word cloud map represents the frequency of its appearance: the larger the font, the higher the frequency of its appearance. The most frequently used words in the speech include *America* (17); *nation* (12); *democracy* (10); *American(s)* (18); *people* (9); *story* (9); *know* (8); *today* (8); *unity* (8); *world* (8); *history* (7); *president* (7); *war* (7); *day(s)* (12); *let* (6); *stand* (6); *work* (6) and *children* (5). Research has shown that the words “America”, “American” and “Americans” are mentioned 35 times, some of which are listed as follows.

	Term	Count	Trend
1	america	17	
2	nation	12	
3	democracy	10	
4	american	9	
5	americans	9	
6	people	9	
7	story	9	
8	know	8	
9	today	8	
10	unity	8	
11	world	8	
12	history	7	
13	president	7	
14	war	7	
15	day	6	
16	days	6	
17	let	6	
18	stand	6	
19	work	6	
20	children	5	

Fig. 2 The most frequently-used twenty subject words in the speech

Table 1. Subject Words of frequency “America(n)” in the Speech

Number	Examples
1	This is America’s day. Through a crucible for the ages America has been tested anew and America has risen to the challenge.
2	America has to be better than this. And, I believe America is better than this.
3	We can make America , once again, the leading force for good in the world.
4	But the American story depends not on any one of us, not on some of us....
5	I ask every American to join me in this cause.
6	And together, we shall write an American story of hope, not fear....
7	An American story of decency and dignity.

Biden frequently emphasized the word “America”, in order to express his regret for the hardship and sufferings the nation has endured, and also express his decision to revitalize American spirit, to evoke the sense of pride and responsibility from the audience. He would then advocate the governing concept of “to repair, rebuild and restore America” of his new administration, and lead America, the leading force back to the world stage.

The word “nation” is mentioned 12 times to express the foreign policy of America that national interest is always put in the first place in all government work. The word “democracy” is repeated 10 times in the speech, which indicates that America has always advocated the value of freedom and democracy. There is no exception for Biden. He has been using it to emphasize that the powerful nation of America has returned, led by his new administration. The word “people” appears more times, which is decided by the Constitution of the United States. Since the founding of the US, people have been the core of the Constitution. American people are foundation stone of America. It is a principle to guarantee all American people, their basic rights of freedom.

The word “history” is used as a metaphor for the history of America. Remembering the past means good preparation for the future. There is a special verb “know”, which is frequently used. It will be interpreted later from the angle of transitivity in Halliday’s Systemic Functional Grammar. The word “unity” was mentioned eight times. In his speech, Biden has constantly emphasized “unity” and “restore”, which is what America currently needs most. Biden called for the unity of the United States, by highlighting the word in the speech. The word of “world” appears many times, which reflects the hegemonic ideology that America has been dominating the world and would maintain the leading power in the world stage. With the rapid expansion of its international influence, America has dominated other countries. Biden’s speech reflects that the new administration would continue America’s hegemonism in handling foreign affairs.

3.2. Transitivity

The system of transitivity focuses on the clause as its basic unit of analysis. A clause involves two essential elements, i.e. the process and the participant. There are six processes to represent ideational content in verbal language: material process, relational process, mental process, behavioral process, verbal process and existential process (Halliday, 2012). Among them, three major processes refer to material, relational and mental. Material process means the process of doing something, usually expressed by action verbs. “Participant” and “goal” of the action are generally represented by nouns or pronouns. Material process can objectively describe an event and record its development process. Relational process is a process that reflects the relationship between things, which can be used to describe the types and characteristics of things (Hu, 1989). Table 2 are verbs to judge transitivity process according to Halliday (1994) and Thompson (2000).

Table 2. Verbs of Different Transitivity Processes

Types of process	Verbs
Material	do, spring, catch, resign, dissolve, combine, play, go, fetch, fall, break, mend
Mental	sense, like, please, feel, think, perceive, long for, know, see, believe, hear, fear, understand etc.
Relational	be, play, act as, serve as, mean, indicate, suggest, imply, show, betoken, mark, reflect, equal, make, comprise, include, represent, constitute, form, exemplify, illustrate, express, signify, realize, spell, stand, stand for, become, remain, etc.
Behavioral	look, watch, stare, listen, think, worry, dream, chatter, grumble, talk, cry, laugh, smile, frown, sigh, snarl, whine, breathe, cough, faint, shit, yawn, sleep, sing, dance, lie, sit, etc.
Verbal	say, tell, ask, describe, repeat, outline, explain, order, promise, speak, imply, indicate, show, demonstrate, signify, suggest, etc.
Existential	be, exist, remain, arise, occur, come about, happen, take place, follow, ensue, sit, stand, lie, hang, rise, stretch, emerge, grow, erupt, flourish, prevail, etc.

Research on transitivity system in Biden’s speech reveals that material, relational and mental processes are frequently adopted.

In the inaugural address, Biden employs material process frequently. This indicates that Biden pays more attention to the process of “action”. Biden, as a newly elected president, is determined to revive the US economy, restore its leadership of America in the world. Moreover, material processes are adopted to describe the measures the new administration would take and the determination to manipulate the hegemonistic position worldly by uniting all forces.

Table 3. Examples of Different Transitivity Processes in the Speech

Transitivity process	Examples
Material process	<p>(1) Today, on this January day, my whole soul is in this: Bringing America together. Uniting our people. And uniting our nation. I ask every American to join me in this cause. Uniting to fight the common foes we face: Anger, resentment, hatred.</p> <p>(2) We can do great things. Important things. We can right wrongs. We can put people to work in good jobs. We can teach our children in safe schools. We can overcome this deadly virus. We can reward work, rebuild the middle class, and make health care secure for all. We can deliver racial justice. We can make America, once again, the leading force for good in the world.</p> <p>(3) And here we stand, just days after a riotous mob thought they could use violence to silence the will of the people, to stop the work of our democracy, and to drive us from this sacred ground.</p>
Relational process	(4) We will be a strong and trusted partner for peace, progress, and security.
Mental process	<p>(5) I know speaking of unity can sound to some like a foolish fantasy. I know the forces that divide us are deep and they are real. But I also know they are not new. Our history has been a constant struggle between the American ideal that we are all created equal and the harsh, ugly reality that racism, nativism, fear, and demonization have long torn us apart. The battle is perennial.</p> <p>(6) I understand that many Americans view the future with some fear and trepidation. I understand they worry about their jobs, about taking care of their families, about what comes next. But the answer is not to turn inward, to retreat into competing factions, distrusting those who don't look like you do, or don't get their news from the same sources you do.</p>
Behavioral process	(7) Let us listen to one another. Hear one another. See one another. Show respect to one another. Politics need not be a raging fire destroying everything in its path. Every disagreement doesn't have to be a cause for total war.
Verbal process	(8) Today, on this January day, my whole soul is in this: Bringing America together. Uniting our people. And uniting our nation. I ask every American to join me in this cause.

By using material process in Example 1 of table 3, Biden appealed to every American citizen, and the whole nation to unite to fight against the common foes and defeat their own resentment and hatred. In Example 2 of table 3, Biden advocated that all Americans should be united to focus on the issue of employment, school education, covid-19, so as to reconstruct the middle class, secure the medical system, eliminate racial discrimination and achieve social justice. The involved action system makes his speech contagious and convincing. In clauses of material process the first personal pronoun "we" is used to represent the president himself, his government or all the American people.

Relational process. Besides, relational processes are also used frequently in the speech, to analyze the current political and economic situation of America, which shows that Biden administration is concerned about the current problems and challenges, and believes in the bright future of the United States. That, in part, gave Americans confidence to face the challenge of rebuilding America. Example 4 in table 3 shows Biden is determined to revitalize America's image in the world, restore its global leadership, which reflects hegemonism of America.

Mental process. Clauses of mental process in the speech can exert great influence upon the audience's emotion. In this way, Biden could easily affect American people and gain their supports. There are few clauses of behavioral and verbal processes in the speech, which usually function to call for unity. Biden is aimed to uniting a wide range of political forces in the United States to narrow down racial distinction.

3.3. Modality

With regard to interpersonal function, modality is used to express speakers' attitude. Modal verbs and adverbs are often used to express the speaker's attitude towards the content or concern about the influence of the content on the audience. According to Hodge and Kress (1979), modality also refers to how much you like the topic between the speaker and the audience. At the grammatical level, modality is mainly related to modal verbs and personal pronouns. Halliday (1994) holds that among the modalities representing possibility and responsibility, *must* represents the high value of possibility and responsibility, *will* represents the middle value, and *can* the low value. Biden used modal verbs to express modalities, such as *will* (16 times), *can* (15 times), *must* (9 times).

The subjective expressions of "must" and "can" are mentioned about 24 times in Biden's speech, showing a command, authority over the whole nation as president. He has the power to issue orders, and the people should obey him. Besides, "will" is used to make the audience assume obligations or responsibilities, which is an objective way of expression, aiming at enhancing the objectivity of the speech. "Must" usually indicates an obligation, speculation, or possibility that something must be done. In the speech, Biden used "must" to express obligation, which aims to arouse the audience's sense of responsibility.

Table 4. Examples of Modal Verb "must" in Biden's Speech

Modal verbs	Examples
Must	(1) For without unity, there is no peace, only bitterness and fury. No progress, only exhausting outrage. No nation, only a state of chaos. This is our historic moment of crisis and challenge, and unity is the path forward. And, we must meet this moment as the United States of America. (2) We must end this uncivil war that pits red against blue, rural versus urban, conservative versus liberal. We can do this if we open our souls instead of hardening our hearts. If we show a little tolerance and humility. If we're willing to stand in the other person's shoes just for a moment.
Will	3) My fellow Americans, in the work ahead of us, we will need each other. We will need all our strength to persevere through this dark winter. We are entering what may well be the toughest and deadliest period of the virus. We must set aside the politics and finally face this pandemic as one nation. I promise you this: as the Bible says weeping may endure for a night but joy cometh in the morning. We will get through this, together.

Biden used the modal verb "must" many times to express his dissatisfaction with racial discrimination and separation, thus to call for the responsibility of American people. This presents his determination to unite all to solve problems. In addition, Biden used the modal verb "will" several times, in such circumstance presently where the nation is politically divided, and with rampant epidemic so as to emphasize unity and healing.

4. Conclusion

The qualitative method is adopted to analyze the subject words of frequency, transitivity and modality in Biden's speech. Halliday's Systemic Functional Grammar provides a concrete and feasible research paradigm for the speech, which is a tentative research framework of political

discourse analysis. Inaugural speech is aimed at declaring domestic affairs and foreign policies of the nation, showing political values and viewpoints of the governing administration.

In order to obtain supports from American people, Biden took the advantage of language strategy. This reflects that he implemented his power as president to influence and manipulate the public. Transitivity analysis discloses Americans' hegemony ideology of privilege over others as the leading power in the world stage. Subject words of high frequency reflect that "freedom" and "democracy" are the core of American ideology, which has been used as a tool to manipulate the power. Research findings in modality reveal that Biden was trying to maintain and consolidate the power. Therefore, the pure ideational function and interpersonal function of language are transformed into political meaning serving for ideology.

Exploration into the political speech reveals that behind the use of language is the embodiment of power and ideology. Ideology has a profound influence on political discourse, so the inaugural speech is no longer a simple speech, but a complex construction of social and personal cognition, discursive practice and internal representation. The study of the interrelationship between language, power and ideology is conducive to exploration into the ideological construction behind discourse, and thus reveal the truth of political discourse.

This research is far from completion. It only tentatively applies concepts or theories in subject words of high frequency, transitivity system and modality based on Halliday's SFG into speech analysis. There are a wide range of research angles in ideational and interpersonal functions, which demands further investigation. Moreover, little analysis is focused on textual function of language, such as analysis of discourse genre, textual style etc. In addition, this study is limited and inadequate in data collection and analysis. What's more, critical discourse analysis is a wide interdisciplinary discipline, but in this study no other disciplines are involved such as politics, communication, cognitive psychology. Therefore, more profound and comprehensive follow-up researches await for further exploration.

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