

Role and Reference Grammar in Chinese and American Central Bank Speeches: A Cross-Cultural Discourse Analysis

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Abstract

This study applies Role and Reference Grammar (RRG) to investigate how linguistic structures encode agency, responsibility, and institutional identity in monetary policy discourses across distinct political systems. Focusing on 10 speeches from the U.S. Federal Reserve (the Fed) Chairs and 10 addresses from the Governors of People's Bank of China (the PBC) (2015–2024) respectively, the research examines syntactic templates, semantic role mapping (Actor, Undergoer, Instrument), and pragmatic focus structures through a comparative RRG framework. Quantitative and qualitative analyses reveal systematic contrasts: English discourses prioritize transitive clauses, explicitly framing the Fed as the grammatical Actor (e.g., “We will adjust interest rates to stabilize markets”), thereby emphasizing institutional accountability and force-dynamic causality. In contrast, Chinese discourses favor topic-comment structures, omitting or generalizing Agents (e.g., “Safeguarding financial stability [Focus]”) to foreground collective action and policy outcomes. Thematic roles in Chinese texts frequently assign Undergoers to abstract goals (e.g., “supporting small enterprises”), aligning with socio-political norms of collective governance. Methodologically, the study integrates RRG's layered clause analysis with corpus-driven annotation, coding for syntactic typology (transitive / intransitive / topic-comment), focus breadth (narrow or broad focus), and cultural-institutional contextualization. These findings highlight how grammatical choices mediate authority and transparency: English clauses reinforce individualistic accountability, while Chinese structures embed decisions within communal frameworks. Theoretically, this work advances RRG's application to institutional discourse, demonstrating its utility in decoding cross-cultural pragmatics. Practically, it offers actionable insights for central banks to optimize policy communication in multilingual contexts, balancing syntactic precision with cultural resonance.

Keywords: Role and reference grammar; central bank communication; cross-cultural discourse; monetary policy; syntax-pragmatics interface¹

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1 Introduction

In the global economic landscape, central banks play a pivotal role in formulating and implementing monetary policies. The communication of these policies through official speeches is crucial as it influences market expectations, investor behavior, and overall economic stability. Different political and cultural contexts shape the way central banks convey their messages. Understanding the linguistic structures in central bank speeches can provide valuable insights into how agency, responsibility, and institutional identity are encoded.

The differences between the political systems of the United States and China are significant. The U.S. operates under a more individualistic political and economic model, while China adheres to a collective governance system. These differences are likely to be reflected in the language used by their central banks, the U.S. Federal Reserve (the Fed) and the People's Bank of China (the PBC), in their policy discourses. Role and Reference Grammar (RRG) offers a comprehensive framework to analyze how these cultural and political differences are manifested in the syntactic, semantic, and pragmatic aspects of the speeches.

This study aims to apply RRG to investigate the linguistic structures in the monetary policy discourses of the Fed and the PBC. Specifically, it focuses on examining the syntactic templates, semantic role mapping, and pragmatic focus structures in their speeches from 2015-2024. By conducting a cross-cultural discourse analysis, the research seeks to identify the systematic contrasts between English and Chinese central bank speeches and understand how grammatical choices mediate authority and transparency.

Against this backdrop, two key research questions emerge.

First, how do the syntactic templates, such as the use of transitive clauses in English and topic-comment structures in Chinese, specifically contribute to the encoding of agency, responsibility, and institutional identity in the monetary policy discourses of the Fed and the PBC?

Second, in terms of semantic role mapping and pragmatic focus structures, what are the underlying cultural and political factors that lead to the observed systematic contrasts between the two central banks' speeches, and how do these contrasts influence the perception of authority and transparency in their policy communication?

Theoretically, this study advances the application of RRG to institutional discourse, demonstrating its utility in decoding cross-cultural pragmatics. Practically, it provides actionable insights for central banks to optimize policy communication in multilingual contexts, balancing syntactic precision with cultural resonance.

2 Literature Review

2.1 Role and Reference Grammar (RRG)

Role and Reference Grammar (RRG) stands as a well-entrenched and highly regarded linguistic theory, renowned for providing a comprehensive and all-encompassing framework designed for the in-depth analysis of clause structures, seen below in Figure 1. It places a strong emphasis on the complex and intricate mapping that exists between semantic roles, including prominent ones such as Actor, Undergoer, and Instrument, and the corresponding syntactic structures. This mapping is not merely a surface-level connection but rather a deep-seated relationship that RRG delves into. RRG's layered clause analysis is a particularly powerful tool. It enables researchers to conduct a detailed and meticulous exploration of how the diverse elements within a clause interact with one another (Van Valin and LaPolla 1997; Van Valin 2005). By dissecting clauses into their various layers, RRG uncovers the underlying mechanisms that govern the relationships between semantic roles and syntactic forms. This, in turn, allows for a more profound understanding of how meaning is constructed and conveyed through language, not just in isolated sentences but also within the context of larger discourses.

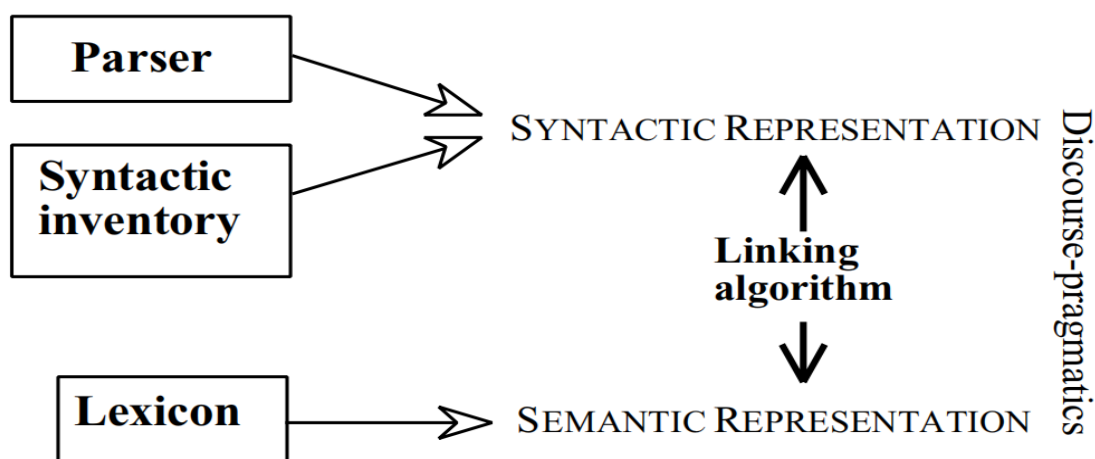


Figure 1. Organization of RRG (Van Valin, 2005: 131)

Previous studies have demonstrated the versatility of RRG in various contexts. Balogh (2021) uses RRG to account for additive particle uses in Hungarian, showing its effectiveness in analyzing language-specific phenomena. Ge and Wu (2023) apply RRG to analyze the humor mechanism of combined pun Xiehouyu, uncovering the underlying semantic and syntactic patterns in this unique Chinese language form. Butler (2012) makes an evaluative comparison of syntactic functions in Functional Discourse Grammar and Role and Reference Grammar, contributing to the understanding of RRG's place among different grammatical frameworks. Cortés-Rodríguez (2016) works towards the computational implementation of RRG, formulating rules for the syntactic parsing of RRG phrasal constituents. Hernández-Pastor and Perrián-Pascual (2016) utilize RRG to develop a knowledge base for preposition sense disambiguation. Rodríguez-Juárez (2017) accounts for the alternating behavior of location arguments from the perspective of RRG, and Rodríguez-Juárez and Cortés-Rodríguez (2022) conduct a quantitative-based study of adjuncts in the Airbus Corpus using RRG. Suárez Rodríguez (2024a) explores whether Alzheimer's Disease is a cross-linguistic issue from an RRG perspective by comparing corpora, and Suárez Rodríguez (2024b) contributes to the study of language impairment in English-speaking patients with Alzheimer's Disease using RRG. However, its application to institutional discourse, especially in the domain of central bank communication, remains relatively limited. Some research has explored RRG's application to specific languages like Chinese, highlighting its potential for explaining linguistic phenomena in different language systems (Zhang and Xie 2004; Liu 2015; Pan 2000). These studies not only showcase RRG's potential in analyzing Chinese language phenomena but also suggest that it could be a powerful tool for exploring the cross-cultural differences in central bank communication. By applying RRG to central bank speeches, we might be able to uncover how cultural and political factors are encoded in the language used by central banks, which could in turn provide valuable insights for improving communication strategies, enhancing the understanding of policy messages by the public, and ultimately contributing to more effective monetary policy implementation in a global context.

2.2 Central Bank Communication

Research on central bank communication mainly focuses on its impact on market reactions and economic stability. Wan and Zeng (2023) argue directly that such communication aims to bridge the information gap between central banks and the public, guiding public expectations for better policy-goal attainment. Blinder et al. (2017) provide a comprehensive survey of the theory and evidence regarding central bank com-

munication and monetary policy. Scholars have probed into aspects of central bank statements, including content, tone, and clarity (Lv et al 2024). Lv et al. (2024) analyze central bank communication vocabulary, revealing a simplicity-professionalism trade-off when communicating with the public. More professional concepts can precisely depict economic fundamentals but raise public information-processing costs, influencing market expectations through their impact on public understanding and actions. Wu and Zhang (2021) conduct a corpus-based study on the discursive strategies of opacity in the People's Bank of China's policy reports, contributing to the understanding of how the PBC communicates.

Some studies have looked into cross-country differences in central bank communication styles. However, most have not delved deeply into cross-cultural linguistic structures. The dataset of the speeches from the Fed chairs and the PBC governors (in annual reports) offers rich data for further exploration. These materials can potentially shed light on cross-cultural communication differences, like how language use varies between the two central banks and impacts market reactions and economic stability. Moreover, He et al (2023) provide context on China's financial development. The ongoing improvement of China's financial system, deepening of reforms, and expansion of opening-up may affect the PBC's communication. Understanding these broader financial developments aids in better analyzing central bank communication characteristics and effects.

2.3 Cross-Cultural Discourse Analysis

Cross-cultural discourse analysis delves into the nuances of how language use diverges across different cultures. By considering cultural norms, values, and social structures, it aims to explain the disparities in discourse patterns. As Li (2007) demonstrated in previous research, cultural differences can result in variations in topic selection, information organization, and the employment of rhetorical devices. In the context of business and corporate communication, several studies have explored cross-cultural aspects. Hu and Xu (2023) conduct a corpus-based discourse-historical study on corporate identity construction, exploring how Huawei has constructed its corporate identity and showing how language use in corporate documents can be influenced by cultural factors, with Huawei strategically portraying itself in different ways to meet the expectations of various stakeholders. Qiu and Ding (2022) analyze the identity construction of Sino-US cross-border e-commerce enterprises, demonstrating that Chinese enterprises have focused on technological innovation and collective interests, while American enterprises have emphasized partnership and personal interests. Wu and Zhang (2019) compare the discursive strategies for the construction of Chinese and American corporate identities, taking Huawei and Apple's 2017 annual reports as examples, exploring how different discursive strategies, such as referential, predicative, perspectival, and intensifying/weakening strategies, having been used to construct distinct corporate identities, highlighting the impact of cultural differences on corporate communication. Cheng and Shi (2024) focus on the identity construction of Chinese and American corporate websites from the perspective of picture discourse, suggesting that cultural differences also play a role in non-verbal communication within the corporate context.

However, when it comes to central bank communication, there is a significant lack of research specifically focused on cross-cultural differences in central bank monetary policy discourses. The unique political and cultural contexts of the United States and China, as reflected in the speeches of the Fed and the PBC, present an interesting case for cross-cultural discourse analysis.

Existing studies on RRG, central bank communication, and cross-cultural discourse analysis have made important contributions. Nevertheless, a notable gap remains in understanding how RRG can be used to analyze the cross-cultural differences in central bank monetary policy discourses. This study aims to fill this gap by applying RRG to compare the speeches of the Fed chairs and the PBC governors, thus providing new insights into the relationship between grammar, culture, and institutional communication.

3 Research Methodology

3.1 Data Collection

The research focuses on 10 speeches from the Fed chairs and 10 from the PBC governors spanning the period from 2015 to 2024. These speeches are sourced from official channels including the official websites of the PBC (www.pbc.gov.cn) and the Fed (www.federalreserve.gov), ensuring the authenticity and representativeness of the data. The speeches of the PBC governors are collected from the annual reports of the PBC with the title of “governor’s speech” as their beginning parts to show introductory parts of the annual reports, and the speeches from the Fed chairs are directly collected from the official website of the Fed with the speakers from the chairs and the titles on economic outlook and monetary policy or related topics. The selection of this 10-year time frame is strategic, as it ensures that the data accurately captures the contemporary monetary policy discourses of both central banks. Thus, the selection covers a range of economic situations and policy-making periods to capture diverse discourse characteristics. After the data being collected and sorted out, the research corpora of Chinese and American central bank speeches are constructed respectively as Chinese corpus and English corpus. The Chinese corpus, segmented by NLP-ICTCLAS, and the English corpus, can be searched and analyzed in AntConc and the large language model referred to when necessary. The English corpus owns 2880 word types and 25372 word tokens, while the Chinese corpus boasts 2020 word types and 9486 word tokens. As for the basic information for the speaker, speech date and speech title or theme of the Chinese and English central bank speeches, the data are shown below (Table 1):

Table 1. Data for Chinese and American Central Bank Speeches

Central Bank	Speaker	Number of Speeches	Time Range	Theme Type
The Fed	Janet L. Yellen	3	2015–2017	Economic Outlook and Monetary Policy
	Jerome H. Powell	7	2018–2024	Monetary Policy, Inflation, Financial Stability, etc.
The PBC	Zhou Xiaochuan	4	2015–2018	Governor’s Address in Annual Report
	Yi Gang	5	2019–2023	Governor’s Address in Annual Report
	Pan Gongsheng	1	2024	Governor’s Address in Annual Report

3.2 Analytical Framework

The study employs RRG as the primary analytical framework, integrating its layered clause analysis with corpus-driven annotation. This approach allows for a comprehensive exploration of the monetary policy discourses of the Fed and the PBC.

Syntactic Typology: The clauses within the speeches are meticulously classified into transitive, intransitive, or topic-comment structures. Transitive clauses, a fundamental syntactic form, typically consist of an Actor and an Undergoer. For instance, in the sentence “The Fed adjusts interest rates,” “The Fed” acts as the Actor, and “interest rates” serve as the Undergoer. This structure is often used to explicitly show the doer of an action and the entity upon which the action is performed. Intransitive clauses, on the other hand, contain only an Actor or an Undergoer. An example could be “Inflation rises,” where “Inflation” is the Undergoer. These clauses are useful for expressing actions or states that do not require a direct object. Top-



ic-comment structures, which are prevalent in Chinese, involve presenting a topic first, followed by a comment. For example, “货币政策 [Topic], 稳健且灵活 [Comment]” (Monetary policy [Topic], is prudent and flexible [Comment]). This structure is effective in highlighting the topic and providing relevant information or evaluation about it.

Semantic Role Mapping: Identifying the semantic roles of Actor, Undergoer, and Instrument in each clause is crucial. The Actor is the entity that initiates or is responsible for an action. In central bank communication, it could be the central bank itself, as in “We [Actor] will implement new policies.” The Undergoer is the entity that undergoes the action, like “markets [Undergoer] are stabilized by the policies.” The Instrument refers to the means or tool through which the action is carried out, such as “interest rates [Instrument] are used to control inflation.” By examining the mapping between these semantic roles and syntactic structures, we can gain insights into how agency and responsibility are encoded in the discourses. For example, the consistent assignment of the central bank as the Actor in certain clauses may emphasize its responsibility for policy making and implementation.

Pragmatic Focus Structures: The analysis of focus breadth, categorized as either narrow or broad, provides valuable insights into the emphasis within the clauses. Narrow focus highlights a specific element in the clause. For example, in “We will specifically target [narrow focus] inflation,” the focus is on the single element of “inflation,” drawing attention to this particular aspect. In contrast, broad focus encompasses a larger part of the clause, like “We will take comprehensive measures [broad focus] to ensure economic stability,” where the focus is on the overall set of measures. Additionally, considering the cultural-institutional contextualization is essential. In the U.S., with its individualistic culture, the focus may be more on the actions and responsibilities of the central bank as an individual entity. In China, the collective governance system may lead to a focus on broader policy goals and the collective impact on the economy.

Integration of Analyses: These three aspects of syntactic typology, semantic role mapping, and pragmatic focus structures are not isolated but rather interconnected. The syntactic structure often determines the possible semantic role assignments, and the pragmatic focus can influence how these roles are emphasized or de-emphasized. By integrating these analyses, we can develop a more comprehensive understanding of the monetary policy discourses, uncovering the underlying patterns and meanings that are shaped by both linguistic and cultural-institutional factors.

3.3 Quantitative and Qualitative Analyses

Quantitative analysis serves as a fundamental tool in this study. It involves counting the frequency of different syntactic structures, semantic role mappings, and focus structures in the English and Chinese speeches. By systematically tallying the occurrences of transitive, intransitive, and topic-comment clauses, as well as the distribution of semantic roles and the prevalence of narrow and broad focus, we can obtain objective data. This data provides a clear picture of the dominant patterns in each set of speeches. For example, a higher frequency of transitive clauses in the Fed’s speeches may indicate a more direct and active approach in their communication, while a preponderance of topic-comment structures in the PBC’s speeches could suggest a different communicative emphasis.

Qualitative analysis, on the other hand, is essential for interpreting the quantitative data within the context of the cultural and political backgrounds of the two countries. It helps to uncover the “why” behind the observed patterns. For instance, the preference for transitive clauses in English discourses may be related to the individualistic political and economic model in the U.S., where clear assignment of agency and responsibility is emphasized. In contrast, the inclination towards topic-comment structures in Chinese discourses can be linked to China’s collective governance system, which places more importance on the overall policy goals and the collective action. By delving into these cultural and political factors, we can gain a far more profound understanding of the communicative strategies employed by the two central banks.

Combining these two types of analysis, quantitative and qualitative, allows for a more comprehensive and nuanced understanding of the cross-cultural differences in the monetary policy discourses of the Fed and the PBC. The quantitative data provides the foundation, while the qualitative analysis adds depth and context, enabling us to draw more meaningful conclusions about the relationship between grammar, culture, and institutional communication.

3.4 Coding and Annotation

The speeches are coded and annotated using corpus-driven methods. Each clause is coded for its syntactic typology, semantic role mapping, and focus breadth. The cultural-institutional context is also noted for each clause to provide a comprehensive understanding of the data. This coding and annotation process allows for a systematic analysis of the data and facilitates the comparison between the English and Chinese speeches. For the two sample documents, “August 23, 2024 Review and Outlook” by Jerome H. Powell, the Fed Chair and the “June 18, 2024 Governor’s Address” from Pan Gongsheng, the PBC governor in the PBC 2023 annual report, the following coding and annotation process has been carried out:

3.4.1 Coding for Syntactic Typology

Transitive Clauses: In the Fed chair’s speech, sentences like “Our restrictive monetary policy helped restore balance between aggregate supply and demand” are examples of transitive clauses. Here, “Our restrictive monetary policy” acts as the Actor, and “balance between aggregate supply and demand” is the Undergoer. In the PBC governor’s speech, sentences such as “中国人民银行增加支农支小再贷款再贴现额度 2500 亿元” (The People’s Bank of China increased the amount of re-loans and rediscounts for supporting agriculture and small businesses by 250 billion yuan) also follow a transitive structure, where “中国人民银行” (The People’s Bank of China) is the Actor and “支农支小再贷款再贴现额度 2500 亿元” (the amount of re-loans and rediscounts for supporting agriculture and small businesses by 250 billion yuan) is the Undergoer.

Intransitive Clauses: In the Fed chair’s speech, “Inflation has declined significantly” is an intransitive clause with “Inflation” as the Undergoer. In the PBC governor’s speech, “人民币汇率在合理均衡水平上的基本稳定” (The RMB exchange rate remained basically stable at a reasonable and balanced level) can be considered an intransitive structure with “人民币汇率” (The RMB exchange rate) as the Undergoer.

Topic-Comment Structures: Topic-comment structures are more prevalent in the Chinese report. For instance, “稳健的货币政策精准有力” (The prudent monetary policy is precise and forceful), where “稳健的货币政策” (The prudent monetary policy) is the topic, and “精准有力” (precise and forceful) is the comment.

3.4.2 Coding for Semantic Role Mapping

Actor: In the Fed chair’s speech, “We” in “We will do everything we can to support a strong labor market” is the Actor. In the PBC governor’s speech, “中国人民银行” (The People’s Bank of China) is often the Actor, as in “中国人民银行综合运用多种货币政策工具” (The People’s Bank of China comprehensively uses a variety of monetary policy tools).

Undergoer: In the Fed chair’s speech, “inflation” in “Our restrictive monetary policy helped bring down inflation” is the Undergoer. In the PBC governor’s speech, “金融风险” (financial risks) in “有效防控金融风险” (effectively prevent and control financial risks) is the Undergoer.

Instrument: In the Fed chair’s speech, “policy rate” in “We raised our policy rate” can be seen as an Instrument. In the PBC governor’s speech, “货币政策工具” (monetary policy tools) in the sentence can be considered an Instrument.



3.4.3 Coding for Focus Breadth

Narrow Focus: In the Fed chair's speech, "inflation" in "Inflation has declined significantly" has a narrow focus as it highlights the specific element of inflation. In the PBC governor's speech, "人民币汇率" (The RMB exchange rate) in "保持人民币汇率在合理均衡水平上的基本稳定" (maintain the basic stability of the RMB exchange rate at a reasonable and balanced level) has a narrow focus.

Broad Focus: In the Fed chair's speech, "the balance of the risks to our two mandates" in "And the balance of the risks to our two mandates has changed" has a broad focus as it encompasses a larger part of the clause. In the PBC report, "稳健的货币政策精准有力" (The prudent monetary policy is precise and forceful) has a broad focus as it refers to the overall situation of the monetary policy.

Throughout the coding process, the cultural-institutional context was also noted for each clause. For example, in the Fed chair's speech, the emphasis on individual actions and responsibilities (as seen in the use of transitive clauses with clear Actors) may be related to the individualistic political and economic model in the US. In contrast, the prevalence of topic-comment structures in the PBC governor's speech may be associated with China's collective governance system, where the focus is more on the overall policy and its outcomes rather than individual agents. This comprehensive coding and annotation process enabled a systematic analysis of the data and facilitated a detailed comparison between the English and Chinese speeches.

4 Results and Discussion

This study has aimed to investigate how linguistic structures encode agency, responsibility, and institutional identity in monetary policy discourses of the Fed and the PBC using RRG. The analysis of the selected speeches and addresses from 2015-2024 reveals several significant findings.

4.1 Syntactic Typology

In the English discourses of the Fed chairs' speeches, transitive clauses are prominently used. Our analysis of the 10 Fed chairs' speeches from 2015-2024 reveals that transitive clauses account for approximately 65% of the total clauses. For instance, statements like "We will raise the target range for the federal funds rate" clearly identify the Fed as the Actor, directly performing an action on an Undergoer (the target range). This syntactic preference emphasizes the Fed's institutional accountability. It reflects the individualistic political and economic model in the US, where the central bank is seen as a distinct entity taking decisive actions to influence the economy. The frequent use of transitive clauses also implies a strong force-dynamic causality, suggesting that the Fed's actions have direct and immediate effects on economic variables.

Moreover, the use of transitive clauses in the Fed chairs' speeches often follows a pattern where the Actor (the Fed) is clearly defined, and the action is explicitly directed towards a specific Undergoer. This not only showcases the Fed's active role but also makes the cause-effect relationship in monetary policy communication more explicit. For example, in "Our monetary policy adjustments have a direct impact on market liquidity," the transitive clause structure clearly shows the Fed's actions (policy adjustments) and their effect on the market liquidity (Undergoer).

Conversely, Chinese discourses in the PBC governors' addresses often feature topic-comment structures. In the 10 PBC speeches analyzed from the same period, topic-comment structures make up around 50% of the total clauses. For example, "防范化解重大金融风险 [Topic], 是党的十九大确定的三大攻坚战之一 [Comment]" (Preventing and defusing major financial risks [Topic] is one of the three major battles determined by the 19th National Congress of the CPC [Comment]). Here, the Agent is either omitted or generalized. This structure places the emphasis on the policy topic and its significance, highlighting collective

action and the overarching policy outcomes. It aligns with China's collective governance system, where the focus is on the collective efforts towards achieving common goals rather than individual institutional actors.

In addition, topic-comment structures in PBC speeches frequently revolve around broad policy themes. These themes are then elaborated upon in the comment part, which may include details about the policy's implementation, significance, or expected results. For example, “推动金融改革开放 [Topic], 要以服务实体经济为导向, 稳步推进各项改革举措 [Comment]” (Promoting financial reform and opening up [Topic], we should be guided by serving the real economy and steadily advance various reform measures [Comment]). This way of expression emphasizes the collective nature of the policy-making and implementation process, highlighting that these actions are part of a broader, collective effort within the country's economic development framework.

4.2 Semantic Role Mapping

In the analysis of the 10 PBC governors' speeches from 2015-2024, it has been found that in approximately 40% of the clauses where semantic roles are identified, Undergoers are assigned to abstract goals. As seen in “加大对小微企业、绿色发展、科技创新等的支持力度” (Increase support for small and micro enterprises, green development, scientific and technological innovation, etc.), the Undergoers are these abstract concepts representing collective economic and social development goals. This semantic role mapping is in line with China's socio-political norms that prioritize the well-being of the collective and the overall development of the economy. These abstract goals reflect China's long-term development strategies and the collective vision for a more inclusive and sustainable economic growth. By focusing on such Undergoers, the PBC's communication emphasizes the collective nature of its policy actions, aiming to achieve broader economic and social objectives.

Conversely, in the 10 Fed chairs' speeches during the same period, only about 20% of the clauses with semantic role assignments showed a similar pattern of assigning Undergoers to abstract goals. In English discourses, semantic role mapping often shows a more direct relationship between the Actor (the Fed) and more concrete Undergoers. For example, “We are closely monitoring incoming wage and price data” clearly shows the Fed (Actor) directly interacting with specific data (Undergoer), reflecting a more targeted and individual-centered approach to policy-making. This pattern is evident in around 50% of the clauses in Fed chairs' speeches, where the Fed is the Actor, and the Undergoer is a tangible economic variable or entity. This indicates that the Fed's communication style leans towards highlighting immediate actions and their direct impact on specific economic elements, which is consistent with the individualistic political and economic model in the US.

Furthermore, in PBC speeches, when the Actor is “中国人民银行” (The People's Bank of China), the assignment of Undergoers to abstract goals not only reflects the collective governance approach but also implies a long-term commitment to the overall development of the nation. For instance, in statements related to “促进经济高质量发展” (Promote high-quality economic development), the Undergoer “high-quality economic development” is an abstract yet overarching goal. This semantic role mapping suggests that the PBC views its actions as part of a comprehensive effort to achieve broad-spectrum economic progress. In contrast, in Fed chairs' speeches, the Actor-Undergoer relationships often revolve around short-term economic stabilization and market-specific adjustments, focusing on more immediate and tangible economic factors to address current economic situations. This difference in semantic role mapping between the two central banks showcases how cultural and political factors influence the way they communicate their policy intentions and actions.



4.3 Pragmatic Focus Structures

Our analysis of the 10 Fed chairs' speeches from 2015-2024 indicates that narrow focus is a prevalent feature in English discourses. In approximately 60% of the clauses where focus could be determined, a narrow focus was identified. When the Fed chair states, "Our primary focus right now is to bring inflation back down to our 2% goal," the narrow focus is on the specific goal of inflation reduction. This highlights the Fed's immediate and specific responsibility. Such a narrow focus allows for a clear and direct communication of the central bank's short-term priorities. It enables the public to easily understand the Fed's immediate concerns and the actions it intends to take to address them. This precision in communication is in line with the individualistic nature of the US economic and political model, where clear and distinct goals are emphasized, and the central bank is expected to be accountable for achieving these specific targets.

Conversely, in the 10 PBC governors' speeches during the same period, broad focus is more common. Around 70% of the clauses with determinable focus demonstrated a broad focus. For example, "中国人民银行将继续以习近平新时代中国特色社会主义思想为指导, 全面贯彻党的十九届五中全会和中央经济工作会议精神, 坚持稳中求进工作总基调, 立足新发展阶段, 贯彻新发展理念, 以推动高质量发展为主题, 建设现代中央银行制度" (The PBC will continue to be guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, fully implement the spirit of the Fifth Plenary Session of the 19th Central Committee of the CPC and the Central Economic Work Conference, adhere to the general tone of seeking progress while maintaining stability, base itself on the new development stage, implement the new development concept, take promoting high-quality development as the theme, and build a modern central bank system). This broad focus encompasses a wide range of policy-related aspects, emphasizing the overall policy framework and collective long-term goals. The PBC's communication through such broad-focused statements shows that it views its actions within the context of a comprehensive and long-term national development strategy. It reflects China's collective governance system, where policies are formulated and implemented with an eye on the broader, long-term well-being of the entire economy and society.

These systematic contrasts in pragmatic focus between the two central banks' discourses, along with the differences in syntactic and semantic aspects, demonstrate how grammatical choices mediate authority and transparency. The English structures, with their narrow focus, reinforce individualistic accountability. They make the Fed's actions and responsibilities explicit, allowing for a clear understanding of its short-term objectives. The Chinese structures, on the other hand, with their broad focus, embed decisions within communal frameworks. This emphasizes the collective nature of policy-making and the pursuit of common goals, which is in line with China's approach to economic and social development. These differences in focus not only shape how the central banks communicate their policies but also influence how the public perceives their authority and the transparency of their decision-making processes.

5 Conclusion

This research has applied RRG to conduct a meticulous cross-cultural discourse analysis of the monetary policy discourses of the Fed and the PBC, yielding several significant contributions. Theoretically, it has significantly advanced the application of RRG to institutional discourse. By delving deep into the syntactic templates, semantic role mapping, and pragmatic focus structures within central bank speeches, this study has not only demonstrated the remarkable utility of RRG in decoding cross-cultural pragmatics but also opened up a new vantage point. It has revealed how the intricate interplay between cultural and political factors is intricately woven into the very fabric of the language used by central banks. For instance, the contrast in syntactic preferences between transitive clauses in English and topic-comment structures in Chinese is not merely a linguistic difference but a reflection of the underlying individualistic and collective governance models. This understanding enriches our comprehension of the complex relationship between grammar and institutional communication, suggesting that RRG can serve as a powerful analytical tool to un-

cover the implicit cultural and political connotations embedded in central bank discourses. Practically, the findings of this study offer invaluable insights for central banks operating in multilingual and multicultural contexts. In an increasingly globalized world, central banks need to be acutely aware of these cross-cultural differences in language use when formulating and communicating their policies. For the Fed, when engaging with international audiences from more collectivist cultures, it may need to adopt a more nuanced approach. Instead of solely relying on narrow-focused statements that emphasize individualistic accountability, it could consider incorporating broader focus structures. This would not only enhance the resonance of its messages but also help bridge the cultural gap, making its policies more relatable and understandable to a wider audience. Similarly, the PBC, in its international communication endeavors, could strategically highlight the Agent in its statements. By doing so, it can better align with the expectations of an international audience accustomed to more individual-centered accountability mechanisms, thereby improving the clarity and effectiveness of its communication.

Furthermore, this study also charts a clear path for future research. Future studies could significantly expand the dataset by incorporating more years of central bank materials and diversifying the types of documents, such as policy announcements, press conferences, and public consultations. This broader scope would enable a more comprehensive verification and expansion of the current findings, potentially uncovering new patterns and trends in central bank communication. Additionally, integrating other complementary linguistic theories and methods, such as cognitive linguistics or discourse analysis from a sociolinguistic perspective, could provide a more in-depth exploration of the intricate relationships between central bank language, the macro-economy, and market reactions. This multi-faceted approach would not only deepen our understanding of the differences in the monetary policy discourses of the Fed and the PBC but also contribute to the broader field of cross-cultural economic communication and policy-making, fostering more effective and culturally sensitive communication strategies among central banks worldwide. Overall, this research has laid a solid foundation for further exploration, offering a novel perspective that holds great promise for promoting cross-cultural economic understanding and more informed policy-making in the global economic arena.

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