

A Case Study of Semantic “We” in Academic Discourse

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Abstract—The personal pronoun “we” is the most frequently-used self-mention language of the author’s presentation in academic discourse. This study adopts quantitative and qualitative designs, selecting 60 English academic discourses from the Linguistics Journal of *The Modern Language Journal* and the Economics Journal of *The Journal of Finance* as samples to build two corpora. With the help of Antconc and Log-likelihood and Chi-Square Calculator 1.0, the present study analyzes the semantic use of the self-mention “we” in the corpus. The finding shows that there are significant differences in the use of “we” between the academic discourse of the two disciplines from the perspective of between disciplines ($p < 0.001$), and the use of “we” is more frequent in the economic academic discourse. From the perspective of within disciplines, the use of “exclusive we” is more frequent and there is a significant difference in the use of “inclusive we” and “exclusive we” in the academic discourse of the two disciplines. Finally, the study also analyzes the textual function of “we” in academic discourse, intending to provide some help to the understanding and writing of academic discourse in different disciplines, especially Linguistics and Economics.

Keywords—personal pronoun we, academic discourse, semantic, textual function

I. INTRODUCTION

Academic discourse, as an objective report of experimental data and scientific research, has long been characterized by science, objectivity, and clarity, with content focusing on the accurate description of objective facts [1]. Therefore, the use of personal pronouns is often avoided and a large number of non-objective expressions are replaced by impersonal structures [2]. However, studies of academic discourse in recent years have shown that academic discourse is not completely objective for academic reporting. Unlike the previous objective and monotonous presentation of data, academic discourse has gradually abandoned the previous objective and monotonous textual style and linguistic features. It adopted subjective and interactive expressions as scholars pay more attention to the presentation of identity and interaction with readers in academic discourse [3].

Semantically, the first-person pronoun “we” is not a single referent, and its referent has different semantic categories in different contexts. Thus, the semantic referent of the first-person pronoun “we” is defined with ambiguity and instability [4]. Hence, the semantic value of first-person pronouns deserves deeper investigation. By studying the semantic meaning of the first-person pronoun “we” in Linguistics and Economics, this paper can better understand the semantic meaning of “we” in different contexts and thus provide some help to the understanding of such academic discourse. At the same time, different disciplines have their own writing styles and characteristics. That is to say, differences in disciplinary contexts can also have an impact

on the use of first-person pronouns. The present paper analyzes the characteristics of the first-person pronoun “we” in the academic discourse of two disciplines, Linguistics, and economics, focusing on the semantic similarities and differences in the use of the first-person pronoun “we” and trying to analyze the reasons for the differences. The aim is to deepen the understanding of the characteristics of the writing style of this type of academic discourse, and also to gain insight into how authors achieve self-promotion and identity construction in different academic discourses. The study hopes to deepen the understanding of the stylistic characteristics of such academic discourse writing, as well as the understanding of how authors achieve self-promotion and identity construction in different academic discourses.

II. RESEARCH METHODOLOGY

A. Theoretical Framework

The first-person pronoun “we” is not a single referent, and its referents have different semantic categories in different contexts [4]. Hyland [5] divided “we” into two main categories, namely “exclusive we” (self-referential) and “inclusive we” (reader’s appellative). The term “exclusive we” refers to the “we” used by authors in academic works without readers, while “inclusive we” refers to the “we” that includes readers. As shown in the Fig. 1, Kuo [6] further classified that “exclusive we” refers to the “we” used by authors in academic works that do not include readers. Such “we” can refer to a single author, a team of authors working together on a research project, scholars working in the same direction as the author, and so on. The term “inclusive we” refers to the “we” that includes the target audience of the scholarly work (i.e., the audience of the author’s peers) or the general public (i.e., the audience of the author’s peers). It can also refer to the general public (i.e., readers in the general sense), etc.

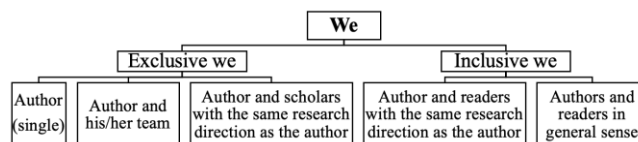


Fig. 1. The semantic referent of we.

B. Operational Definition

As mentioned above, the first-person pronoun “we” is not a single referent due to the ambiguity and instability of semantic referents. Specifically, its referent has different semantic categories in different contexts [4]. In this paper, “we” is divided into two categories, “inclusive” and “exclusive,” mainly from the semantic point of view. According to Kuo’s [6] classification, “inclusive we” includes the speaker (i.e., author) and the listener (i.e., reader),

while “exclusive we” does not include the reader. The specific examples in this study are as follows.

Example 1

In this section, we review the CIP condition and define the cross-currency basis as the deviation from the CIP condition (Economics 15).

Example 2

We conclude by suggesting how our expanded view of teaching/learning might broaden SLA/T’s ‘pedagogical imagination’ (Linguistic 14).

The “we” in Example 1 is “inclusive” which refers to the authors and readers of the academic discourse. In Example 2, “we” refers to the authors of academic discourse only, which is called “exclusive we”. In the semantic analysis of “we,” the present study will classify and discuss them according to this definition.

C. Research Questions and Design

This study aims to answer the following two questions: What are the characteristics of the different semantic uses of “we” in linguistic and economic academic discourse? What are the similarities and differences in the usage characteristics between the two disciplines?

In order to answer these questions, the present study built a small corpus of academic discourse. The corpus consists of academic papers discourse in a linguistics journal, *The Modern Language Journal*, and the economic journal *The Journal of Finance*, from recent 3 years, with 10 academic articles from each discipline each year, for a total of 60 articles. The purpose of this paper is to investigate the use of the personal pronoun “we” in academic discourse, and the corpus includes the abstracts and texts of the papers. The rest of the footnotes, endnotes, references, appendices, etc. were excluded from the corpus and were then manually marked and deleted. The specific information of the corpus is presented in Table 1.

Table 1. Size of corpus

	Linguistics	Economics	Total
Articles	30	30	60
Token	355,975	533,117	889,092

D. Data Collection and Analysis

Firstly, data collection was conducted. The PDF versions of the 60 academic discourses to be analyzed were converted to plain text format, and irrelevant information such as titles, footnotes, and author profiles was manually removed to build a self-constructed corpus.

Secondly, the personal pronouns “we” in the two academic papers were detected by manual annotation and the AntConc, and the results were compiled. The overall frequency of the personal pronoun “we” in the selected academic papers was calculated, and the frequency of its collocations and their collocations were counted. (Considering that “we” appears in titles, examples, and quotations that are not the author’s own words, it is removed by manual annotation.) The frequency of “we” in the two disciplines was then counted using Antconc.

The frequency of “inclusive we” and “exclusive we” in the

two disciplines was then analyzed according to Kuo’s classification. Then, we analyzed the characteristics of the roles of “inclusive we” and “exclusive we” in the two disciplines by giving specific examples and classifying them.

Afterward, a table was drawn to compare and analyze the frequency and role of “we” in the two disciplines. The reasons for these characteristics and similarities were then analyzed. Finally, based on the results of the analysis, the characteristics of the use of “we” in academic discourse are summarized in order to bring some insights into the understanding and writing of different scientific terms.

III. THE GENERAL FEATURES OF “WE” IN THE CORPUS

A. The Overall Frequency of “We”

Since the total word counts of the two corpora established in this study are different (355,975 in the academic linguistics corpus and 533,117 in economics), they cannot be compared directly. Therefore, this study tested the independence of “we” by calculating the chi-square and p-values between the two corpora. As a result, the differences in the use of “we” between the two disciplines were compared. First, the AntConc was used to filter the overall frequency of “we” in the academic corpora of linguistics and economics. Based on this, the p-values and chi-square values of the frequency of “we” in the two disciplines were calculated using the Log-likelihood and chi-square value calculators to further observe the usage of “we” in the two disciplines. The data are presented below.

Table 2. The overall frequency of “We” in academic discourse of the two disciplines

	Linguistics	Economics	Chi-square	p
We	758	4,340	-1351.94	0.000
Total words	355,975	533,117		

As shown in Table 2, the total number of words in the linguistics corpus is 355,975, and the frequency of “we” is 758. The ratio of the frequency of “we” to the total number of occurrences $p < 0.001$ indicates a significant difference in the frequency of “we” between the two disciplines. The negative chi-square test indicates that the frequency of “we” in economics terms is much higher than the probability in linguistics.

B. The Pragmatic Function of Different Semantic “We”

“Inclusive we” is often used to express ideas and explain the process. At this time, “we” can close the distance between the author and the reader in language expression so that the reader can better integrate into the research [7]. In this way, readers can better understand the views of the article [8].

Example 3

From the use of the emphatic adverb hontooni (‘really’) and the laugh particles inserted in this utterance; we can see that this laughter is triggered by the particular life situation that he is expressing (Linguistic 9).

Example 4

To do so, we need an alternative solution method that accurately accounts for higher order dynamics and yields robust solutions (Economics 11).

In Example 3, “we” is used to illustrate the author’s point

of view. In this case, the author of the academic discourse uses “we” to guide readers to better accept their views and guide readers to enter the research step by step. In Example 4, “we” is used to explain the research process [9]. In this way, the reader can better understand the ideas put forward by the author in his/her study of academic discourse. Even if the reader may be different from the author’s research field, it can also increase the reader’s sense of participation in this study, thus enhancing the reader’s interest in the study of terminology [10].

As the subject, “exclusive we” is often used to state research results and discuss research methods, purposes, and significance. Compared with the personal pronoun “I”, which is also the author’s self-reference in academic discourse, “we” contains less subjectivity. Therefore, the degree of personal interference in the research results can also be relatively reduced. Therefore, the scientificity, objectivity, and accuracy of the research are also improved accordingly.

Example 5

If we set our consideration of possible forms (i.e., our envelope of variation, see Chambers, 2008) to any form that conveys a state or event to occur after speech time, then we have circumscribed our variable context to all contexts of futurity (and only contexts of futurity). (Linguistic 22)

Example 6

We find that both rank and tournament incentives increase risk-taking among underperforming professionals, while only tournament incentives affect students. (Economics 16)

Example 5 has is a single author. In this case, the author still chooses to use the personal pronoun “we” to describe the methodology and purpose of his research in the academic discourse. Compared with “I”, “we” is more objective. This approach can improve the persuasiveness of the research to a certain extent. In Example 6, the “we” in the academic discourse of Economics not only emphasizes the importance of the author of the academic discourse in the process of scientific research but also enhances the authority and credibility of the research through the role of the team.

IV. DIFFERENCES

A. *The Use of “Inclusive We” is More Frequent in Economic Academic Discourse*

With the help of Antconc, this study uses the method of manual annotation to count the frequency of “inclusive we” in the corpus of two disciplines by reading the context of the target word “we”. The specific data are shown in the Table 3.

Table 3. The frequency of Inclusive we

	Inclusive we	Total we	Chi-square	p
Linguistics	26	758	0.00	0.000
Economics	146	4,340		

As shown in the Table 3, of the 758 “we” in the academic discourse of Linguistics, 26 are “inclusive we.” Among the 4,340 “we” in Economics, there are 146 “inclusive we.” The chi-square value of the total frequency of “inclusive we” between the two disciplines is 0.00, and the p-value is 0.000. Therefore, we can conclude that compared with linguistics, the use of “inclusive we” is more frequent in economic academic discourse.

B. *The Use of “Exclusive We” is More Frequent in Economic Academic Discourse*

In the same way, with the help of Antconc, we count the frequency of “exclusive we” in the corpus of two disciplines by reading the context of the target word “we”.

Table 4. The frequency of exclusive we

	Exclusive we	Total we	Chi-square	p
Linguistics	732	758	0.00	0.000
Economics	4,194	4,340		

According to Table 4, among the total 758 “we” in linguistic academic discourse, 732 are “exclusive we.” Of the 4,340 “we” in Economics, 4,194 “exclusive we” are included. The Chi-square value between the two is 0.00 and the p-value is 0.000 (<0.001). similar to “inclusive we,” the use of “exclusive we” is more frequent in the academic discourse of Economics.

V. SIMILARITIES

By classifying and counting different semantic “we,” it was found that “exclusive we” is more frequently used in the academic discourse of two disciplines than “inclusive we”. The specific data are shown in the Table 5.

Table 5. The general features of different semantic “We”

	Inclusive we	Exclusive we	Total	Chi-square	p
Linguistics	26	732	758	-1311.41	0.000
Economics	146	4,194	4,340	-7547.56	0.000

Table 5 shows that there are 758 “we” in linguistic academic discourse including 26 “inclusive we” and 732 “exclusive we”. The Chi-square value of the frequency between “inclusive we” and “exclusive we” in linguistic academic discourse is -1311.4 (<0), with a p-value of 0.000 (<0.001). Similarly, there are 4340 “we” in the academic discourse of Economics. Among them, 146 are inclusive, and 4,194 are exclusive. The chi-square value of the frequency between “inclusive we” and “exclusive we” in economic academic discourse is -7547.56 (<0), with a p-value of 0.000 (<0.001).

Therefore, we can conclude that there is a significant difference in the use of different semantic “we” in both linguistic and economic academic discourse. The authors tend to use “exclusive we” in academic discourse.

V. REASONS FOR SIMILARITIES AND DIFFERENCES

This study discovered, through observation and analysis, that the use of the personal pronoun “we” in the two disciplines has both similarities and differences. The following are the reasons for these similarities and differences.

This study believes that the main reason for the differences is due to differences between the two disciplines. Each discipline has its own distinct language phenomenon. Linguistics is one of them, and it belongs to the humanities. Because the humanities are so important in the development of other disciplines, linguistics is more cautious in its use of language. Economic studies various social phenomena and their development laws as a social discipline. Its main purpose is to quantify practical problems using logical

deduction. The research process involves a large number of subjective judgments from researchers. Therefore, these differences will have a certain impact on the use of personal pronouns.

The similarity can be attributed to two factors. For starters, it is because of the characteristics of academic discourse. As stated earlier in this paper, the majority of academic discourse in all disciplines aims to demonstrate ideas and share findings. Second, the semantic meaning “we” constrains it. Under the premise of writing academic discourses with the same background and purpose as previously mentioned, “we” has its specific usage in specific discourse links, such as acknowledgment, demonstration, the establishment of prestige, the improvement of credibility, and so on.

VI. TEXTUAL FUNCTION OF “WE”

After reading the relevant literature, the present thesis finds that the textual functions of “we” are similar but different among different disciplines. With the different pragmatic functions of “we” as mentioned in the previous part, this part would like to analyze the contribution of “we” in its textual function.

A. *Create a More Objective and Rigorous Research Atmosphere*

In the corpus, “we” is mostly used to explain the procedure, and to state results or claims. At this time, “we” have “team color” which can not only highlight the main content or innovative features of the paper but also make people feel strong authority and create a more objective and rigorous atmosphere for research.

Example 7

We examined how our focal NNEST participant, Puja, was confronted with and successfully negotiated numerous emotional challenges in her first year in a U.S. MATESOL program... (Linguistic 1).

Example 8

We use the introduction of a Financial Transaction Tax (FTT) in France in 2012 to test competing theories on its impact. We find no support for the idea that an FTT improves market quality by affecting the composition of trading volume (Economic 2).

As the examples show, when “we” play the pragmatic role of explaining a procedure and stating results or claims in academic discourse, it is sometimes used to satisfy readers’ sense of participation. It is used to let readers enter into the research together with the author. Besides, it is used to describe objectively, and to form a context atmosphere that is full of order and scientific rigor.

B. *Highlight the Value and Readability of the Academic Discourse*

When “we” play the roles of elaborating an argument and stating a goal or purpose, it is usually descriptive language. At this time, “we” guide and prompt readers to pay attention to the research content, which can highlight the value and readability of the paper. Meanwhile, “we” not only to be able to sort out the context of the article, but also to create an orderly, objective and rigorous atmosphere for the article.

Example 9

In what follows, we present the findings before returning to a brief discussion of the implications of this project for language educators and qualitative researchers who utilize interviews as a method of data generation (Linguistic 23).

Example 10

We propose that, by financing their own product sales through captive finance subsidiaries, durable goods manufacturers commit to higher resale values for their products in future periods (Economic 14).

In addition, as the “we” with the function of stating a goal or purpose and elaborating an argument, it can always give the readers a sense that the topic of research is full of importance. That is, the issues are worth discussing, and the author full of authority.

C. *Shorten the Distance between Readers and Authors*

“We”, which plays the role of expressing self-benefits, often expresses the author’s gratitude. It shows the author’s modest and polite image, which can shorten the distance between the reader and the author, and guide the reader to accept their own views.

Example 11

We are grateful to our colleagues Rosamond Mitchell, Kevin McManus, Laurence Richard, Patricia Romerode Mills, Karen Ruebens, the participants, and our transcribers and research assistants for their contribution to this research (Linguistic 5).

Example 12

We particularly thank Rani Piputri and all participating financial institutions and professionals for valuable collaboration (Economic 16).

Furthermore, when “we” function as expressing self-benefits in the article, “we” will guide the reader to step into the author’s mind. This kind of “we” shorten the distance between reader and author and let the reader accept the author’s opinion easier.

V. CONCLUSION

This study found that the use of “we” in the two disciplines differed significantly in terms of total word frequency. Specifically, the frequency of “we” in economic academic discourse is much higher than that in linguistic. Similarly, the use of both semantic “we” in the academic discourse of Linguistics is less than that in Economics in terms of semantic function. In addition, “exclusive we” is more frequently used than “inclusive we” in the academic discourse of both disciplines. The analysis showed that “exclusive we” is usually used to declare the results of a study, introduce the methodology, and state the purpose or meaning of the study. In this case, “we” is a less subjective personal pronoun. As a result, the author’s human factor in the academic discourse is less intrusive in the line of research findings. This improves the scientific, objective, and accurate nature of academic discourse. The “inclusive we” is often used to express opinions and explain processes. In terms of language expression, “we” can reduce the distance between the author and the reader in academic discourse and enable the reader to better participate in the research. As a result, readers can

better understand the academic discourse. This paper discusses and analyzes the use of “we” in academic discourse in Linguistics and Economics, and shows how the authors use “we” in different needs by interpreting linguistic examples in academic discourse, which can help the study will help learners understand the use of the personal pronoun “we” in academic discourse and use it appropriately in academic writing, so as to help them understand and write academic discourse in different disciplines, especially in linguistics and economics.

The present study also has some limitations, and the follow-up study may consider expanding the scope and quantity of the corpus, as well as exploring the use of personal pronouns in specific parts of academic papers, and further exploring the application rules of personal pronouns in academic discourse and the connection with writing cognition.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Zhou Yaru makes the main contribution to this paper. Zhou Yaru conducted this work and wrote the article; Zhang Yi helped to revise and perfect the paper. All authors had approved the final version.

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