

Systematic Literature Review: Trends in Japanese Pronouns Research

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ABSTRAK

This study examines research trends on Japanese pronouns from 1994 to 2024 using a systematic literature review and bibliometric approach. The software used were PoP (Publish or Perish) and VOSviewer by drawing data from Google Scholar. The study focused on words and phrases appearing at least five times in the titles and abstracts of 180 research articles, identifying 718 words/phrases, 29 of which were interrelated. After manual selection, 28 relevant words/phrases categorized into six clusters. Network visualization helped explore the relationships between these topics, revealing six clusters with varying connectivity. Research on Japanese pronouns peaked between 2004 and 2014, with the latest studies focusing on specific subtopics. The density visualization showed that topics with red hues had been thoroughly researched, while lighter hues indicated under-explored areas. Topics such as acquisition, comparison, indeterminate pronouns, and Japanese zero pronouns were recognized as under-researched. Future research may focus on these under-explored topics to improve understanding and expand the overall knowledge.

Kata Kunci: Bibliometric analysis, Japanese, Pronouns, Research trends, Systematic literature review

1. INTRODUCTION

Pronouns in Japanese have attracted the attention of linguistic researchers over the past few decades (Miyazaki, 2023; Su dkk., 2023; Yee & Wong, 2021). Knowledge of pronouns is vital for language comprehension (Okumura dkk., 2023). Pronouns are a classic example of a linguistic form not specifically specified (Kaufmann, 2023). Pronouns must be interpreted semantically in a context, and therefore, the study of pronouns opens the door to questions about the process of interpreting sentences and discourse (Ono & Suzuki, 2023; Ueno & Kehler, 2016).

The Japanese language has a unique structure and culture, which provides a rich basis for research on how pronouns are used in various contexts (Nagano & Martohardjono, 2023; Noguchi, 2020; Yee & Wong, 2021). Patterns of pronoun use in Japanese differ from those in other languages and have changed along with socio-cultural developments (Kobayashi & Rinnert, 2023; Seaborn & Kim, 2023; Su dkk., 2023). Therefore, a comprehensive analysis of pronoun research trends in Japanese from 1994 to 2024 will provide a valuable picture of how pronoun use has changed over time.

This study aims to collect a systematic literature review that identifies, describes, and analyzes research trends on Japanese pronouns over the last 30 years. Specifically, this research aims to:

- 2) identify the relationship between research related to Japanese pronouns, and
- 3) analyze the novelty in research on Japanese pronouns.

This study is important because it provides a better understanding of the way pronouns are used in Japanese and how their use has changed historically. This study looks at research trends over the past 30 years to discover new patterns, important trends, and changes in Japanese pronouns use in linguistic, social, and cultural contexts. Better understanding Japanese language trends will help Japanese language linguistic research, as well as translators, researchers, and Japanese language learners. Understanding Japanese and the use of this language can help understand international culture and communication. Consequently, this research is of great importance for linguistics academics and the current global context.

2. LITERATURE REVIEW

Some open pronouns in Japanese are very rare, which means that people learning Japanese as a second language (L2) can only understand Japanese pronouns at the lexical level. They can not use a more complex syntactic system or syntax-pragmatics interface (Nagano & Martohardjono, 2023) to understand them. In addition, research on L2 learners' interpretations of Japanese open and empty pronouns shows that learners do not show problems in learning Japanese at the initial stage, but these problems appear at later stages.

According to qualitative sociocultural research on gender identity conducted on Japanese students learning a second language, they use personal pronouns actively and consciously, which indexes them as male (Brown & Cheek, 2017). Still related to pronouns and gender, a study that looked at differences in

Japanese pronouns based on gender from a literary perspective found that gender dramatically influences the use of personal pronouns in novels (Nusantara, 2020).

According to studies from a conversation analysis perspective on using pronominals in communicative contexts, Japanese speakers use the personal pronoun *watashi* to start producing storytelling (Jin & Takagi, 2021). In addition, it was found that Japanese personal pronouns are not used only as references or clause arguments in conversation. Japanese personal pronouns do not form the same category, but instead, they demonstrate three distinct applications of the particular concept, which has prosodic, pragmatic, semantic, and grammatical properties (Ono & Thompson, 2003). Japanese pronoun studies have been conducted, particularly gender, second languages (L2), and communication use. However, a systematic study has never reviewed the substantial Japanese pronoun literature to discover new patterns, significant trends, and changes in Japanese pronoun use. The aim of this study is to fill this gap and provide recommendations for mapping research and novelty related to Japanese pronouns for future research.

3. METHOD

In order to do this study, published literature on the study of pronouns in Japanese was examined using bibliometric analysis techniques. Bibliometric analysis is a well-liked and thorough method for examining and assessing enormous amounts of scientific data. Bibliometric analysis involves three stages: data compilation, data structuring and cleaning, and analysis, interpretation, and visualization (Donthudkk., 2021). This research uses a literature search from a Google Scholar search to select relevant articles. Google Scholar can track open-access scientific document citations and a more comprehensive range of impact citation types (Kousha & Thelwall, 2008).

The Harzing Publish or Perish Application Version: 8.12.4612 (as of 12 March 2024), accessed on 11 April 2024, was used to carry out this literature search process. Search results in .ris format were sent to VOSviewer 1.6.20 for bibliometric analysis and visualization. The VOSviewer software tool is used to build and view bibliometric networks. This network includes individual publications, journals, and researchers (Rahimallah dkk., 2022; VOSviewer Official Website, 2024).

4. RESULTS AND DISCUSSION

4.1 Result

Data collection begins with Harzing's Publish or Perish (PoP) application. PoP is a software program used to analyze academic citations. It collects raw citations from various data sources, then analyzes them and presents multiple metrics, such as the number of papers, total citations, and h-index (Harzing, 2016). In conclusion, PoP can make searching easier and help focus searches. The title words, namely Japanese pronouns, are browsed for 30 years, from 1994 to 2024, using PoP. Furthermore, 180 articles with a total of 2600 citations were obtained.

The data from the 180 studies that have been compiled was compiled and cleaned later. Eliminating irrelevant research is how this method works. One of the eliminated criteria for research is as follows: 1) research whose study substance is far from the relevance of Japanese pronunciation studies; 2) the same research (usually published by different publishers or republished via different sites). Data was deleted, leaving only 175 studies with 2580 citations. Next, the data is exported in .ris format, and VOSviewers is used to process it. The flow chart provides further insight.

An analysis was carried out of 175 studies discussing Japanese pronouns by looking for similarities or repetitions of terms (words or phrases) that emerged from the research. VOSviewer is used up to 5-word repetitions to determine the field of study. Of the 718 words or phrases that appeared, there were 29 words or phrases that were considered related or interconnected, and a minimum of five repetitions were found. Of the 29 words or phrases, 28 were manually selected to be related to Japanese pronominals.

4.2 Discussion

After selecting relevant words/phrases, 28 topics were identified and grouped into 6 clusters across 175 studies from a total of 180 research samples, as shown in Table 1. These topics serve as the focus for analyzing Japanese Pronouns research. The relationships between clusters and topics are illustrated using network visualization in Figure 1.

Table 1. Distribution of Topics Across 6 Clusters

No.	Cluster 1 (8 items)	Cluster 2 (6 items)	Cluster 3 (6 items)	Cluster 4 (4 items)	Cluster 5 (3 items)	Cluster 6 (1 item)
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1	acquisition	difference	first person pronoun	analysis	antecedent	comparison
2	english	distribution	japanese first person pronoun	paper	japanese zero pronoun	
3	english pronoun	indeterminate pronoun	japanese language	pronoun	person	
4	interpretation	japanese	japanese personal pronoun	zero pronoun		
5	japanese learner	japanese pronoun	third person pronoun			
6	japanese	personal pronoun	use			
7	overt pronoun					
8	preliminary study					

4.2.1 Network Vizualisation

Network visualization can be used to see patterns of relationships between clusters and topics, as shown in figure 1. Figure 1. containing the items we will study further. Items, also called nodes or knots, are the subject of research (N. J. Van Eck & Waltman, 2019). Mesh lines connect two or more vertices to each other, showing the connection or relationships between them. The conditions or events described in the title and abstract of the article are the nodes that have this mesh line. Numbers determine how strong this pattern of relationships is; the higher the number, the stronger the pattern.

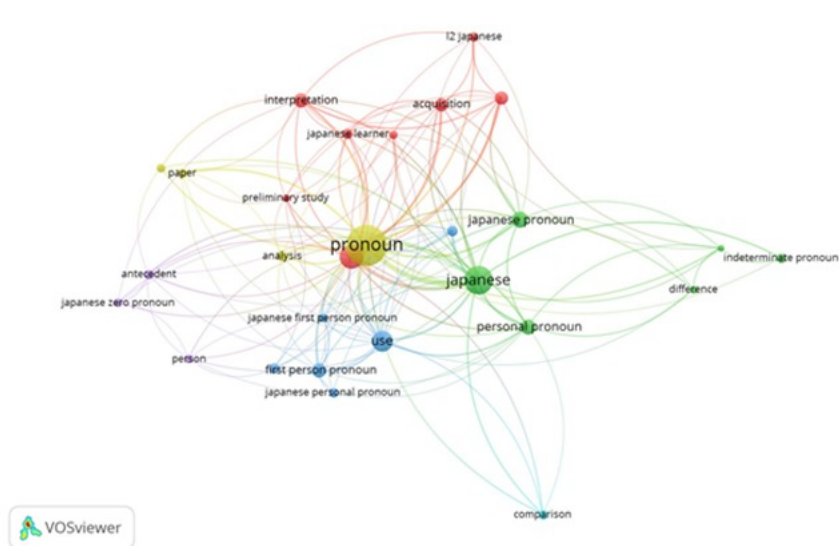


Figure 1. Network Visualization

Figure 1 shows that the 28 nodes are divided into 6 clusters with 175 links. Network visualization consists of a Google Scholar search using Publish or Perish for the keyword "Japanese pronouns." The keywords listed in the title and abstract of this research article form a graph consisting of various clusters, each represented by a specific color. Therefore, the colours in the visualization indicate the number of clusters in the network, and topics or nodes with the same colour indicate that they are in the same cluster. Cluster 1 is red, cluster 2 is green, cluster 3 is dark blue, cluster 4 is yellow, cluster 5 is purple, and cluster 6 is light blue, each with a research focus or research topic, as depicted in Figure 8. Figure 9 shows that cluster 1 (red) has the most studied research topics, so it connects more with research topics in other

clusters. However, cluster 6, in light blue, has the fewest connections to other topics; for example, the topic "comparison".

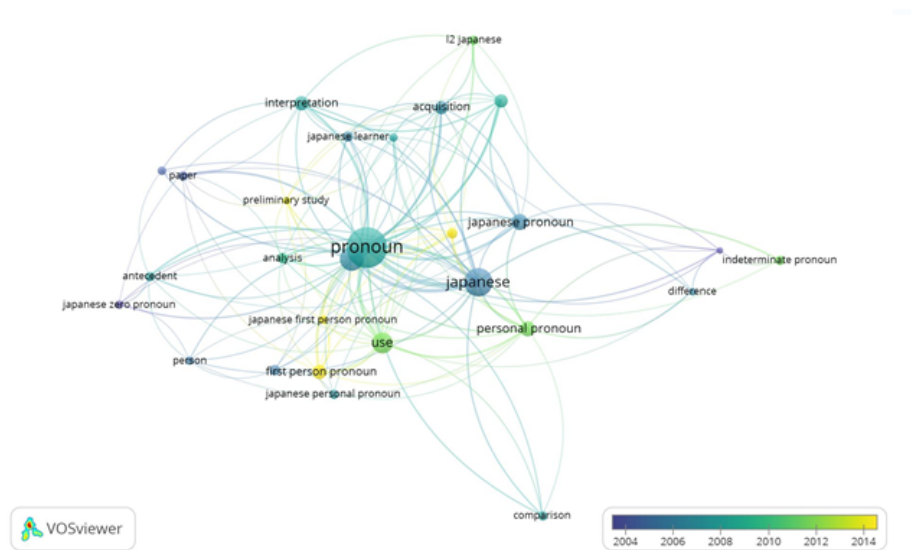


Figure 2. Overlay Visualization

Figure 2 shows the level of novelty of research on Japanese pronouns. This analysis shows when (year) and how intensively the research was carried out. Based on Figure 2, the 2004-2014 period was the peak period for research, especially on relevant topics. Dark blue indicates the period 2004 and earlier, dark green for 2008, light green for 2010, and yellow for 2014. The lighter nodes and lines in Figure 10 indicate more recent research.

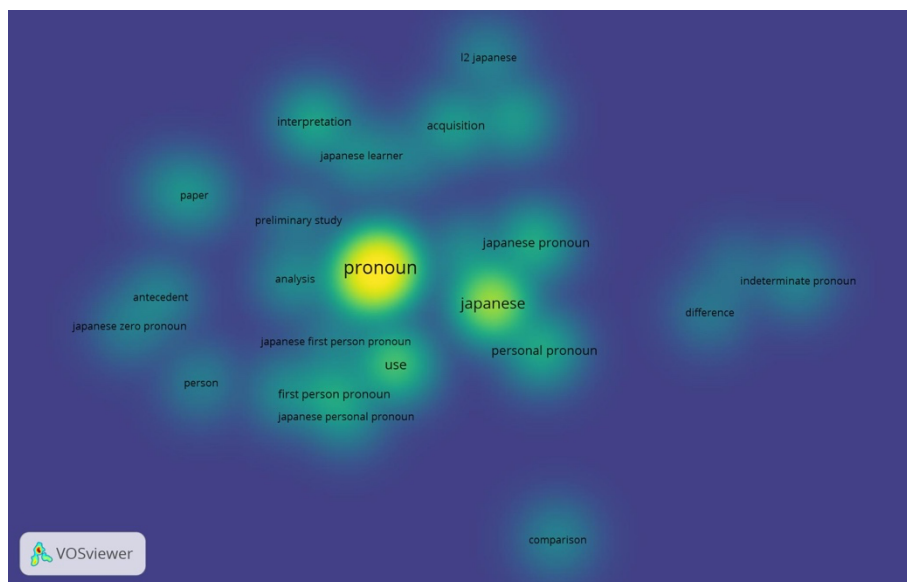


Figure 3. Density Visualization

The figure of density visualization shows research saturation related to Japanese pronouns, which can be seen through density visualization, where topics with lighter or red colours indicate that they have been widely researched and have reached the saturation phase. Topics with vibrant colors or none at all suggest that research is still uncommon and may be further investigated. This graphic highlights key subjects for more study and aids in understanding trends in the evolution of research. Based on Figure 3,

several interesting topics that are rarely researched, such as "comparison" indeterminate pronouns", "Japanese zero pronoun", and "acquisition", can be the focus of further research.

5. CONCLUSIONS

Network visualization was used in this study to investigate the connections between research subjects and clusters. Six clusters with differing degrees of topical connectivity were formed from the examination of the study's 28 nodes. Research on Japanese pronouns peaked between 2004 and 2014, with the most recent studies concentrating on particular subjects. The density visualization also revealed that subjects with higher saturation, shown by red hues, have been thoroughly researched, whilst subjects with lighter hues indicate regions that have received less attention and may benefit from more outstanding studies. Notably, subjects including "acquisition," "comparison of indeterminate pronouns," and "Japanese zero pronoun" were found to be understudied and in need of more investigation.

Future research should focus on topics that have not received enough attention, particularly those highlighted in the density visualization, such as "acquisition," "comparison of indeterminate pronouns," and "Japanese zero pronouns." These fields provide opportunities for further in-depth research and have the potential to add to the corpus of knowledge on the subject. Future research may also focus on strengthening connections between clusters with fewer interconnections, such as Cluster 6, to expand the study's scope and encourage more interdisciplinary concepts.

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