Micro and Macro Approaches in Linguistics for Method Development

Umul Khasanah[1] ,
[1]Universitas 17 Agustus 1945 Surabaya, Indonesia

ABSTRACT

Background. Micro and macro approaches in linguistics have long been two methods used separately in language research. The micro approach focuses on the technical structure of the language, such as grammar, phonology, and syntax, while the macro approach examines how language is used in a broader social context. However, the separation of these two approaches often creates a gap in understanding the overall use of language.

Purpose. This research aims to develop a method that integrates micro and macro approaches in linguistic studies, especially in Japanese.

Method. The research method used was mixed, in which quantitative data was collected through a questionnaire from 52 native Japanese speaking respondents, and qualitative data was obtained through in-depth interviews with 10 participants. This study examines how Japanese speakers use language structures in various social contexts, both formal and informal.

Results. The results showed that an understanding of the technical structure of language helps speakers in formal situations, such as in the workplace, while social adaptation is necessary in more relaxed situations, such as social media. The integration between micro and macro approaches provides a more comprehensive understanding of how language is used in everyday life.

Conclusion. In conclusion, a method that combines these two approaches is essential to get a more complete picture of the dynamics of language use.

KEYWORDS

Macrolinguistics, Microlinguistics, Research Methods

INTRODUCTION

Micro and macro approaches in linguistics have long been the subject of discussion and research in various linguistic disciplines (Riandi & Nupus, 2022). The micro approach generally focuses on small details such as phonology, morphology, and syntax. These aspects involve the analysis of language structure at a smaller level, even down to the smallest unit of language. In contrast, the macro approach includes broader studies such as sociolinguistics, pragmatics, and discourse analysis, which look at how language is used in a larger social context. These two approaches are an important foundation in understanding and developing research methods in linguistics (Malkin, 2022)

Linguists realize that each approach has its own advantages and limitations (Hung, 2019). The micro approach allows researchers to dig deeper into the deeper details of the more technical aspects of the language. Phonological and syntactic studies, for example, provide a clearer understanding of the internal structure of language and how small elements work in the language system as a whole. This approach also makes a significant contribution to formal linguistic theory (Orcasitas-Vicandi, 2022).

Meanwhile, the macro approach highlights how language is influenced by social, cultural, and political factors (Juybari, 2020). Language is inseparable from the context in which it is used, so a macro approach is crucial in understanding the dynamics of language use in society. Research in sociolinguistics and discourse analysis allows researchers to look at the role of language in social interaction and how language change reflects social change (Fadhila, 2016).

The incorporation of micro and macro approaches in the development of linguistic research methods is very important. This combination not only provides a comprehensive understanding of the language, but also opens up new opportunities in the development of linguistic theories and applications. Some researchers even argue that the role of linguistics in the future lies in the ability to integrate these two approaches more effectively (Berman, 2022; Rezapour, 2021).

Understanding of micro and macro approaches has had a significant impact in areas such as education, translation, and language policy (Vocroix, 2021). In the context of education, for example, the micro approach helps in the teaching of more appropriate grammar, while the macro approach helps in understanding cultural and linguistic differences between individuals. This also has an impact on language policies that are more inclusive and responsive to the needs of the community (Liddicoat, 2020).

In the development of linguistic research methods, researchers are constantly looking for ways to harmonize micro and macro approaches in order to produce more accurate and relevant findings. The main challenge faced is how to balance the focus of technical details with an understanding of the broader social context. However, with the advancement of technology and increasingly sophisticated analytical methods, the integration of these two approaches is increasingly possible and is expected to make a greater contribution to the study of linguistics (Bürki, 2020).

The micro and macro approaches in linguistics, although they have provided a great deal of understanding of aspects of language, still leave some gaps that have not been explored in depth. One fundamental question that often arises is how to integrate the two approaches in one complete and cohesive research method (Kalina & Bagińska, 2023). The separation between more technical micro and more social macro approaches often creates gaps in holistic understanding of language. The lack of research that combines these two approaches is one of the major challenges in the development of linguistic methods.

There has not been much research that examines in detail how microelements, such as phonological or morphological structures, interact with broader social dynamics in a macro approach. Despite efforts to bridge this gap, such as in sociolinguistic or pragmatic studies, the relationship between the technical language component and the social context is often still not explained in sufficient detail. There is room for methodological development that is more capable of exploring the interaction between micro and macro elements in everyday use.

The lack of research that utilizes a combination of micro and macro approaches also results in limited application of linguistic research results in various practical contexts. For example, in the field of language education, there is often a separation between teaching grammar (micro) and teaching the use of language in a social context (macro). More research is needed to find ways to

best integrate these two approaches, so that they can have a greater impact on language teaching and policy.

Another uncertainty lies in the best method to bring together micro and macro data in linguistic research. Modern technologies, such as natural language processing and big data analytics, are opening up new possibilities, but there are still gaps in the methods by which data can be processed from these two very different approaches. The development of more integrative methods is still an urgent challenge in today's linguistic research (Palfreyman, 2020; Sharifi, 2020).

Filling the gap between micro and macro approaches in linguistics is an urgent need, given that language as a complex phenomenon cannot be fully understood through just one point of view. Research that focuses only on the structure of language without considering the social context will result in partial understanding. On the other hand, research that prioritizes social factors too much without understanding the technical aspects of language can also lose accuracy in analysis. The merger of these two approaches will enrich the results of the research and provide a more comprehensive picture of how language works and is used.

The application of this integrated approach will not only deepen our knowledge of language, but also increase the relevance of linguistic research in real life. For example, in language education, an approach that combines technical teaching (grammar and syntax) with an understanding of the social context of language use will result in students who are more skilled and able to communicate effectively in a variety of situations. This shows that efforts to bridge this gap have significant practical value, not only in academia, but also in various sectors of society.

The integration between micro and macro approaches can also expand the application of linguistics in other fields such as language technology and big data analysis. Research that is able to combine technical aspects of language with social context analysis can play a role in the development of more sophisticated artificial intelligence systems, such as machine translators and virtual assistants. This provides a strong justification that filling this gap is not only theoretically important, but also has a far-reaching impact on technological development and societal progress.

RESEARCH METHODOLOGY

The design of this study uses a mixed approach that combines quantitative and qualitative methods to analyze the Japanese language through micro and macro perspectives (Mustafa et al., 2022). On the micro aspect, this research will examine the structure of the Japanese language, including phonology, morphology, and syntax. On the macro aspect, this study will examine how the Japanese language is used in social and cultural contexts, especially in interactions between individuals and in mass communication media (Priadana & Sunarsi, 2021). This approach is designed to understand the Japanese language thoroughly, both in terms of its structure and in terms of its use in society.

The study population includes native Japanese speakers in urban areas of Japan who actively interact in various social contexts, such as education, business, and media. The sample will be taken purposively from Japanese language learners, office workers, and social media users in Japan. The total expected sample is 52 respondents for quantitative data and 10 participants for in-depth interviews as part of the qualitative data. The selection of this sample is expected to represent variations in the use of the Japanese language in various social strata (Chen, 2020; Ewing, 2020b).

The instruments used in this study consist of a structured questionnaire for quantitative data collection and a semi-structured interview guide for qualitative data collection. The questionnaire will include questions about the use of Japanese in everyday life, understanding of the structure of the language, and perception of social variations in the language. In-depth interviews will be

conducted to dig deeper into users' perceptions of the influence of culture and social context on the Japanese language they use (England, 2022; Ewing, 2020a).

The research procedure begins with the collection of quantitative data through the distribution of questionnaires to selected respondents. Afterwards, in-depth interviews will be conducted with participants selected based on their involvement in the use of Japanese in various social situations. The collected data will be analyzed in stages, with quantitative analysis carried out through descriptive statistics and qualitative analysis using a discourse analysis approach (Chen, 2022; Egorov, 2021).

RESULT AND DISCUSSION

This study collected quantitative data from 52 native Japanese speaker respondents who interacted in various social contexts. The data shows that 80% of respondents use Japanese in a formal context at work, while 60% are also actively communicating in Japanese on social media. In terms of language use, 70% of respondents reported a deep understanding of the syntactic structure of the Japanese language, while 50% acknowledged that there were variations in the language used depending on the social context. This data was measured using a Likert scale of 1 to 5 which measures the level of comprehension and use of language.

Context	Frequency (%)
Workplace	80%
Social Media	60%
Family Interaction	40%
Educational Institutions	70%

Tabel 1. Frekuensi Penggunaan Bahasa Jepang dalam Berbagai Konteks

This data also includes an analysis of social factors such as the age and educational background of the respondents. Respondents with higher education are more likely to have a better understanding of micro-aspects of the Japanese language, such as morphology and phonology. In contrast, those who are active in broad social interactions, such as social media, show a better understanding of the macro context of language.

The results of the statistical data show that there is a relationship between the level of education and the ability to understand the technical aspects of the Japanese language. Speakers with higher education backgrounds tend to focus more on microelements, such as more complex grammatical structures. These data highlight that formal education plays an important role in the formation of linguistic competence. A deep understanding of the structure of language allows individuals to master grammar better, which further affects how they communicate in formal situations.

In the context of language use on social media, the data showed that respondents used less formal language variations more often, reflecting flexibility in the application of the Japanese language. This variation has to do with social and cultural influences, where language tends to be adapted to the audience or situation. This reinforces the importance of a macro approach in language use analysis, which pays attention to the influence of social factors on individual linguistic choices (Kharisma et al., 2023).

Understanding the difference between language use in the workplace and social media confirms that context plays an important role in language choice. Although most respondents have a

good understanding of language structures, their practical use varies depending on the audience and situation. This variation shows the dynamics of the use of the Japanese language in modern society.

In this section, the study examined qualitative results from in-depth interviews with 20 participants. This interview revealed that social context greatly influences the way the Japanese language is used. Most participants reported that they spoke a variety of different languages depending on who they spoke. In formal interactions, they tend to use more standard language, while in informal contexts such as conversations with friends, they more often use relaxed and slang-filled language.

Some participants also highlighted the difference in the language used in the world of work compared to daily social interactions. In the workplace, the use of language is more formal and structured, while on social media, they feel more free to experiment with language variations. This shows that there is a significant influence of social norms on the use of language in various situations.

This description of the data shows that the Japanese language is not static and can be adjusted according to the social context. Participants acknowledged that an understanding of the micro-aspects of language, such as grammar and phonology, helped them in maintaining the formality of communication in the workplace. However, on the other hand, they feel more comfortable using less formal language in social situations.

Data from interviews show that social context affects not only word choice and language style, but also the way language is cognitively processed by speakers. Participants stated that they often had to "switch codes" or adjust their language style depending on who the interlocutor was. This phenomenon shows how important the macro approach is in understanding linguistic dynamics, since language not only serves as a means of communication, but also as a reflection of social norms and values.

The choice of more formal language at work and more relaxed on social media reflects complex linguistic adaptations. This process involves an in-depth understanding of grammar (micro-aspects), but it also requires sensitivity to social contexts (macro-aspects). Effective use of language in a variety of situations suggests that speakers must understand not only the structure of language, but also the social factors that influence communication.

The difference between the use of formal and informal language also highlights the importance of micro and macro approaches in linguistic research. This research confirms that understanding the structure of language alone is not enough to understand how language is used in everyday life. Researchers need to take into account the social and cultural influences that influence individual language choices (Arianto & Fadly, 2020).

The quantitative and qualitative data obtained show that there is a close relationship between formal education and the use of the Japanese language in different social contexts. Speakers with higher education tend to have a better understanding of language microelements, such as grammar and syntax, while those who interact more frequently on social media show a better understanding of macro elements, such as language variations in social contexts. This relationship shows that both approaches, micro and macro, complement each other in understanding the use of language as a whole.

The study also shows that speakers with higher education backgrounds are more likely to use formal language in a professional context. Conversely, those who are more active on social media tend to be more flexible in using less formal language variations. This relationship between education and social context strengthens the importance of micro and macro approaches in linguistic research.

These results indicate that a comprehensive understanding of language cannot be achieved by focusing on just one approach. Researchers need to combine the analysis of the technical structure of language with the analysis of the social influences that shape language use. The integration between micro and macro approaches is key to understanding how language is used in modern society.

A case study was conducted on three participants working in a multinational corporate environment in Japan. These three participants reported that they often use formal Japanese in their interactions with bosses and colleagues, but are more relaxed in communication with peers outside of the work environment. Participants also stated that although they understood formal grammar, they often felt more comfortable using more casual language in non-formal situations.

One participant emphasized the importance of adapting language styles to cultural and social contexts. He often has to balance the formality of language in the workplace with freedom of language on social media. This shows that there is a continuous linguistic adaptation based on the situation and social environment.

Other participants revealed that the use of formal language in the workplace sometimes limits their personal expression. They feel that while grammar helps maintain clarity of communication, social context often influences how messages are delivered. In this case, the micro approach in language needs to be complemented by a macro understanding of social norms.

Data from this case study shows that Japanese speakers, especially in work environments, often have to navigate between two different language styles. Formal language styles are used to maintain ethics and hierarchy in a professional environment, while casual language is more commonly used in social interactions outside of work. This phenomenon shows the importance of micro and macro approaches in understanding how language is used in various social contexts.

The choice of language used by the participants reflects linguistic adaptation to different social situations. Although formal grammar provides a clear communication structure, adaptation to social norms remains an important factor in successful communication. The study emphasizes that language is not just a collection of grammatical rules, but also a tool that reflects social interaction.

The relationship between quantitative and qualitative outcomes shows that micro and macro approaches in linguistics complement each other. The use of formal language in the workplace and more casual variations of language outside of the professional environment show how Japanese speakers must understand both the structure of the language (micro) and the social (macro) context. The integration of these two approaches is crucial to get a more comprehensive picture of how language is used in everyday life.

The data from this case study underscores that a deep understanding of language structure is insufficient if it is not accompanied by an understanding of the social context. Speakers must be able to adapt their language style based on the situation, demonstrating the importance of a holistic approach to linguistic research.

This research shows that micro and macro approaches in linguistics have an important role in understanding the use of the Japanese language in various social contexts. Quantitative results show that there is a strong relationship between education level and understanding of language structure (micro), as well as flexibility in using language in social (macro) contexts (Andi Irma, 2023). Qualitative data from the interviews also supported these findings, where participants described how they adjusted their language style based on the audience and situation. This study confirms that these two approaches cannot be separated in a comprehensive linguistic study.

The separation between formal and informal language use is particularly evident in the context of the workplace and social media. Participants tended to use a more standard language in a

professional setting, while more casual variations of language were used in informal communication. The data also show that a deep understanding of language structure helps in maintaining the formality of communication, while social adaptation is important in more relaxed situations. The overall results show a balance between technical and social aspects in the use of language.

The study also found that Japanese speakers who were more active in social interactions on social media showed higher levels of linguistic flexibility. They are more likely to adapt the language to their audience, both in the use of slang and informal language variations. These results emphasize the importance of a macro approach in understanding the dynamics of language use in modern society, especially in the digital context.

Another key finding is that speakers with higher education backgrounds tend to have a better understanding of the technical aspects of the Japanese language, but they also retain adaptation to the social context in their daily use of language. This shows that formal education provides a strong foundation in grammar, but understanding the social context remains crucial in effective communication.

The results of this study are in line with previous research which shows the importance of micro approaches in understanding language structure in detail. Research conducted by Sugiyama (2019) also confirmed that speakers with higher education backgrounds better understand language structures such as grammar and phonology. However, the study goes a step further by incorporating a macro approach, suggesting that an understanding of the social use of language is also important, which is not so emphasized in Sugiyama's research.

The main difference with other studies lies in the focus of integration between micro and macro approaches. Most previous studies have tended to separate these two approaches, with microstudies focusing more on technical and macro aspects of social factors. This study succeeded in bridging the gap by showing that these two approaches complement each other and cannot stand alone in understanding the complexity of language use.

Some sociolinguistic research, such as the work of Tanaka (2017), focuses more on macro approaches and social factors that affect the use of language. However, this study shows that although social factors are important, understanding the structure of language remains a solid foundation in the proper use of language. This highlights the need to harmonize micro and macro approaches in a more holistic study of linguistics.

These findings also enrich pragmatic studies, which often examine how language is used in social interactions without focusing too much on technical structures. This research adds a technical dimension to the micro approach, providing a more comprehensive understanding of how technical and social elements interact with each other in the use of the Japanese language.

The results of this study are a sign that language is not only a formally learned communication tool, but also a product of dynamic social interaction. A deep understanding of the structure of language provides a strong framework for speakers to master the language technically, but adaptability to social contexts is key to effective communication. This study highlights the importance of integration between technical and social aspects in linguistic research.

The phenomenon of linguistic adaptation found in this study shows that the Japanese language is constantly evolving, especially in the context of social media. Japanese speakers are actively adapting their language styles according to the situation, showing that language is a flexible and responsive entity to social changes. This is a sign that language cannot be understood only from a formalistic point of view, but rather as a reflection of evolving social norms.

Findings on the role of formal education in mastering the technical aspects of language indicate that education remains an important element in shaping linguistic competence. However, this research also indicates that formal education must be balanced with an understanding of the social context and pragmatic in the use of language. This is a signal for the education system to adapt the language curriculum by considering micro and macro approaches simultaneously.

This study is also a sign that the integration between micro and macro approaches can open up new avenues in the development of linguistic research methods. Research that focuses too much on just one aspect, whether technical or social, will lose the complexity and true dynamics of language use. This indicates the need for a more holistic approach in linguistic research in the future.

The implication of the results of this study is the need for a change in the approach to language education, especially in the context of teaching foreign languages such as Japanese. A language curriculum that focuses too much on grammar and formal structure will miss important aspects of using the language in real life. Language education should consider how language is used in a social context, so that students can be more flexible in applying language in a variety of situations.

This research also has implications for the development of language technology, especially in natural language processing. By understanding how the micro and macro aspects of language interact with each other, technologies such as machine translation can be better developed to handle language variations in both formal and informal contexts. This will allow for more sophisticated and accurate application of language technology in a variety of social environments.

In the context of linguistic research, these results suggest that methodologies that combine micro and macro approaches should become the new norm. Research that is too narrow in focusing on a single approach will result in partial findings and do not reflect the complexity of actual language use. These implications are also relevant in cross-cultural studies, where language is often influenced by different social and cultural contexts.

This research also opens up opportunities for further research that explores the interaction between micro and macro aspects in languages other than Japanese. This approach can be applied in sociolinguistic research across different languages and cultures to understand how language structure and social factors influence each other. This provides the basis for a broader and more diverse study of linguistics in the future.

The results of this study occur because language, as a social phenomenon, cannot be separated from its technical structure. An understanding of grammar and morphology provides a solid foundation for language speakers, but adaptability to social contexts is what allows for more effective communication. Japanese, like many other languages, requires a balance between technical understanding and social awareness in order to be used appropriately in a variety of situations.

The linguistic flexibility found in this study is mainly due to the influence of technology and social media. Social media creates a space where language speakers can experiment with different language variations, thus reinforcing the role of macro approaches in language use analysis. Social media also allows speakers to engage in various forms of social interaction that require rapid and effective linguistic adaptation.

Formal education plays an important role in shaping linguistic competence, but it does not fully cover the pragmatic aspects of everyday language use. This explains why even though Japanese speakers with higher education backgrounds have a good understanding of the structure of

the language, they still have to adapt their language to the social context. The influence of social and cultural norms is very strong in determining the choice of language used in certain interactions.

The use of different languages in formal and informal contexts is due to established social norms. In the workplace, for example, the use of formal language is considered part of professional etiquette, while in informal social interactions, more casual variations of language are more acceptable. This shows that the use of language is greatly influenced by the expectations and social rules that apply in each context.

The next step is to integrate these findings into language education, especially in the teaching of foreign languages. The language curriculum should reflect the importance of both approaches, micro and macro, to provide a comprehensive understanding of how language is used in different social contexts. Students need to be trained not only in the technical aspects of the language, but also in pragmatic awareness to deal with dynamic communication situations.

Future linguistic research should focus more on incorporating micro and macro approaches in the study of other languages. Languages with different social contexts can provide additional insights into how these two approaches interact with each other. This cross-cultural study will open up new possibilities in the understanding of language as a complex and varied social phenomenon.

Language technology could also benefit from these findings. By understanding how language is used in different social contexts, the development of technologies such as natural language processing and virtual assistants can be improved. The application of this technology needs to be more sensitive to formal and informal language variations and be able to adapt to various communication situations.

Further research is also needed to explore how social changes, such as globalization and digitalization, affect the dynamics of language use. The influence of globalization on the use of the Japanese language, for example, can be an interesting focus of research, especially in relation to linguistic adaptations in intercultural interactions.

CONCLUSION

The study found that the integration of micro and macro approaches in linguistics provides a more holistic understanding of the use of the Japanese language in various social contexts. This approach not only helps uncover how the technical structure of language works, but also how language is adapted based on different social situations, especially in formal and informal contexts. The main contribution of this study is the incorporation of the two approaches in linguistic research methods, which previously tended to be separated. The limitations of this study lie in the limited sample of Japanese speakers in certain environments, so further research needs to expand its scope to a wider range of social and cultural groups to ensure a broader generalization of the results.

AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

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