

Mapping of the Betawi Language in Balekambang Subdistrict Based on Geographic Information System: A Sociogeolinguistic Study

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Abstract

Geolinguistics is a multidisciplinary field that integrates linguistics, geography, and technology to examine language variation and distribution. In Indonesia, geolinguistic studies remain limited, whereas in Malaysia this approach has developed into a major trend in macrolinguistic research and has inspired similar studies in Indonesia. However, previous research has not sufficiently connected geolinguistic findings with efforts to revitalize regional languages through a sociogeolinguistic perspective supported by Geographic Information System (GIS) analysis. This study aims to map phonological and lexical variants of the Betawi language in Balekambang Subdistrict by focusing on sociogeolinguistic factors to support language preservation. Employing a qualitative approach, field data were collected through interviews with 82 native Betawi speakers across three neighborhood units (RW) and twenty-six sub-neighborhoods (RT). The analysis concentrates on phonological and lexical variations of two nouns, /bapak/ and /ibu/, as representative forms of the Central Betawi Malay dialect. Variant distributions were mapped using GIS based on interview data collected with Swadesh instruments from adult and elderly speakers. The findings reveal three to four phonological and lexical variants influenced by Central, Peripheral Betawi, and Arabic elements. The results indicate a dialectal shift in Balekambang, particularly in areas with strong Arab-descendant communities, leading to reduced numbers of native Betawi speakers. This study offers recommendations for local government policies on revitalizing the Central Betawi dialect and supports broader dialect mapping initiatives to prevent language endangerment in Jakarta.

Introduction

Previous research on geographical dialects in Indonesia and Malaysia served as the foundation for conducting sociogeolinguistic research on the Betawi Malay dialect in Jakarta. Relevant research has provided information and data on the distribution of dialects in general based on phonological and lexical differences, as well as the distribution of dialects analyzed based on their geolinguistic aspects. However, relevant research still has shortcomings because it does not analyze sociolinguistic aspects, such as language retention, positive attitudes in language, language migration, or language revitalization. In Indonesia, geolinguistic research has not yet become a concern and trend among linguistic researchers.

Meanwhile, in Malaysia, a lot of geolinguistic research has been carried out. Geolinguistic research was pioneered by Nor Hashimah Jalaluddin who conducts cross-disciplinary linguistic

research in Malaysia. Nor Hashimah Jalaluddin's research in 2017 related to geolinguistics and her subsequent studies in 2020 on migration and new landscapes, as well as in 2021 on the Along dialect in Terengganu, Malaysia, were also relevant (Nor Hashimah et al., 2017, 2021). A lot of research on geolinguistics has also been conducted by Harishon Radzi, Siti Noraini Hamzah, and Siti Nur Izzaty in 2014, 2017, 2023, and 2024. Geolinguistics combines the study of geography and linguistics, as well as utilizing Geographic Information Systems (GIS) to map and find the dialect boundaries of a language with the right phonological and lexical variants in it (Fazal & Noriati, 2017). Khairul Ashraaf et al. (2022) and Junaini et al. (2023) explain the phenomenon of dialect migration in North Perak, the distribution of North Perak dialect variations, dialect variations in Johor, the influence of the Terengganu dialect in the East Coast region of Malaysia, the distribution of the Siamese Malay dialect in Thailand, the change in the dialect of Lower Pahang after 50 years and the association of emotional words with the geographical environment on Langkawi Island. Not much different, Siti Nur Izzaty et al. (2024) also highlighted GIS software in explaining language phenomena, especially the phenomenon of dialect preservation and migration in Baling, Kedah and discussed geographical factors and other factors as non-linguistic factors that affect this phenomenon (Siti Nur Izzaty et al., 2024). One of the dialects that will be studied in this collaborative research between Indonesia and Malaysia is the Betawi Malay dialect as part of the Betawi language in the East Jakarta area. Betawi has a long history. The initial discussion of the meeting of various tribes in the land of Jakarta and the history of the Betawi Malay dialect is an interesting research topic to study. The development of the Betawi language is studied by Muhajir (2000) in his book entitled *Betawi Language: History and Development*. Muhajir stated that one of the characteristics of the Betawi Malay dialect is the appearance of an allophone [e] at the end of a word that has an allophone. Not all [a] allophones turn into [e] in the Betawi dialect. The Betawi Malay dialect is regionally and geographically divided into two parts, namely the Betawi Kota or Central Betawi subdialect and the Betawi Pinggiran or Betawi Ora subdialect. The subdialect of Betawi is spoken /rumah, saya, apa/ → [rume], [saye], [ape]. Meanwhile, /rumah, sayah, apah/ for Peripheral Betawi (Muhajir, 2000). The original Jakartans call themselves Betawi or Betawi Malays or Selam people (only after independence was achieved, their names were better known as Jakartans). The language used is called Malay or Betawi Malay (also only after independence, the name is better known as Jakarta). The language spoken on the outskirts of Jakarta, in the area bordering Sundanese, is called Betawi Ora (Siti Jubaedah, 2020). The diversity of the Betawi Malay dialect is an interesting topic to study, especially to the extent to which the mapping of the Betawi Malay dialect is still in accordance with the current conditions of the Betawi community. This research is very important considering the migration of people from outside Jakarta along with language migration. The migrants continue to settle and the distribution in remote areas of Jakarta will certainly threaten the preservation of the Betawi language. Speakers of the Central Betawi Malay dialect and the suburbs will gradually become extinct if they are not accompanied by a positive attitude towards the Betawi language and culture itself. Moreover, the number of migrants from outside Jakarta every year reaches more than 200 thousand residents, which was recorded in 2017-2022 (Gamma, 2023). Nationally, migration trends also show a high level of population mobility between provinces. Regarding inter-provincial lifetime migration in 2023, the five provinces with the highest percentage of migrants were Kepulauan Riau (40.6 percent), DKI Jakarta (30.8 percent), East Kalimantan (30.2 percent), North Kalimantan (29.9 percent), and West Papua (26.3 percent) (Central Bureau of Statistics, 2024). This data reinforces the view that Jakarta continues to be one of the main destinations for migrants, which in turn intensifies sociolinguistic changes affecting the Betawi language. Therefore, a study is needed that can provide solutions related to social and geographical problems in the Betawi speaking area in Jakarta from a socio-geolinguistic perspective.

Previous research has not comprehensively analyzed dialects from phonological and lexical aspects using GIS technology, nor has it consistently led to efforts for language preservation and revitalization; furthermore, none of the studies have resulted in policies for local governments to maintain extinct local wisdom, as exemplified by the revocation of Betawi cultural heritage in Condet. As is known, the Condet area of East Jakarta was once made a cultural heritage area through the Decree of Governor Ali Sadikin No. D. IV-1511/e/3/74 dated April 30, 1974. The

designation of Condet as a cultural heritage area at that time was so that cultural assets for agricultural and plantation cultivation practices that at that time still existed quite a bit by the local community, which was thick with the typical culture of the Betawi people, could be maintained and preserved. Even more special, the location of Condet on the banks of the flowing Ciliwung River has been found to have archaeological objects, such as perimbas axes and various tools commonly used by ancient humans. The findings are estimated to belong to residential communities living on the banks of the Ciliwung rivers and they are suspected to be the ancestors of the Betawi people. Currently, the condition of Condet no longer reflects that of a Betawi village because the community is increasingly pluralistic and the buildings are chaotic (Jakarta Media Analyst, 2024). Condet has undergone modernization and is inhabited by many other ethnicities, so the authenticity of Betawi culture has begun to fade. Don't let the Betawi language in Condet fade and gradually become extinct.

Therefore, an initial study is needed that can obtain information on the map of the distribution of the Betawi language, especially the Central Betawi Malay dialect used by the residents of Condet in Balekambang Subdistrict. The results of the geolinguistic analysis were then associated with sociolinguistics regarding efforts to defend the Betawi language, especially the Central Betawi Malay dialect in Condet, East Jakarta, Indonesia, as a sociogeolinguistic study based on GIS. The preservation of the Betawi language in Jakarta is a necessity to avoid its extinction in its own home due to rapid urban migration from various regions. This research also contributes to efforts to produce policies for the Special Region Government of DKI Jakarta to maintain local wisdom.

Method

This qualitative research uses field data with interview techniques as the main data source. Three stages: data collection, processing, and analysis. This research was conducted in Condet, Balekambang Subdistrict, East Jakarta. Balekambang Subdistrict has a population of 32 thousand people and an area of 1.65 km². Balekambang borders Batu Ampar. A total of 3 RW and 26 RT are located in Condet, Balekambang Subdistrict, East Jakarta (Balekambang Subdistrict, 2025; Ministry of Health, 2009) was selected as the study area with 82 respondents. The details of the number of respondents for each RT are two to three people. This coincides with the opinion of Creswell (2013), which is a phenomenological study involving subjects in the range of three to ten people.

Respondents were not limited to a specific gender and regardless of any educational background, but the age factor was a key requirement for respondent selection as the study focused on the phenomenon of dialect retention and switching. Therefore, respondents who were over 18 years old (adult age) and those who were 56 years old and above (elderly) were chosen to represent two different generations. Age categorization was carried out based on Saparinah, the Ministry of Health of the Republic of Indonesia, and the World Health Organization (WHO) (Saparinah, 1983; Ministry of Health, 2009). This study uses Morris Swadesh (Swadesh list) which focuses on 2 nouns (/ibu/ and /bapak/) that will be spoken by the residents of Balekambang in Betawi when interviewing native Betawi speakers. This research also collects data through reading literature or written sources relevant to the research topic, which are sourced from books, journals, papers, articles, and reports related to sociogeolinguistic research.

Data collection was conducted by three research teams across three neighborhood units (RW01, RW04, and RW05) in Balekambang Subdistrict. The fieldwork took place from June to July 2025, between 08.00 and 16.00 WIB, and was carried out directly at the residences of community members. Each team was accompanied by the respective Head of RT to identify and document the number of Betawi speakers in each RT while facilitating household visits. Within each team, roles were clearly divided: one member was responsible for conducting interviews and taking field notes, while another handled audio recording and photographic documentation. Following the completion of data collection, all recordings were transcribed, and the interview results were carefully verified against the audio data to ensure accuracy. The Betawi dialect data were then transcribed using phonetic notation. Subsequently, the lexical data were classified according to the phonological and lexical variants of the Betawi Malay dialect. Finally, the distribution of lexical

usage of /ibu/ and /bapak/ in Balekambang Subdistrict was visualized through choropleth and isogloss maps generated using Geographic Information System (GIS) technology.

In interviewing, the research team asked about demographic aspects consisting of the respondents' background, location of the research area, geographical environment, economic sector, as well as the lexical sounds of nouns (/ibu/ and /bapak/) in Betawi based on Morish Swadesh vocabulary.

Results and Discussion

According to Haifa Nazwa Mar Hassan (2019), each district has different dialect variants from one region to another. This can be attributed to Norazila (1986) in Rusidah Abdul Wahab (2010), who explains that a language or dialect is different from another language or dialect as a result of different environmental influences. According to him, this difference can be seen through the phonological and lexical systems. Therefore, phonological and lexical variants are forms of language that have small differences that can be detected through sounds, the use of certain words, meanings and the like like other forms of language in the same language system.

As a result of an interview with the Balekambang Subdistrict Head, information was obtained that of the 5 Rukun Warga (RW) in Balekambang Subdistrict, there are only 3 RWs who have native Betawi speakers because the settlements of Betawi residents have changed ownership to immigrants from various regions outside Jakarta, including most of the residents of Arab descent. Therefore, this study then focused on data collection on only 3 RWs, namely RW 01, RW 04, and RW 05 which still have native Betawi speakers. Data was collected through interview techniques and recording of the population of Betawi Condet in adults (18-55 years) and old age (56 and above).

The following is an example of a word list instrument and interview fillings with Morish Swadesh vocabulary collected from respondents who speak the Betawi Malay dialect in Balekambang Subdistrict in the nouns categories.

Data RW 004 Balekambang Subdistrict: RT001/RW004

Word List Instrument

Nama Enumerator : Ratri Anindita and M. Syamsul Maarif
Date : 1 July 2025
Start time : 13.00 WIB
End time : 13.30 WIB

Respondent Background

1. Name : Hikmah
2. Gender : Female
3. Age : 37 Years
 a. Adults : 18-55 years old
 b. Category : 56 years and above
4. Place of birth : Jakarta
5. Mother's ancestry : Betawi
6. Origin of paternal lineage : Javanese
7. First language at home : Betawi
8. Education : Vocational School
9. Educational experience : SMK
10. Length of stay in the village : 36 years
11. Occupation : Merchant

Location of the Research Area

1. Province : Special Region of Jakarta
2. City : East Jakarta

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3. District : Kramat Jati
4. Village : Balekambang
5. Number of villagers : 32,000 people
6. Nearest town : Batu Ampar Village
7. Distance from nearest town/town : 8 km
8. Main type of transportation : JakLingko city transportation (Jakarta City Transportation)
9. Majority of villagers (ethnicity): Betawi
10. Geographic environment :
 - i. River/River : Ciliwung
 - ii. Range : none
 - iii. Hill : none
 - iv. Swamp : none
 - v. Main Highway : Condet Highway
11. Sector Economy
 - i. Agriculture (rice, vegetables, hamlets): none
 - ii. Plantation (rubber, palm oil, coconut) salak
 - iii. Fisheries : none
 - iv. Livestock : none
 - v. Small and Medium Industries : Sellers of grocery stores, culinary, perfumes, Umrah Hajj equipment

Lexical List

Table 1. Swadesh Basic Vocabulary (Blust Revision, 1980) and Betawi Forms

No.	Swadesh Words	Translation	Betawi Language	Phonetic
1.	<i>Mother</i>	Ibu	Emak	ə.maʔ
2.	<i>Father</i>	Bapak	Babeh	ba.bəh

Based on the above instrument, 82 respondents were identified and data was obtained that all respondents were born and raised in Condet, Balekambang Subdistrict. The data that has been collected based on the results of interviews with native Betawi speakers in Balekambang Subdistrict is then analyzed based on the phonological and lexical variants that have been successfully identified. Before the results of interviews with respondents were classified and categorized based phonological and lexical variants, this study first looked at the zoning map of Balekambang Subdistrict. On the zoning map in Figure 1, the Balekambang Subdistrict area is part of Kramatjati District, East Jakarta. Of the five RWs in Balekambang Subdistrict, the Head of the Village stated that only three RWs have native Betawi speakers, namely RW 01, RW 04, and RW 05. Of these three RWs, there are phonological and lexical variants of Morish Swadesh's vocabulary that focuses on 2 nouns (/ ibu/and /bapak/) in Betawi.

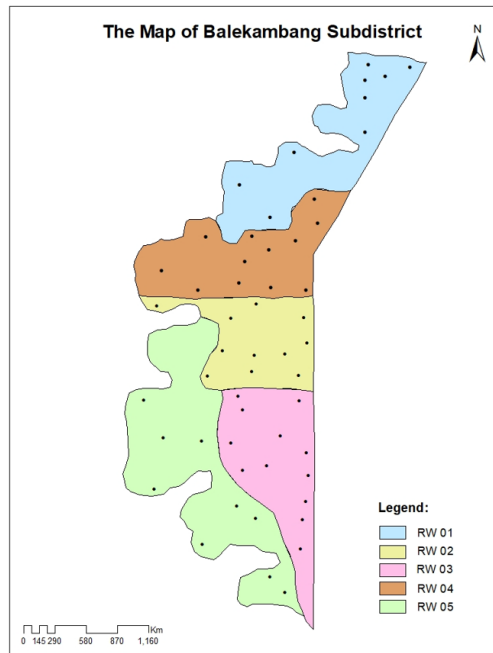


Figure 1
Map of Balekambang Subdistrict

Based on field data and analysis results, it was found that the use of GIS technology can be applied in this study by using a clear administrative boundary zoning map for all RWs in Balekambang Subdistrict. Balekambang Subdistrict is divided into 5 RWs and on the map above, it is focused on 3 RWs which are study data using the Betawi Malay dialect. The map in figure 1 is the basis for making a map of the isogloss spread and a GIS-assisted *choropleth* map. This means that isogloss and *choropleth* maps based on 2 lexicals studied spoken by 82 respondents in five RWs will produce 2 isogloss maps. The resulting one of choropleth map is a map compiled based on the collection of field data in this study in Balekambang Subdistrict, as below.

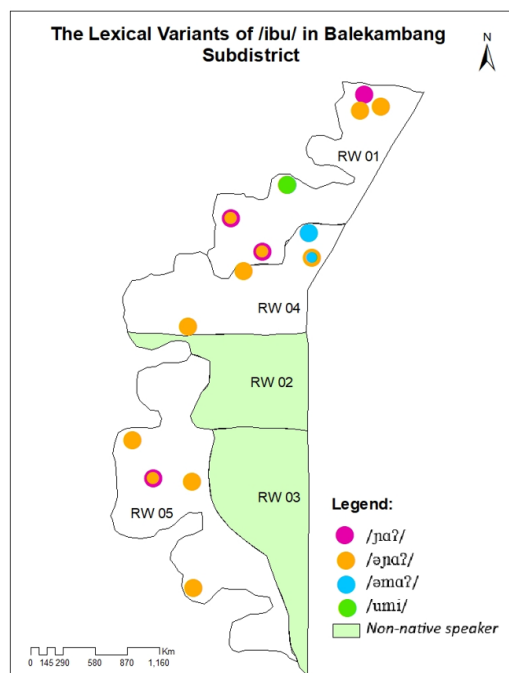


Figure 2
Choropleth map for lexical /ibu/

Based on the choropleth map above, the lexical /ibu/ has four phonological and lexical variants, namely: [paʔ], [əpaʔ], [əmaʔ], and [umi] which are spread across the use in RW 01, RW 04, and RW 05 by 82 adult and elderly respondents. There is an Arabic influence on the use of the lexical /umi/ spoken by respondents of the indigenous Betawi Condet people in Balekambang Subdistrict.

This study describes phonological and lexical variants based on recorded data on the Betawi Malay dialect speech of respondents in Balekambang Subdistrict. Based on 82 respondents who spoke native Betawi in Balekambang Subdistrict in adults and the elderly, a Betawi dialect has been collected which the respondents said had phonological and lexical variants in nouns. The results of using phonological and lexical variants can be seen in Table 2 below.

Table 2. Use of lexical variants /ibu/ in Balekambang Subdistrict

Varian Leksikal /ibu/						
No.	RT	1.1	1.2	1.3	1.4	Bilangan Varian
		[paʔ]	[ə.paʔ]	[ə.maʔ]	[u.mi]	
RW 01						
1.	003	√	√			2
2.	004	√	√			2
3.	005		√			1
4.	006	√				1
5.	008	√	√		√	3
6.	009		√			1
RW 04						
1.	004		√	√		2
2.	007		√	√		2
3.	008		√			1
4.	012		√			1
RW 05						
1.	001	√	√			2
2.	002		√			1
3.	003		√			1
4.	008		√			1

Similarly, on the choropleth map for the lexical /bapak/ in the following Figure 3. Based on the choropleth map above, the lexical /bapak/ has three phonological and lexical variants, namely: [babaʔ], [babəh], and [abaʔ] which are spread across the use in RW 01, RW 04, and RW 05 by 82 adult and elderly respondents. There is an Arabic influence on the use of the lexical /abaʔ/ spoken by respondents of the indigenous Betawi Condet people in Balekambang Subdistrict.

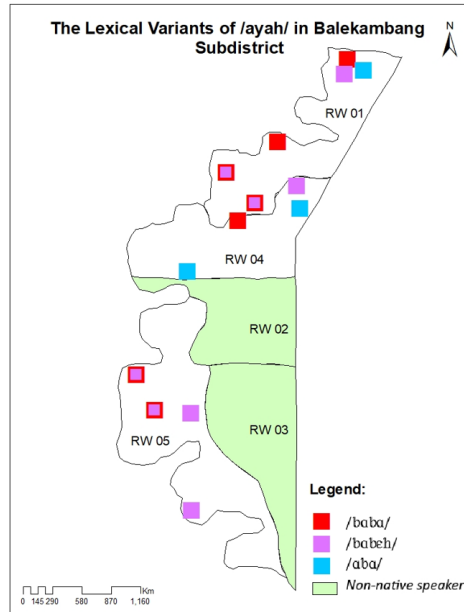


Figure 3
Choropleth map for lexical /bapak/

The phonological and lexical variants /bapak/ in Balekambang Subdistrict are spread across 14 RTs in 3 RWs, with different number of variants. This can be seen in Table 3 below.

Table 3. Use of phonological and lexical variants /bapak/ in Balekambang Subdistrict

Phonological and lexical variants /bapak/					
Nu .	RT	1.1	1.2	1.3	Number of Variants
		[ba.baʔ]	[ba.bəɦ]	[a.baʔ]	
RW 01					
1.	003	√	√		2
2.	004	√	√		2
3.	005			√	1
4.	006	√			1
5.	008	√			1
6.	009		√		1
RW 04					
1.	004		√		1
2.	007			√	1
3.	008	√			1
4.	012			√	1
RW 05					
1.	001	√	√		2
2.	002		√		1
3.	003		√		1
4.	008	√	√		2

Based on the data that has been collected, there are one to six phonological and lexical variants of nouns in native Betawi speakers in Balekambang Subdistrict. These 2 nouns words were found spread across three RWs in Balekambang Subdistrict.

Based on several tables containing the use of phonological and lexical variants above, the analysis can be focused on the following 2 lexicals in the Betawi language:

Table 4: List of basic Swadesh vocabulary and translations (Blust Revised, 1980)

Nu.	Indonesian Language	Betawi Language	Varian Lexical 1	Varian Lexical 2	Varian Lexical 3	Varian Lexical 4
1.	Ibu	Emak	ɲaʔ	ə.ɲaʔ	ə.maʔ	u.mi
2.	Bapak	Bapak	ba.baʔ	ba.bəh	a.baʔ	

Based on Table 4 above, it can be described that there are 1) 4 phonological and lexical variants of the noun /ibu/; and 2) 3 phonological and lexical variants of the noun /bapak/. The use of the nouns /ibu/ and /bapak/ are spread across three RWs as shown in Table 5 below.

Table 5. Distribution of lexical variants in three RW in Balekambang Subdistrict

Lexical	Balekambang Subdistrict		
	RW 01	RW 04	RW 05
Ibu	ɲak, ə.ɲak, u.mi	ə.ɲak, ə.maʔ	ɲak, ə.ɲaʔ
Bapak	ba.baʔ	ba.bəh	a.baʔ

Based on Tables 4 and 5, it can be seen that the lexical variants of these 2 nouns have characteristics found in the Middle Betawi subdialect and there are also lexical characteristics of the Peripheral Betawi subdialect. The phonological and lexical characteristic of the Central Betawi subdialect is Jakarta all sounds [a] or [ah] at the end of the word is pronounced to be [è]. Phoneme [a] in the end quarter, many of them became [e], for example: /malam/ → /malem/, /padat/ → /padet/, /atap/ → /atep/, /kerap/ → /kerep/; while /alam/, /malang/, /nakal/ and /pasar/ remain /alam/, /malang/, /nakal/, and /pasar/.

In Table 5, based on data, in Balekambang Subdistrict there is a nominal /bapak/ that undergoes phonological and lexical shifts so that no longer all RWs sound /ε/, for example /ba.bε/. In RW 01 and 05, Betawi speakers were found reciting /ba.baʔ/ dan /ʔa.baʔ/. That is, there has been an Arabic influence on the lexical sound /Bapak/ in Balekambang Subdistrict.

This is as stated by Jubaedah (2020) that many words from Arabic are used daily with the pronunciation of “dijakartakan”, for example anè (Arab: ana) ‘saya’, èntè (Arab: anta) ‘kamu’, jekat (Arab: zakat), gahwa ‘kopi’, sahi ‘teh’, padol “silakan” apdol ‘lebih baik’ and so on. In addition to the native Jakartans in Jakarta, many people of Arab descent migrated to Balekambang Subdistrict. This was also clarified by the Head of Balekambang Subdistrict that these urbanites of Arab descent bought houses and land of the indigenous Betawi people in Balekambang Subdistrict so that it had a great influence on the development of the fading Betawi language, even more “thick” with the influence of the Arabic language, such as the lexical /a.ba/ found spoken by residents in Balekambang Subdistrict.

Thus, based on the choropleth map in the lexical /ibu/ and /bapak/ that have been described and analyzed in the phonological and lexical variants above, an isoglos map of the use of the Betawi Malay dialect in Balekambang Subdistrict can be produced as shown in Figure 4 below.

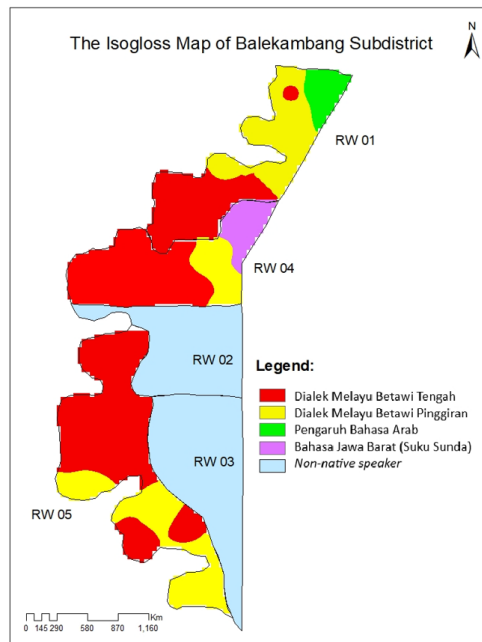


Figure 4
The isogloss map of Balekambang Subdistrict

Thus, the existence of phonological and lexical variants of the Betawi Malay dialect in Balekambang Subdistrict which varies in nouns are based on the results of interviews with Betawi speaker respondents in Balekambang Subdistrict and this is supported by Chaer due to several factors, namely: 1) the residential area in the village of Condet (Balekambang Subdistrict) began to be displaced so that the indigenous Betawi people migrated to Bogor and Karawang; 2) the influx of urbanites of Arab descent who bought land and houses in Balekambang Subdistrict influenced the use of the Betawi language mixed with Arabic; and 3) people use Betawi as a language of conversation, where it is only used for fellow Betawi people. For other people who are not Betawi, they will not use Betawi. Immigrants who are people from outside Betawi often isolate the Betawi language in their conversations. For example, in Balekambang Subdistrict, urbanites of Arab, Javanese, Sundanese, descent, will tend to insert fragments of words or phrases in their mother tongue, thus also affecting the purity of the Betawi language of the residents in Balekambang Subdistrict.

In Tadjuddin Nur's (2021) research, the defense of the Betawi Malay language can be maintained if there is a high enough loyalty of the Betawi community to maintain the use of the Betawi language in their area where they live with the use of Betawi Malay in daily communication. Loyalty to the Betawi language, pride in the attitude of the people's language, and the norms of the language of the people in Balekambang Subdistrict are the determining factors in the defense of the Betawi language in Condet, Balekambang Subdistrict. However, as explained earlier, the rapid flow of urbanization and migration of immigrants from outside Jakarta with their regional languages to Balekambang Subdistrict is also one of the factors for the fading of the use of Betawi language in Condet. The identity and characteristics of the Central Betawi Malay dialect began to be eroded by the influence of the Peripheral Betawi Malay dialect, the Modern Betawi Malay dialect, and the Arabic language.

In addition, based on data the number of adult respondents (49 people) is larger than the elderly respondents (33 people), this also has a significant influence on the use of Betawi language in Condet, especially the Central Betawi Malay dialect. This is based on the results of interviews with local RT and RW administrators, from year to year, the number of native Betawi speakers of elderly age is decreasing due to their deaths and relocation to the suburbs of Jakarta, Cileungsi, Bogor, Cikarang, Bekasi, and Karawang. More or less native speakers of Betawi as a mother tongue have also decreased in Balekambang Subdistrict. The adult respondents were indeed born and raised in Condet, but not all respondents had the descendants of both Betawi Condet parents. One of their

parents is from Java or another tribe outside Betawi. This means that this is also a factor that determines the acquisition of their mother tongue, namely Betawi mixed with other regional languages.

Therefore, in order to maintain the Betawi language in the Condet area, Balekambang Subdistrict, serious efforts are needed by Balekambang Subdistrict so that the Betawi language does not become extinct as the Betawi tradition and culture inherent in Condet as a Betawi cultural heritage. The Balekambang Subdistrict, East Jakarta can collaborate with the DKI Jakarta Provincial Government to strive for the revitalization of the Betawi language. The remaining native Betawi residents in Balekambang Subdistrict can be involved to jointly preserve the Betawi language by continuing to speak Betawi as the first language for their descendants and their families.

Conclusions

Based on the results of field data analysis regarding the spread of Betawi Malay dialects in Balekambang Subdistrict, it can be concluded that sociogeolinguistic research is a type of research that can be an alternative solution in obtaining information about the spread of Betawi Malay dialects in an area, especially in Balekambang Subdistrict. Based on the data, it can be concluded that the use of the Central Betawi Malay dialect has begun to mix with the use of the Peripheral Betawi Malay dialect, as well as the inclusion of the influence of Arabic. This trend is evidenced by the appearance of one to four phonological and lexical variants in the nouns in the list of Morish Swadesh vocabulary spoken by Condet residents in Balekambang Subdistrict in RW 01, RW 04, and RW 05.

The use of GIS technology, which is able to integrate dialectological and geolinguistic research, can also be combined with sociolinguistic research so as to produce sociogeolinguistic studies. The mapping of the Betawi Malay dialect in Balekambang Subdistrict with the help of GIS technology will produce isogloss and *choropleth* maps that are able to map the spread of the Betawi Malay dialect in three RWs in Balekambang Subdistrict.

The use of GIS technology is an advantage in this sociogeolinguistic research because it produces *choropleth maps* and isogloss maps that are in accordance with the distribution points of phonological and lexical variants of the Betawi Malay dialect spoken by residents in the three RWs. The map of the Balekambang Village area map that divides the boundaries of the upper 5 RWs into GIS bases to map the Betawi Malay dialect accurately. This means that GIS technology is used effectively in sociogeolinguistic studies in Balekambang Subdistrict.

However, the research in Balekambang Subdistrict has limitations because the data collected during interviews with respondents is very likely to produce less accurate data. This is because the respondents were nervous when interviewed so that they forgot the Middle Betawi Malay dialect that is commonly spoken for some of the words asked by the enumerator.

Of the total population of Balekambang Subdistrict of 32,000 people, only 82 native Betawi Condet speakers were found. This means that the indigenous people who still use the Betawi language are less than 1% of the total population in Balekambang Subdistrict. This represents a major policy challenge for the local provincial government to strive to maintain the Betawi language in Condet by issuing the latest circular or the latest regional regulations as a replacement for Regional Regulation Number 4 of 2015 concerning the Preservation of Betawi Culture.

The Head of Balekambang Subdistrict and his staff involve all residents to maintain the language attitude and loyalty to the use of the Central Betawi Malay dialect as a characteristic of Betawi in Condet and preserve Betawi culture in daily life. Of course, this is inseparable from the role of all residents in all RWs together with the Betawi communities in Balekambang Subdistrict to preserve the local traditions of Betawi culture, starting from the use of the Betawi language, Betawi culinary, Betawi art and culture in weddings, circumcision, and religious ceremonies with local Betawi nuances. This is an effort to defend the Betawi language, especially the Central Betawi Malay dialect in Condet, Balekambang Village.

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References

- Chaer, Abdul. (2009). *Kamus dialek Jakarta* (Edisi revisi). Masup.
- Chambers, J. K., & Trudgill, P. (2004). *Dialectology* (2nd ed.). Cambridge University Press.
- Collins, J. T. (1989). *Antologi kajian dialek Melayu*. Dewan Bahasa dan Pustaka, Kementerian Pendidikan Malaysia.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed method approaches* (4th ed.). Sage Publications.
- Demografi Penduduk Kelurahan Balekambang, Jakarta Timur. (2025). Dalam <https://timur.jakarta.go.id/kelurahan/balekambang/demografi>
- Departemen Kesehatan Republik Indonesia. (2009). *Sistem kesehatan nasional*. Kementerian Kesehatan Republik Indonesia.
- Hamzah, S. N., Jalaluddin, N. H., & Ahmad, Z. (2014). Variasi dialek Melayu di Perak Utara: Analisis geolinguistik. *Jurnal Linguistik*, 18(2), 30–46.
- Hanizat, M. K., & Hamzah, S. N. (2023). Pengekalan dan peralihan bahasa di Kuala Selangor: Analisis geolinguistik. *Jurnal Wacana Sarjana*, 7(4), 1–29.
- Hassan, H. N. M. (2019). *Pengekalan dialek Melayu di Melaka: Aplikasi Geographical Information System (GIS)* [Undergraduate thesis, Universiti Kebangsaan Malaysia].
- Jaafar, M. F., Mat Awal, N., & Aman, I. (2011, July 2). Pengekalan bahasa dalam kalangan penutur dialek Negeri Sembilan berdasarkan pendekatan dialektologi sosial bandar. *International Seminar on Language Maintenance and Shift*, 168–172.
- Jaafar, M. F., Mat Awal, N., Mis, M. A., & Lateh, H. (2015). Bahasa sempadan Malaysia–Thailand: Pengekalan vs peralihan bahasa. *Jurnal Pendidikan Bahasa Melayu*, 1, 1–9.
- Jalaluddin, N. H., et al. (2017). Penyebaran dialek Melayu di Langkawi: Analisis geolinguistik. *GEMA Online® Journal of Language Studies*, 17(4), 159–177.
- Jalaluddin, N. H. (2018). Dialek Melayu di Perak: Analisis geolinguistik. *International Journal of the Malay World and Civilization*, 6(2), 69–82.
- Jalaluddin, N. H., Saari, K. A., Radzi, H., & Sultan, F. M. M. (2020). Migrasi dan lanskap baharu dialek di Johor. *Akademika*, 90(3), 14–16.
- Jalaluddin, N. H., Wan Halim, W. A. A., & Saari, K. A. (2021). The continuum of Terengganu dialect along the east coast Malaysia: A geolinguistics study. *Journal of Nusantara Studies*, 6(1), 176–198.
- Kasdan, J., Radzi, H., & Nopiah, J. (2023). Variants of emotion lexicons, ‘marah’ (angry) and ‘malas’ (lazy) in Langkawi Island: A geo-linguistics analysis. *Lingua*, 18(1), 69–82.
- Lateh, H., Jalaluddin, N. H., & Jaafar, M. F. (2020). Pengekalan dan peralihan dialek Melayu Satun: Korelasi antara penggunaan bahasa dengan faktor umur penutur. *Jurnal Linguistik*, 24(2), 47–58.
- Lateh, H., Jaafar, M. F., & Shin, C. (2023). Sikap dan persepsi penutur dialek Melayu Satun dalam pengekalan bahasa ibunda. *International Journal of the Malay World and Civilization*, 11(1), 77–88.
- Mahali, S. N., Tamby Omar, A., & Wong, M. M. (2022). Domain dan pemilihan bahasa generasi muda Murut di daerah Keningau, Sabah. *GEMA Online® Journal of Language Studies*, 22(3), 119–138.
- Marliana, N. L. (2017). Eksistensi dialek Melayu Betawi pinggiran di Kampung Budaya Betawi Setu Babakan dan dialek Melayu Tengah di Kampung Budaya Betawi Condet. *Proceedings of the Fifteenth KOLITA Conference*. Atma Jaya University.
- Media Analisis Jakarta. (2024, May 5). Perkampungan Budaya Betawi Setu Babakan bisa gagal

- seperti Condet. *Media Analis Indonesia*.
<https://mediaanalisisindonesia.com/read/perkampungan-budaya-betawi-setu-babakan-bisa-gagal-seperti-condet-ketua-lkb-ungkap-alasannya/>
- Muhajir. (2000). *Bahasa Betawi, Sejarah, dan Perkembangannya*. Yayasan Pustaka Obor.
- Nur, T. (2021). *Pemertahanan bahasa Melayu Betawi di Setu Babakan Jagakarta, Jakarta Selatan* [Doctoral dissertation, Universitas Nasional].
- Omar, A. H. (1985). *Susur galur bahasa Melayu*. Dewan Bahasa dan Pustaka Malaysia.
- Radzi, H., Jalaluddin, N. H., Ahmad, Z., Hamzah, S. N., Yusoff, Y. M., & Sanit, N. (2014). Geolinguistics study on lexical and phonology dialect variations in North Perak, Malaysia. *Procedia – Social and Behavioral Sciences*, 118, 152–158.
- Radzi, H. (2017). *Analisis geolinguistik leksikal dialek Melayu di Perak menggunakan sistem maklumat geografi* [Doctoral dissertation, Universiti Kebangsaan Malaysia].
- Saari, K. A., Jalaluddin, N. H., & Sultan, F. M. M. (2022). Analisis vokal /ɑ/ di akhir kata dalam dialek Melayu di hilir Pahang. *GEMA Online® Journal of Language Studies*, 22(4), 142–160.
- Sadli, S. (1983). *Persepsi sosial mengenai perilaku menyimpang*. Bulan Bintang.
- Salit, S. N. I., Radzi, H., & Hamzah, S. N. (2024). Pengekalan dan peralihan dialek di Baling, Kedah: Kajian GIS. *International Journal of the Malay World and Civilization*, 12(3), 50–68.
- Selvajothi @ Pillai Ramalingam. (2017). *Peralihan dan pengekalan bahasa Tamil dalam kalangan masyarakat Tamil di Kuching, Sarawak* [Doctoral dissertation, Universiti Malaya].
- Shafina, G. (2023, February 5). Jakarta terima 200-an ribu migran pada 2017–2022, terbanyak dari provinsi tetangga. *Data.goodstats.com*. <https://data.goodstats.com>
- Shahbuddin, A. Z. A.-Q., & Omar, M. S. (2020). Pengekalan kosakata budaya dalam kalangan generasi muda masyarakat Jawa. *Jurnal Linguistik*, 24(1), 81–93.
- Siti Jubaidah. (2020). Dialek Betawi Jakarta. *Tsaqôfah: Jurnal Agama dan Budaya*, 18(1), 1–11.
- Sultan, F. M. M., & Muhammad, N. (2017). Kata soal dalam dialek Perlis. *Jurnal Akademika*, 89(2), 139–154.
- Statistics Indonesia. (December 13, 2024). *Statistics of population mobility and labor 2024*. Retrieved November 13, 2025, from <https://www.bps.go.id/id/publication/2024/12/13/8264549bd1ccfccb993c3528/statistik-mobilitas-penduduk-dan-tenaga-kerja-2024.html>
- Tinggom, A. S., Jalaluddin, N. H., & Kasdan, J. (2021). Penyebaran variasi leksikal ‘kapal’ dalam dialek Melayu Siam di Satun, Thailand: Analisis geolinguistik. *International Journal of the Malay World and Civilization*, 9(1), 47–57.

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