

Language Variations in Jayapura City: A Study of Dialectology

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Abstract. The number of national infrastructure development programs in Jayapura City has an impact on the decline in the use of the local language. Starting from the construction of the Cross-Border Post (PLBN) for Skouw, the construction of the Youtefa red bridge, to the construction of facilities and infrastructure for the XX National Olympic Week (PON). These various national infrastructure development programs have encouraged Jayapura City to have several new city icons. This is due to the results of infrastructure development are visited by many people and tourists and it creates tourist attraction in Jayapura City. In addition, this condition also creates high language contact and easier transportation access in Jayapura City, thus it can be affect the use of the local language. In this regard, research on language variations using a dialectological approach is important as a step to map regional languages in Jayapura City. The research data was obtained from the results of the language mapping of the National Agency for Language Development and Cultivation with 400 vocabulary items on questionnaire. There were seven isolects compared in this study. There are two types of research methods, namely quantitative and qualitative. The quantitative method was obtained from dialectometric and etima calculations, while the qualitative method was gained from the analysis of 400 vocabularies used as a list of questions. As a result, there were seven regional languages in Jayapura City, namely Elsen, Kayo Pulau, Nafri, Nyaw, Skou, and Tobati. This result was obtained from dialectometric calculations >90% between isolects which indicated language differences. Thus, the seven language in Jayapura City urgently need language preservation efforts so that there is no shift, change, or language extinction.

Keywords: Language Variation; Dialectology; Language Preservation

1 Introduction

Jayapura has many national development programs. This can be seen from several results of national infrastructure development, such as the construction of the Skouw Cross-Border Post (PLBN), the construction of the Youtefa red bridge, to the construction of facilities and infrastructure for the XX National Olympic Week (PON). This national infrastructure development program comes from the national budget or the State Revenue and Expenditure

Budget (APBN) so that this national infrastructure development program is a state national priority program (PPN/Bappenas, 2017). Strong support from the Central Government for the infrastructure development program in Jayapura City is contained in Presidential Instruction Number 9 of 2020 Regarding to the Acceleration of Welfare Development in the Papua Provinces and West Papua. Dealing with this presidential instruction, infrastructure development has been continuously promoted until now. These various national infrastructure development programs are expected to be supporter of improving people's welfare so that they not left behind to other regions in Indonesia. Definitely, this national development is not merely limited to infrastructure development, however there are also developments in other fields. Starting from the fields of health, education, local economic development, digital infrastructure, and connectivity.

From many national developments, infrastructure development is closely related to the use of the local language of the society in Jayapura. How come, the Skouw Cross-Border Post (PLBN), which is the gateway to the national border between Indonesia and Papua New Guinea, has been beautified with several beautiful buildings that combine local and modern architecture. The border post, which was initially rarely visited by the public or tourists, turned into a bustling area and became one of the new tourist attractions in Jayapura City. Moreover, Presidential Instruction Number 1 of 2021 concerning the Acceleration of Economic Development in State Border Area. So that the Skouw Cross-Border Post will certainly continue to develop forward and further add to its tourist attraction in the future. In addition, transportation access to the Skouw Cross-Border Post is also being improved by building the Youtefa red bridge near Hamadi Beach. This bridge is the link between the center of Jayapura City and the Skouw Cross-Border Post. The distance from the center of Jayapura City which was originally about one hour with 35 kilometers to merely fifteen minutes with 12 kilometers when passing the red bridge of Youtefa (Redaksi Indonesia, 2019). This condition leads to the mobility of people to be high and their language contact also increases. In fact, the implementation of the XX National Sports Week (PON) in Papua Province in October 2021 has increased infrastructure development in Jayapura. The Ministry of Public Works and Public Housing (PUPR) has also built an apartment as an athlete's home in Jayapura (PUPR, 2021).

Increasing the potential of tourism, easy transportation access, and organizing national-scale activities in Jayapura can be factors that affect the decline in the use of the community's local language. This concern is based on the Village Potential Survey (Statistics Indonesia, 2018) in Jayapura which indicated that most societies in Jayapura use Indonesian as their daily communication language. This condition is very worrying because local languages are no longer actively used in daily communication. In fact, Jayapura has local people who use local languages even many immigrants from outside the Papua Province. This is known from the existence of several local tribes in Jayapura, such as the Nafri, Tobati, Kayu Batu, Kayu Pulo, Waena, and Skouw tribes (Government of Jayapura City, 2018). Ethnic differences are usually marked by language differences. Therefore, this study aims to explore language variations in Jayapura using a dialectological approach. It aims to (1) identify the languages in Jayapura, (2) create a language map in Jayapura, and (3) find out the peculiarities of language use in Jayapura. The results of this study are useful for local governments to protect languages in Jayapura, to increase the use of local languages as the characteristic of identity in Jayapura, and document languages in Jayapura from the threat of language extinction.

2 Literature Review

Previous research from this study was taken from similar research with several aspects. Starting from research on the topic of language variations, research data in Jayapura, or research in the field of dialectology. This is due to dialectological research in Jayapura has never existed previously, so that previous research in this study was taken from several aspects that are still related to this study. The absence of previous dialectological research in Jayapura City indicated the novelty of this study. Several previous studies that can be used as literature reviews are the research of Sanjoko, et al (2016), Mantiri (2017), and Mu'jizah (2018). A brief description of three studies can be seen below.

2.1 Sanjoko, et al (2016)

The study entitled „Dialectology of the Biak Language“ discusses the use of the Biak language in several areas of speech. The focus of this research is to see the differences in the use of the Biak language in several areas of speech in West Papua Province and to prove the truth of the clarification of the dialect distinction of the Biak language that was put forward by previous researchers. The research analysis used dialectometric calculations and sound correspondence analysis. The result of this research indicated that the variation in Biak language was obtained by the percentage between regions where the observations showed a percentage of 51—81%, it revealed that only different sub-dialects between Biak speakers with different speech areas. Several variations of the Biak language include the Kajasbo sub-dialect, the Sorido sub-dialect, the Nermnu sub-dialect, the Yenures-Mokmer sub-dialect, the Opiaref-Soon sub-dialect, and the Samber-Sopen-Dwar sub-dialect. However, this study does not describe the language map and distribution of the Biak language.

2.2 Mu'jizah (2018)

Research on language preservation efforts entitled „Preservation and Revitalization of Nafri Language and Literature, Papua: An Endangered Language“ and data were taken from Nafri language research in Jayapura. However, the discussion of this research tends to the policy of language preservation efforts to be documented until it is revitalized. The description of research and/or efforts to protect Nafri's language and literature in the future. There is no linguistic analysis in this study. The research method leads to a qualitative method with research reviews combined with the theory of language preservation, especially preservation and revitalization. The results of this study showed that the Nafri language was an endangered language, thus it demands to language preservation efforts and assistance from all stakeholders. The sustainability of the use of the Nafri language can be supported by language learning through revitalization as a form of language defense. Nevertheless, the framework of language preservation efforts and policy recommendations in this study can be used as additional references, although none of them are directly related to this research other than the Nafri's language as a local language in Jayapura.

Responding to these previous studies, this current study has advantage due to it provide an overview of language maps to see the situation and condition of language in Jayapura and compares languages in Jayapura. This is different from the research of Sanjoko, et al (2016) which merely compares the Biak language in West Papua Province and there is no language map to make it easier in seeing the distribution of the language. In addition, this study is also more focused and detailed in terms of the list of questions and the scope of the research

compared to the research of Mantiri (2017) which is less in-depth, both in the scope of the research, data boundaries, and research analysis. In fact, this study also uses a comprehensive linguistic analysis with a dialectological approach compared to the research of Mu'jizah (2018) which describe reviews of previous research and policy recommendations in the framework of language preservation and revitalization. The results of this study can also be used as a basis for efforts to preserve languages in Jayapura City, while Mu'jizah's research only discusses the Nafri language. The novelty of so many research from previous research makes this research interesting, important, and different from the others.

2.3 Mantiri (2017)

The study entitled „Dialectology of the Biak Language“ discusses the use of the Biak language in several areas of speech. The focus of this research is to see the differences in the use of the Biak language in several areas of speech in West Papua Province and to prove the truth of the clarification of the dialect distinction of the Biak language that was put forward by previous researchers. The research analysis used dialectometric calculations and sound correspondence analysis. The result of this research indicated that the variation in Biak language was obtained by the percentage between regions where the observations showed a percentage of 51—81%, it revealed that only different sub-dialects between Biak speakers with different speech areas. Several variations of the Biak language include the Kajasbo sub-dialect, the Sorido sub-dialect, the Nermnu sub-dialect, the Yenures-Mokmer sub-dialect, the Opiaref-Soon sub-dialect, and the Samber-Sopen-Dwar sub-dialect. However, this study does not describe the language map and distribution of the Biak language.

3 Methodology

This study uses a dialectological approach because there are several factors. First, the dialectological approach is considered more relevant to see variations in a language and the reality of language change (Sunendar, 2019). Second, the dialectological approach produces a language map that is able to provide an overview of the linguistic situation and condition of a region in general (Lauder, 2007). Third, the dialectological approach uses quantitative and qualitative methods so that the results of the research can be more objective and avoid subjectivity. Some of these factors are in accordance with the discussion of this research which focuses on language variations, produces language maps, and uses quantitative and qualitative methods so that the research results are objective and comprehensive. Quantitative methods were obtained from etima calculations and dialectometric calculations, whereas qualitative methods were obtained from analysis of the results of the language mapping of the National Agency for Language Development and Cultivation which had been carried out during the period from 1992 to 2019 (Sunendar, 2019). In general, this research is expected that it can increase the number of dialectological studies in Indonesia, add language maps at the district/city level in Indonesia, and can be used as a means to preserve languages in Indonesia, especially in Jayapura. This is because the number of dialectological studies, language maps at the district/city level, as well as efforts to preserve language, especially language mapping in Indonesia are still very small amount.

Research data taken from the language mapping of the National Agency for Language Development and Cultivation in the form of list 400 questions for each isolect in Jayapura City. The question list consisted of basic Swadesh vocabulary, body parts vocabulary, kinship

system vocabulary, movement and work vocabulary, and to task vocabulary. There are seven isoelect or data being compared in Jayapura City, namely Elseng, Kayo Pulau, Nafri, Nyaw, Skou, Tobati, and Papuan Malay isoelects. The isoelect were taken to be observation area in this study. In this case, (1) Elseng isoelects were taken in Koyakoso Village, Abepura District, (2) Kayo Pulau isoelects were taken in Tahima Soroma Village, South Jayapura District, (3) Nafri isoelects were taken in Nafri Village, Abepura District, (4) Nyaw isoelects were taken in Moso Village, Muara Tami District, (5) Skou isoelect was taken in Skou Yambe Village, Muara Tami District, (6) Tobati isoelect was taken in Tobati Village, South Jayapura District, and Papuan Malay isoelect was taken in Waena Village, Heram District. The scope of this study was based on the level of lexicon and phonology. From the language mapping data, the discussion of this research tended to etima calculation, dialectometric calculation, and language mapping. An explanation of the theoretical basis of etima calculation, dialectometric calculation, and language mapping can be explained further below.

3.1 The Calculation of Etima

The etima calculation is a classification of research data in each gloss or list of questions (Sunendar, 2018). The answer which has a phonetic resemblance is classified into the same etima. On the other hand, different berries are classified into two onse symbol. Phonetic similarities are usually indicated by differences of less than two letters and no more, while phonetic differences are characterized by differences of more than three letters or more. For example, in the HIRUP gloss there are [s|rOd], [s|dOt], and [amb|kan] in Banyumas dialect of Javanese and the Banyuwangi dialect of Javanese. Berian [s|rOd] and [s|dOt] have phonetic similarities because they only differ in the moddle consonant, while the answer [amb|kan] belongs to the different answer with [s|rOd] and [s|dOt]. Thus, the HIRUP gloss can be classified into two etima with three symbols (Budiono, 2018).

3.2 The Calculation of Dialectometric

Dialectometric calculation can be interpreted as a statistical measure of measurement to see differences between isoelects and between areas of observation with a comparison of vocabulary from a list of questions (Ayatrohaedi, 1983). The formula of dialectometric calculation from Jean Seguy (Lauder, 2007) that can be used in this study as follows.

$$\frac{s \times 100}{n} = d \% \quad (1)$$

Information:

s : Total differential amount from other regional isoelect

n : Total regional isoelect

d : Gap vocabularies in percentage

Dealing with the dialectometric calculation formula above, there are two classifications of dialectometric calculation classification from Guiter (in Lauder, 2007) and Lauder (Ayatrohaedi, 2002). The difference in the results of the dialectometric calculation between the two is a difference of 10% in each grouping to determine the status of the language. From the two results of the dialectometric calculation, which result is in accordance with the situation and linguistic conditions in Jayapura City that will be used. This is due to the

linguistic situation and conditions and also the results of dialectometric calculation in each region have different characteristics so that they cannot be equated between one region and another. The following is a breakdown of the classification of dialectometric calculation, both Guiter and Lauder.

Table 1. Table of Guiter's dialectometric calculation results (in Lauder, 2007)

Language Status	Percentage (%)
Different language	>80%
Different dialect	51—80%
Different subdialect	31—50%
Different speech	21—30%
Same language	<20%

Table 2. Table of Lauder's dialectometric calculation results (in Ayatrohaedi, 2002)

Language Status	Percentage (%)
Different language	>70%
Different dialect	51—70%
Different subdialect	41—50%
Different speech	31—40%
Same language	<30%

The etima calculation is a classification of research data in each gloss or list of questions (Sunendar, 2018). The answer which has a phonetic resemblance is classified into the same etima. On the other hand, different berries are classified into two onse symbol. Phonetic similarities are usually indicated by differences of less than two letters and no more, while phonetic differences are characterized by differences of more than three letters or more. For example, in the HIRUP gloss there are [s|rOd], [s|dOt], and [amb|kan] in Banyumas dialect of Javanese and the Banyuwangi dialect of Javanese. Berian [s|rOd] and [s|dOt] have phonetic similarities because they only differ in the middle consonant, while the answer [amb|kan] belongs to the different answer with [s|rOd] and [s|dOt]. Thus, the HIRUP gloss can be classified into two etima with three symbols (Budiono, 2018).

3.3 Designing of Language Map

One thing that needs to be known before designing a language map is a language map is different from an administrative map. Administrative maps are more about administrative boundaries, while language maps are more about the boundaries of language use in an area. The steps for designing a language map start from (1) making a base map, (2) making a numbering map of the observation area, (3) making a triangular map of language, and (4) a spider web map (Ayatrohaedi, 2002). The aim of making a base map is to become the basis for the boundaries of language use so that the base map must cover the boundaries of the area around the observation area. This base map is made as simple as possible by considering the map information, scale, and cardinal directions to make it easier in seeing the map. Furthermore, the base map is numbered from the observation area by paying attention to the numbering pattern. Starting from the zigzag numbering pattern, circular clockwise, counterclockwise circular, and so on. After that, the observation area that has been numbered is drawn the closest line between the observation areas so that it forms a triangular line of language. This aims to make it easier to determine the comparison between the observation areas by paying attention to the closest distance. This triangular map is a reference for drawing

lines on a spider web map. When the line on the spider web map has been made based on the results of the dialectometric calculation, the triangular line of language is removed so that the spider web map is different by taking the line between the triangles of language between the observation areas.

4 Result and Discussion

The results of this study were divided into three types, namely (1) etima calculation results, (2) dialectometric calculations results, and (3) language map results. The etima calculation results and the dialectometric calculation results were based on phonetic similarities and differences from the given research data. Meanwhile, the results of language maps, especially spider web maps, are based on the results of dialectometric calculations. This is intended to make it easier for seeing the results of language variations in Jayapura City visually and partially. From these explained based on the results of the existing research data. In addition, findings of interesting language use in Jayapura City can also be discussed in this study so that linguistic situations and conditions can be described, identified, or comprehensively explained.

4.1 The Result of Etima Calculation

The etima calculation is a classification of research data in each gloss or list of questions (Sunendar, 2018). The answer which has a phonetic resemblance is classified into the same etima. On the other hand, different berries are classified into two onset symbol. Phonetic similarities are usually indicated by differences of less than two letters and no more, while phonetic differences are characterized by differences of more than three letters or more. For example, in the HIRUP gloss there are [s|rOd], [s|dOt], and [amb|kan] in Banyumas dialect of Javanese and the Banyuwangi dialect of Javanese. Berian [s|rOd] and [s|dOt] have phonetic similarities because they only differ in the middle consonant, while the answer [amb|kan] belongs to the different answer with [s|rOd] and [s|dOt]. Thus, the HIRUP gloss can be classified into two etima with three symbols (Budiono, 2018).

Table 3. Table of etima calculation results

Etima	Symbol	Result	Percentage (%)
Seven	Seven	252	63%
Six	Seven	62	16%
Six	Six	46	12%
Five	Seven	17	4%
Five	Six	6	2%
Five	Five	10	3%
Four	Six	2	1%
Four	Five	2	1%
Four	Four	3	1%
Total		400	100%

Based on the table of etima calculation results above, it can be seen that the most etima are seven etima with seven symbols. The etima has obtained 252 results from 400 questionnaires. If the percentage is calculated, the seven etima with seven symbols have a percentage of 63% compared to the other etima. This indicated that the isolects in Jayapura City compared in this study can be asserted to be different between the isolects. In other words, each isolect has

a dominant phonetic difference so that the etima calculation results show a different language. This finding is further strengthened by the acquisition of the sound highest etima which has a large difference in results of 62 out of 400 question lists for six etima and seven symbols. If the percentage is calculated, these six etima and seven symbols have a percentage of 16%. It is a very big difference to assume that language use in Jayapura City only has six languages with one dialect. However, the etima calculation results need to be strengthened by dialectometric calculations so that the linguistic evidence is more abundant and comprehensive. Moreover, this study is closely related to the identity and identity of a society group. The less of depth analysis with minimal linguistic evidence can encourage the determination of language variation erroneous and unfounded. In fact, society really needs linguistic evidence like this to be able to express linguistic situations and conditions clearly and can be accounted for.

On the other hand, some other interesting things that can be known from the results of this etima calculation. Some of these interesting things include (1) the basic Swadesh vocabulary being the largest contributor to seven etima with seven symbols. Although not all of the basic Swadesh vocabulary has seven etima with seven symbols, this dominance is evidence of differences between the seven isolects compared in this study. Next, another interesting thing is (2) all isolects do not have basic cultural vocabulary, such as body parts vocabulary, kinship system vocabulary, movement and work vocabulary, and task vocabulary. This can be seen from the existence of (a) five etima with six symbols, (b) five etima with five symbols, (c) four etima with six symbols, (d) four etima with five symbols, and (e) four etima with four symbols. Dealing with the etima calculation, it can be seen that at most at least three isolects in one question list or glosses do not have concepts in the vocabulary of the basic cultural field. This common issue because not all of the vocabulary in the list of questions have concepts in certain languages. Economic, social, and cultural factors influence whether or not the concept exist. For example, glos LINDUR or which can be interpreted as sleepwalking has no vocabulary in the isolects of Elseng, Nafri, and Skou. Meanwhile, the Papua Malay isolect has [m|lindur], the Kayo Pulau isolect has [StSotO], the Nyaw isolect has [hnika?], and the Tobati isolect has [itSOD xiyah].

4.2 The Result of Dialectometric Calculations

Determination of the observation are compared in this study was by looking at the closest observation area from the triangular line drawing. Not all observation areas are compared in dialectometric calculations. This is due to the distant observation areas have different tendencies. It is precisely this area of close observation that can better prove the difference. If indeed the inter-isolects are different languages, it is certainly supported by the acquisition of high dialectometric calculations. In addition, the comparison of dialectometric calculations with the nearest observation area can also facilitate data processing and see the linguistic situation and condition in an area. The following are the results of inter-isolect dialectometric calculations in Jayapura City.

Table 4. Table of dialectometric calculation result

Area of observation	Percentage	Finding
1/2	86%	Different language
1/3	96.75%	Different language
1/4	97%	Different language
1/5	97.75%	Different language
1/6	95.50%	Different language
2/3	96.75%	Different language

Area of observation	Percentage	Finding
2/6	95.50%	Different language
3/4	94.75%	Different language
4/5	98.25%	Different language
5/6	95.75%	Different language
5/7	97.75%	Different language
6/7	91.75%	Different language

Table 5. Table of descriptions of observation areas in Jayapura

No	Isolect	Village	District	Regency/City
1	Tobati	Tobati	South Jayapura	Jayapura City
2	Kayo Pulau	Tahima Soroma	South Jayapura	Jayapura City
3	Melayu Papua	Waena	Heram	Jayapura City
4	Nafri	Nafri	Abepura	Jayapura City
5	Elseng	Koyakoso	Abepura	Jayapura City
6	Skou	Skou Yambe	Muara Tami	Jayapura City
7	Nyaw	Mosso	Muara Tami	Jayapura City

Responding to the results of the dialectometric calculation above, it can be seen that most of the results of the dialectometric calculation show the percentage >90%. This indicates that the intr-isolects have different categories of language. There is only one comparison that shows a result of 86%, namely the comparison between the Tobati isolect and the Kayo Pulau isolect. Even so, these results still indicate the results of different language categories. This lower dialectometric calculation compared to other isolect comparisons can be triggered by several factors. One of the factors is the high interaction and language contact between the two considering the distance is not too far away. This is usually supported by easy access to transportation, especially since these two isolects are located in the same district, namely South Jayapura. On the other hand, the category of the results of Guitier's dialectometric calculation is still relevant to describe the linguistic situation and condition in Jayapura City. Due to most of the acquisitions are >90% which is still far from the threshold for the different language category classified by Guitier with >80% gains.

4.3 The Result of Designing Language Map

As revealed in the method section, the creation of language map has several stages of creating a map. Starting from making a base map, making a numbering map of the observation area, making a triangular map of language, to making a spider web map which is the final result as an illustration of the results of dialectometric calculations. First of all, the base map takes a geographic map from Google Map by adding a description of the boundaries, scale, and cardinal directions. Furthermore, the base map is numbered according to the isolect of the existing research data. This map numbering pattern uses a circular pattern in a counterclockwise direction. This is due to the adjustment of the geographical location of Jayapura City by choosing the first numbering of the Tobati isolect in Tobati Village, which is located in the center of Jayapura City. Although geographically located in the center of Jayapura City, the Tobati isolect is directly opposite the sea and its settlements are above the sea so that interaction and language contact are not as much as other observation areas that are close to other regional borders. Next, a triangular map is made by drawing the closest line from the given numbering pattern. The triangular map of the language become a reference for

drawing lines on the spider web map by paying attention to the results of the existing dialectometric calculations. Some of these map can be seen below.



Fig. 1. Basic map

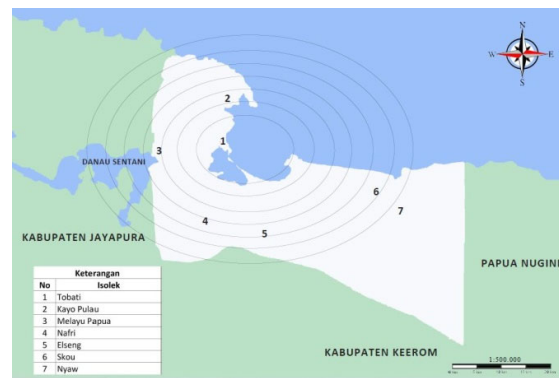


Fig. 2. Numbering map

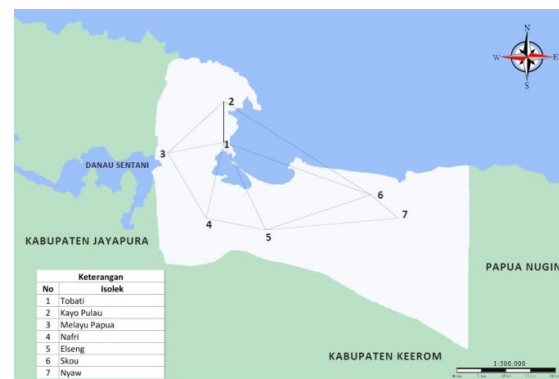


Fig. 3. Triangular map of language

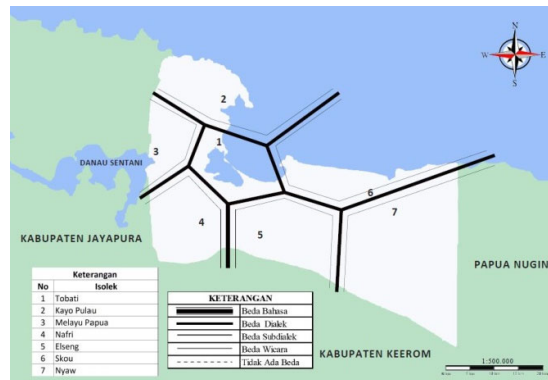


Fig. 4. Map of spider webs

In accordance with the spider web map, it can be seen that all the compared isolects in Jayapura City have dialectological results with different categories of inter-isolect languages. In the map above, it can be seen that Jayapura City is with two other regencies in Papua Province, such as Jayapura Regency and Keerom Regency. In fact, Jayapura City also met with a neighboring country, namely Papua New Guinea. In addition, Jayapura City can also be said to be a coastal area because most of its isolects are close to the sea. By having this language map, language variations can be represented without having to know the administrative area. This is due to language boundaries with different administrative boundaries. However, this language map can still change depending on the amount of data being compared. Moreover, the basic nature of the language is always changing so that this language map can continue to be developed for development. To make it easier to see the language variations in Jayapura City, below is a language map with the use of colors. This language so that it can become a protective material, especially the documentation of Jayapura City. Besides, this language map can also be used by the local government and relevant stakeholders in the context of efforts to preserve the language in jayapura City, especially the language that has been mapped.

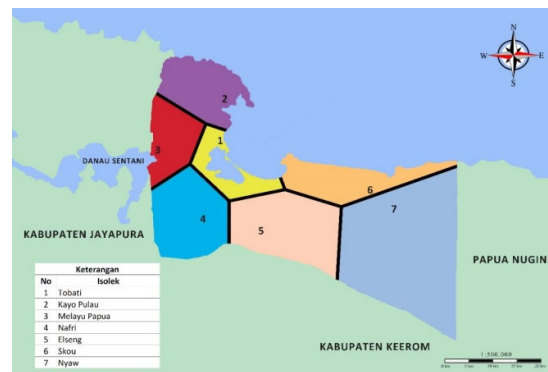


Fig. 5. Language map based on color in Jayapura

4.4 Comparison of Papuan Malay with Indonesian

An interesting discussion from the research data provided in Jayapura City is the existence of the Papuan Malay isolect. This isolect is proven dialectologically through dialectometric calculations with other isolects, such as the isolects of Elseng, Nafri, Nyaw, Skou, and Tobati, as different languages. However, it is this comparison of Papuan Malay with Indonesian that still has to be explored more deeply. This is intended so that there are no mistakes in the inclusion of language names. If the derivation of Papuan Malay is not much different from Indonesian, it can be said that Papuan Malay is the same as Indonesian. On the other hand, if the language of Papuan Malay is very different, it can be argued that it is different from Indonesian. In this case, linguistic evidence is needed to support the determination of a community use in a group that different or not different. Therefore, this study attempts to compare the Papuan Malay language taken in Waena Village, Heram District with Indonesian. The comparisons shown below are only the different berries between Papuan Malay and Indonesian, while those that are not shown, it indicates that the language is same as Indonesian as follows.

Table 6. The comparison of Papuan Malay with Indonesian

No	Gloss	Papuan Malay Language	Indonesian
1	BERENANG	molo	b r naG
2	BERJALAN	bajalan	b r jalan
3	BURUK	tarabae	buruk
4	DIRI (BER)	badiri	b r diri
5	EMPAT	ampat	mpat
6	HIJAU	hijo	hijaw
7	ISTERI	maetuwa	ist ri
8	KALAU	kalo	kalaw
9	KAMI, KITA	kitoG (toraG)	kami
10	KELAHY (BER)	baku pukul	b rk lay
11	MEREKA	doraG	m reka
12	NYANYI	ma~na~ni	m ~na~ni
13	PERUT	poro	p rut
14	SUAMI	maetua	suwami
15	TIDAK	tarada	tida?
16	GIGI YANG BERTUMPUK TUMBUHNYA	lombo	GiGsul
17	KAKEK	tete	kake?
18	MENANTU	ana mantu	m nantu
19	MERTUA	bapa mantu (mama mantu)	m rtuwa
20	NENEK	nene	nEnE?
21	ORANG TUA KAKEK/NENEK	tete moyaG	buyut
22	JITAK (KETUK KEPALA DENGAN BUKU JARI)	toki	jitak
23	KELAHY (BER)	baku pukul	b rk lay
24	SELAM	molo	s lam
25	SENANDUNG (BER)	ma~na~ni	b rs nanduG
26	SUAP (ME)	kasih makan	suwap
27	SUSUY (ME)	kasih susu	susuy
28	TIDURKAN (ME)	kasih tidur	m nidurkan

After conducting the comparison between Papuan Malay and Indonesian, it is known that the difference both of them, it has been found that 28 glosses from 400 glosses or equivalent to merely 7%. The condition also shows that there are 372 glosses that are the same between Papuan Malay and Indonesian. This indicates that Papuan Malay and Indonesian can still be categorized as the same or have no differences. From the 28 different glosses in the table above, most of the differences are more in the basic Swadesh vocabulary of 15 glosses. Meanwhile, the difference in vocabulary of body parts is one gloss, kinship system vocabulary is five glosses, and movement and work vocabulary is seven glosses. In the task vocabulary, there is no difference between Papuan Malay and Indonesian. This finding encourages Papuan Malay cannot be counted as a local language in Jayapura City and can still be set to be Indonesian. Thus, the naming of the Papuan Malay language is less precise and more suitable to be called Indonesian. This is because the difference between Papuan Malay and Indonesian is too small if it is called to have a different language.

4.5 The situation and condition of language in Jayapura City

The overview of the situation and linguistic conditions in Jayapura City can be seen from several perspectives. Different points of view, therefore different results from the description of the situation and linguistic conditions in Jayapura City. This difference is considered reasonable because the goals and needs of each institution are different. The community or other stakeholders as data user must be able to choose and determine the similarity of the objectives and needs of the existing linguistic data. This is because the basic for naming language is also different, such as based on community recognition, scholarship, or identity. The three perspectives cannot be equated and instead add to richness of the situation and linguistic condition in a place or region. Some of these points of view can be seen from several data released by the local government and the Statistics Indonesia (BPS). The local government through the Education and Culture Office publishes the Jayapura City Regional Cultural Thoughts (Pemerintah Kota Jayapura, 2018) which contains data on languages in Jayapura City. Meanwhile, the Statistics Indonesia displays data on the use of language in daily communication in Village Potential (Badan Pusat Statistik, 2018). Data from local government is based on identity, while data from Statistics Indonesia (BPS) is based on community recognition. The following is data from the local government and Statistics Indonesia (BPS) on the situation and conditions of language in Jayapura City.

Table 7. Table of language data in Jayapura (Pemerintah Kota Jayapura, 2018)

No	Province	Regency/City	Language
1	Papua	Jayapura City	Elseng
2	Papua	Jayapura City	Melayu
3	Papua	Jayapura City	Nafri
4	Papua	Jayapura City	Nyaw
5	Papua	Jayapura City	Skou
6	Papua	Jayapura City	Tobati

Table 8. Table of language used by the majority of the population (Badan Pusat Statistik, 2018)

Province	Regency/City	District	Village	Language Use
Papua	Jayapura City	Muara Tami	West Koya	Indonesia
Papua	Jayapura City	Muara Tami	Holtekam	Indonesia
Papua	Jayapura City	Muara Tami	Skow Yambe	Indonesia
Papua	Jayapura City	Muara Tami	East Koya	Indonesia

Province	Regency/City	District	Village	Language Use
Papua	Jayapura City	Muara Tami	Skow Mabo	Indonesia
Papua	Jayapura City	Muara Tami	Skow Sae	Indonesia
Papua	Jayapura City	Muara Tami	Koya Tengah	Indonesia
Papua	Jayapura City	Muara Tami	Mosso	Indonesia
Papua	Jayapura City	Abepura	Asano	Indonesia
Papua	Jayapura City	Abepura	Nafri	Indonesia
Papua	Jayapura City	Abepura	Engros	Indonesia
Papua	Jayapura City	Abepura	Awiyo	Indonesia
Papua	Jayapura City	Abepura	Koya Koso	Indonesia
Papua	Jayapura City	Abepura	Yobe	Indonesia
Papua	Jayapura City	Abepura	Abe Pantai	Indonesia
Papua	Jayapura City	Abepura	Kota Baru	Indonesia
Papua	Jayapura City	Abepura	Vim	Indonesia
Papua	Jayapura City	Abepura	Wai Mhorock	Indonesia
Papua	Jayapura City	Abepura	Wahno	Indonesia
Papua	Jayapura City	Heram	Yoka	Indonesia
Papua	Jayapura City	Heram	Waena Village	Indonesia
Papua	Jayapura City	Heram	Hedam	Indonesia
Papua	Jayapura City	Heram	Waena	Indonesia
Papua	Jayapura City	Heram	Tabansai	Indonesia
Papua	Jayapura City	South Jayapura	Entrop	Indonesia
Papua	Jayapura City	South Jayapura	Tobati	Indonesia
Papua	Jayapura City	South Jayapura	Hamadi	Indonesia
Papua	Jayapura City	South Jayapura	Ardipura	Indonesia
Papua	Jayapura City	South Jayapura	Numbai	Indonesia
Papua	Jayapura City	South Jayapura	Argapura	Indonesia
Papua	Jayapura City	South Jayapura	Tahima Soroma	Indonesia
Papua	Jayapura City	North Jayapura	Gurabesi	Indonesia
Papua	Jayapura City	North Jayapura	Bayangkara	Indonesia
Papua	Jayapura City	North Jayapura	Mandala	Indonesia
Papua	Jayapura City	North Jayapura	Trihora	Indonesia
Papua	Jayapura City	North Jayapura	Angkasapura	Indonesia
Papua	Jayapura City	North Jayapura	Imbi	Indonesia
Papua	Jayapura City	North Jayapura	Tanjung Ria	Indonesia
Papua	Jayapura City	North Jayapura	Kampung Kayobatu	Indonesia

Dealing with the table above, it can be revealed that the local government recognize that there are six language in Jayapura City. These languages are Elseng, Malay, Nafri, Nyaw, Skou, and Tobati. The Kayo Pulau language has not been included in the list of languages in Jayapura City by this local government. Meanwhile, the local government incorporated Malay into a different language from Indonesian. In fact, if it seen from the linguistic evidence in this study, it can be seen that Papuan Malay is the same as Indonesian, thus it cannot be said to be different. The addition of the Kayo Pulau language identified and mapped in this study may also add to the intangible wealth in Jayapura City. Local governments need to follow up on these findings so that no local language is neglected. Moreover, The Minister of Home Affairs Regulation Number 40 of 2007 concerning Guidelines for Regional Heads in Preserving and Developing State and Regional Languages. In this regulation, local government have an obligation to preserve local languages in their territory.

On the other hand, the Statistics Indonesia (BPS) displays survey data on the daily use of the community in Jayapura City. The data presents survey results within the scope of the village with the dominance of the use of the society's language. As a result, the table above

shows that all villages in Jayapura City use Indonesian as their daily language. There is no village that uses daily language by using the local language. This finding indicates that there is a decrease in the use of local languages in Jayapura City. Local languages are still used but may be in certain situations with most of the language use still using Indonesian. This is very unfortunate because the local language in Jayapura City can be said to be few compared to other districts/cities in Papua province with only six languages, but all of them have decreased in use so that local languages are increasingly being abandoned by speakers, especially young speaker. For example, young speaker in Tobati Village cannot speak Tobati language because (1) there is no local language transmission from parents to children, (2) the local language is considered useless because it is not needed at school or work, and (3) Tobati language vocabulary is considered more difficult than Indonesian (Satwiko Budiono, 2019). If these situations and conditions continue to be ignored, sooner or later the local language in Jayapura City may go into a phase of extinction and no longer to be known by the speakers.

5 Conclusion

In accordance with the results and discussion in this study, six language variations have been found in Jayapura. Some of the regional languages included Elseng, Kayo Pulau, Nafri, Nyaw, Skou, and Tobati languages. Papuan Malay cannot be categorized as a local language because it has no difference with Indonesian. The six languages identified and mapped were based on the etima calculation results and the dialectometric calculation results with linguistic evidence supporting the results. In dialectometric calculations, all percentages showed results >80% which indicated different languages. These results were also contained in a language map to make it easier for the society in seeing the speech areas of the languages in Jayapura.

On the other hand, the languages identified and mapped in this study have not all been included in the list of languages in Jayapura City contained in the local government data. The Kayo Pulau language has not been included in the list of languages in Jayapura City, while Papuan Malay is in fact registered as a language in Jayapura City by the local government. In addition, languages use in Jayapura City shows a decline because local languages are not used in daily communication. The role of the local government in preserving the local language in Jayapura City is truly needed. The local government must also follow up on the results of this research so that local language in Jayapura City can be preserved. Language preservation efforts, such as language vitality studies, language conservation, and language revitalization can be alternative follow-up activities. This is intended to prevent the local language in Jayapura City from being extinction which is getting closer and closer along with increasing number of national developments.

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