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A Contrastive Morphological Analysis of the Tombulu Dialect of the Minahasa Language and Indonesian in the Context of Local Language Instruction

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Abstract

This research investigates the morphological differences between the Tombulu dialect of Minahasa and Indonesian, focusing on their implications for local language teaching. The study aims to identify those differences and develop pedagogical strategies to address them. Using a qualitative descriptive methodology with a comparative approach, the study adopted the PRISMA framework for systematic literature review, VOSviewer for linguistic cluster analysis, and Voyant Tools for qualitative data analysis. Data collection was conducted through semi-structured interviews with native speakers, direct observation, and document analysis. This study applied the linguistic cluster algorithm to identify key thematic patterns in the morphological structure of the two languages. The results show that there are significant morphological differences, especially in affixation, reduplication, and word formation. Tombulu dialect has a more complicated affix system, which is absent in Indonesian, while Indonesian morphology follows a more standardized and systematic pattern. These differences pose challenges in local language acquisition, especially in understanding word structure and meaning formation. This research recommends that local language teaching, especially for the Tombulu dialect, integrate pedagogical approaches that systematically consider morphological variation. It is suggested that curriculum design and teaching strategies be adjusted to address these linguistic differences to improve students' comprehension and proficiency. However, limitations of this study include a focus on one Minahasa dialect, which limits generalizability. In addition, this study relied on a small sample of native speakers, which may not be fully representative of the wider language community. Future research should consider a wider sample and explore the impact of these morphological differences in a multilingual context.

Keywords: Morphological Differences, Tombulu Dialect, Indonesian Language, Affixation, Reduplication, Linguistic Analysis, Curriculum Development.

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Introduction

Language plays an important role in shaping culture, communication and identity. Through language, individuals establish a sense of belonging, transmit values, and interact with the world around them. In a multilingual country like Indonesia, where hundreds of local languages coexist with the national language, an understanding of the complex relationship between local dialects and the standard language is of paramount importance, especially in the context of education. This issue becomes even more apparent when we consider the role of local languages in promoting cultural identity and heritage (Li & Li, 2025). Amidst this linguistic diversity, the Tombulu dialect of the Minahasa language provides an interesting example of how complex and distinctive local languages can be. The Tombulu dialect exhibits unique morphological characteristics that set it apart from Indonesian, a distinction that has profound implications for both language preservation and education. Despite Indonesian being the dominant language in formal education and official communication, the preservation and teaching of regional languages such as Tombulu face various challenges, many of which are due to the significant morphological discrepancies between these regional languages and Indonesian.

This research focuses on analyzing the contrastive morphology between the Tombulu dialect and Indonesian, with the main aim of exploring and describing specific differences in the morphological systems of both. Morphology, which is the study of word structure and formation, plays a crucial role in how languages develop and how language speakers understand meaning (Matiyenga & Ajani, 2025). By examining key areas such as affixation (the addition of prefixes, suffixes, and infixes), reduplication (the repetition of syllables or words), and word formation in both languages, this study aims to identify key morphological differences between Tombulu and Indonesian. These differences not only highlight the linguistic richness of the Tombulu dialect, but also provide important insights into the pedagogical challenges that arise in teaching local languages within an Indonesian education system that largely operates in standard Indonesian. The rationale for this research is rooted in the growing recognition of the importance of preserving local languages, especially in Indonesia, where these languages are in danger of being marginalized as the national language continues to dominate all aspects of public life. Indonesia's national language policy, designed to foster unity and cohesion among a geographically and culturally diverse nation, has been instrumental in forging a unified linguistic identity. However, this policy has unintentionally led to the marginalisation of many regional languages, including those spoken in Minahasa regions, such as Tombulu. This marginalisation not only threatens the survival of these languages, but also undermines the transmission of cultural knowledge embedded in them. In this context, the challenge is not only to preserve these languages, but also to find ways to teach them effectively in a system that largely favours Indonesian. The complexity of integrating these local languages into formal education is further exacerbated by the substantial morphological differences between these languages and the national language (Crosson et al., 2025). These differences present significant barriers in language acquisition and teaching, making it important to explore how regional languages can be taught in a way that takes into account their unique structures while still promoting proficiency in Indonesian.

The main problem discussed in this study lies in the complexity of the morphological system of the Tombulu dialect, which differs in key aspects from Indonesian. Tombulu dialect has a much more complicated and diverse set of morphological rules, especially in the use of affixes, reduplication patterns, and word formation processes. These morphological features are often absent or different in Indonesian, which follows a more systematic and standardized pattern. These differences can lead to confusion for learners, especially those who are fluent in both

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languages (Hudu & Iddrisu, 2023). This linguistic mismatch not only poses challenges in terms of language comprehension and acquisition, but also in terms of pedagogy. Teachers tasked with teaching both languages often struggle to bridge the gap between the morphological structures of these two languages, leading to difficulties in language teaching. This problem is further exacerbated by the lack of comprehensive studies that systematically address these differences and their implications in teaching, so there are still gaps in our understanding of how to effectively teach local languages in contexts where the national language dominates.

Given these challenges, this study aims to provide a detailed contrastive analysis of the morphological structures of Tombulu dialect and Indonesian. By identifying specific morphological differences between the two languages, this research will not only illuminate the linguistic complexities involved, but also explore how these differences affect language teaching and learning outcomes. The findings from this research will be used to propose practical pedagogical recommendations, aimed at helping educators address the morphological gap between these two languages. In particular, the research will provide suggestions on how to integrate regional language teaching into the broader educational framework, while taking into account the unique characteristics of regional dialects. With a focus on these practical implications, this research aims to contribute to the development of more effective and contextually relevant approaches to teaching regional languages, such as Tombulu, within the Indonesian education system. Finally, this research aims to promote a deeper understanding of linguistic diversity and promote greater proficiency in local as well as national languages, ensuring that the rich linguistic heritage of regions such as Minahasa is preserved and valued by future generations.

This study aims to describe the morphological differences between Minahasa language Tombulu dialect and Indonesian language and explore the implications in teaching local languages. Through this study, it is hoped that a more comprehensive understanding of the structure of the Minahasa language in the Tombulu dialect can be obtained so that it can be the basis for designing teaching materials that are more contextualized and in accordance with the needs of regional language learning in Indonesia. We aim to bridge the gap between the linguistic needs of local communities and existing educational policies, offering insights that will improve the teaching of local languages while ensuring the relevance and sustainability of Indonesian local languages in an increasingly globalized world.

Literature Review

The foundation of this research is built on a comprehensive review of previous studies, especially those that examine linguistic aspects used by speakers of certain ethnic groups, especially in the context of local languages in Minahasa. These studies provide important insights into the complexity of regional languages and the cultural aspects reflected through language use. Central to this research is the concept of ethnic identity, which is inherently linked to local wisdom. According to Delfia et al (2023), local wisdom can be analyzed through linguistic features found in local languages, which provide valuable insights into the worldview and practices of a particular community. The Tombulu dialect, as part of the Minahasa language group, serves as a significant case study to explore how linguistic features encapsulate the ethnic identity and local wisdom of its speakers.

Local languages, as integral components of cultural heritage, contribute not only to language preservation but also to the enrichment of national identity. As noted by Gong & Gao (2024), these languages contain the values and wisdom of a particular ethnic group, such as harmonious

living, mutual cooperation, and perseverance, all of which are rooted in the structure and expression of the language. Local languages thus serve as reservoirs of cultural knowledge, making it important for their preservation in order to maintain linguistic diversity and cultural heritage (Tannenbaum & Berkovich, 2005). The relationship between language structure and cultural values confirms the importance of preserving local languages such as Tombulu, as these languages are vital to maintaining ethnic wisdom and identity (Rajagukguk et al., 2022). Language maintenance, which is an integral part of language preservation, is often associated with language shift. According to Siregar (2022) language maintenance is an effort to ensure the continuous use of a language within its community. However, these efforts are faced with the phenomenon of language shift, where a community adopts a new language, often a national language, in a domain previously used by the old language. This shift can lead to the decline of local languages, which is an increasingly pressing issue in multilingual societies such as Indonesia (Ciuciulkiene et al., 2023; Manowaluilou et al., 2022). Language preservation efforts, including education, media, and literature, are crucial to maintaining linguistic diversity and fostering cultural pride within local communities. This is especially true for regional languages such as Tombulu, which face the risk of being marginalized by the dominant national language. Morphological aspects of local languages, particularly affixation, reduplication, and word formation patterns, also play an important role in their preservation (Khanetnok et al., 2023). Language and culture preservation refer to two interrelated notions. Language preservation is an effort to keep a language in use and appreciated, especially as a group identity in the language community concerned through teaching, literature, mass media, and so on. Cultural preservation is an effort to keep a culture in use and valued primarily as the identity of a particular group of people in a particular place (Muchena & Jakaza, 2022).

Previous studies on Minahasa dialects, including Tombulu, Tonsea, Tondano, and Tontemboan, have focused on various aspects of language structure. Research by Mandolang et al (2024) and Rorimpandey (2021) explored linguistic features related to plants and traditional medicine, highlighting the cultural significance of the language in daily life. In addition, studies by Senduk et al (2021) focused on understanding structural differences in sentence formation, word order, and grammatical features, particularly in the context of language learning and teaching. Comparative studies on dialects such as Tonsea, Tondano, and Tontemboan, alongside other indigenous languages across Indonesia, have provided valuable insights into the linguistic complexities that arise when integrating regional languages into educational frameworks. Their findings emphasize the structural differences between the two languages, which is crucial to understanding the challenges in teaching local languages in the formal education system (Errington et al., 2024).

However, these studies have not fully addressed the morphological contrast between Tombulu dialect and Indonesian, particularly in relation to local language teaching. This research aims to fill the gap by providing a contrastive analysis of the morphological structures of Tombulu and Indonesian, focusing on areas such as affixation, reduplication and word formation. It seeks to develop a deeper understanding of how these differences affect language teaching and acquisition, especially for bilingual learners. The rationale for this research is rooted in the need for a comprehensive approach to language maintenance and education in Indonesia. As indigenous languages face the risk of marginalization, it is crucial to identify and address the linguistic challenges encountered when teaching these languages alongside the national language. Understanding these challenges is essential for preserving indigenous linguistic heritage and ensuring effective language transmission within educational settings (Adeoye et al.,

2024; Al-Tarawneh, 2024; Isnaini et al., 2023). By addressing the morphological differences between Tombulu and Indonesian, this research aims to provide practical insights for educators, policy makers and language preservationists. The aim is to create pedagogical strategies that effectively integrate local languages within the educational framework, ensuring their continued relevance and vitality. To further strengthen the literature review, additional empirical and theoretical studies will be included. These studies will provide newer insights into language maintenance, language shift, and the pedagogical implications of morphological differences between languages. By expanding the scope of the literature, this research will provide a more comprehensive understanding of the issues at hand and encourage further exploration of the role of local languages in education and cultural preservation.

Methodology

Research Design

This research employs a qualitative descriptive method. According to Filipović (2019) asserts that qualitative research design is inherently flexible, not overly rigid or detailed, and does not strictly define concepts, allowing for adjustments when more fundamental, intriguing, or unique findings emerge in the field. Additionally, the data in this study is presented descriptively, aligning with the qualitative research paradigm, in which collected data is typically in the form of images and words rather than numerical figures, and is conveyed through descriptive or narrative formats (Benson, 2019). The data collection process utilized various techniques and instruments, including direct observation, interviews, and literature review. Primary data was collected through questionnaires administered to respondents, which were then combined with existing linguistic data. A comprehensive review of previous studies was conducted to identify and fill gaps in the literature, primarily through PRISMA analysis. In addition, data analysis utilized VOSviewer for linguistic cluster analysis and Voyant tools for qualitative data analysis, which enabled deeper exploration of linguistic features and respondents' perspectives. This ensures a more comprehensive and representative dataset. The questions are directed toward informants who actively use the Minahasa Dialect Tombulu, particularly within their social interactions. The research was conducted in four sub-districts: (1) South Tomohon, (2) North Tomohon, (3) East Tomohon, and (4) West Tomohon. Each of these sub-districts was represented by several neighborhoods where the community still actively uses the Tombulu dialect in daily interactions. Respondents from each linguistic community were selected based on recommendations from local leaders, such as 'lurah' or village elders, who had first-hand knowledge of individuals still actively using the language, totaling 30 respondents.

Study selection or literature screening

This research integrates a systematic review approach with an empirical study, where the PRISMA method is applied in the selection process of relevant literature. Meanwhile, primary data collection was conducted through questionnaires or interviews to obtain information directly from respondents. In this context, PRISMA is used to screen and analyze literature that supports the research framework, while the survey or interview method is applied in collecting and analyzing data on the population and sample under study.

The linguistic data collected was primarily derived from the core Swadesh vocabulary, which was further expanded in the field while considering various morphological processes. The article selection process, guided by the PRISMA framework, ensured a systematic and rigorous approach to identifying relevant studies. The PRISMA-guided approach guarantees

1552 A Contrastive Morphological Analysis of the Tombulu methodological transparency and reliability, reducing bias in article selection (Mengist et al., 2020). The process is outlined in four stages:

Data bases selection		Included : Scopus Excluded : Other databases.
Identification	Keyword and syntax search "Local Language"; "Indonesia"; "Linguistic"	Included: 754 documents Excluded: non-related documents from Scopus databases
Screening	Document type: Articles Language: English	Included: 554 articles Excluded: other document type Included: 400 articles Excluded: non-English articles
Eligibility	Title and Abstract Alignment (TAA): Emerging Economies	Included : 400 articles Excluded : articles do not align with our research objectives
A total of 400 articles are included in the analysis.		

Figure 1. Data Selection and Inclusion Criteria

Source: Authors data analysis, 2025

Research Instruments

PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) used to identify, screen and select literature relevant to the research topic, namely morphological comparison between Tombulu dialect and Indonesian language in the context of local language teaching. PRISMA helped in ensuring that the literature review was conducted in a systematic and transparent manner, and those only studies that met the inclusion criteria were included in the analysis. Primary data collection was conducted through questionnaires and interviews designed to explore respondents' perceptions and experiences of local language teaching, particularly the Tombulu dialect. The questionnaire consisted of questions that identified their understanding of the morphological differences between Tombulu and Indonesian, as well as the challenges faced in teaching the local language. Interviews were conducted in-depth with a number of key informant's selected based on recommendations from local figures, such as village heads or adat elders, who have first-hand knowledge of individuals who still use Tombulu actively. VOSviewer was used to analyze the relationship between words or terms in the selected

literature, by mapping words or concepts that frequently appear in existing studies. This analysis aims to look at linguistic clusters in the context of Tombulu language and Indonesian language and identify patterns that are relevant for morphological studies. Text analysis of the qualitative data obtained through interviews and questionnaires was conducted by visualizing frequently occurring words, as well as analyzing the frequency and relationships between words in the context of respondents' experience and understanding of language morphology. This process used Voyant Tools to support the analysis.

Data Analysis

The data analysis model employed in this study follows the linguistic scientific characteristic analysis framework proposed by Martinčić-Ipšić et al (2016) and Cong & Liu (2014). These identified rules are subsequently compared with other linguistic phenomena, contributing to the refinement of linguistic theory, the enhancement of methodological approaches, and the inspiration for further exploration of new linguistic issues (Liu, 2011). This research uses several text analysis tools or qualitative data analysis (QDA) software such as VOSviewer, and Voyant Tools. This research follows the methodology outlined by Halevi Hochwald et al (2023), which provides a structured framework for transforming qualitative data into quantitative analysis. By employing this guideline, the study ensures a rigorous and systematic approach to data processing, enabling the integration of qualitative insights into a measurable and analyzable quantitative framework. Our analysis begins with the simultaneous analysis utilizing clustering with co-occurrence network analysis of keywords. We argue that clustering provides a more detailed two-dimensional view of a network's structure compared to mapping, although it is limited in depicting multi-dimensional relationships. Clustering is not constrained by dimensional limits but operates on binary dimensions rather than continuous ones. The algorithm involves specific formulas for our calculations, which are as follows:

$$V(C_1, \dots C_n) = \frac{1}{2m} \sum_{i \le j} \delta(C_i, C_j) \omega_{ij} (C_{ij} - \gamma \frac{C_i C_j}{2m}) \qquad \dots (1)$$

where C_i = element cluster i

 γ = clustering resolution

m = total number of edges or sum of all edge weights.

$$\omega_{ij} = \frac{2m}{C_i} C_j$$

Sources: (Waltman et al., 2010)

The most common tools for further analysis of the partial correlation and significance (p-value) from the text analysis are the person correlation and significance (p-value) based on a t-test. The correlation coefficient measures the strength and direction of a linear relationship between two variables in this research for term 1 and term 2. It is calculated using the Pearson correlation formula as follows:

$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 (y_i - \bar{y})^2}} \dots (2)$$

Sources: (Hetenyi et al., 2019)

where:

- x_i and y_i are the individual sample points of the two variables (in this case, keyword frequencies).
- \bar{x} and y are the means of the variables/keyword frequencies.

Subsequently, to test the significance of the correlation coefficient whether the observed correlation is statistically significant, we use the t-test with the following formula for the test statistic:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$
 ... (3)

Source: (Hetenyi et al., 2019)

Where:

- r² is the Pearson correlation coefficient.
- *n* is the number of paired observations.
- the p-value is then obtained from the t-distribution with n-2 degrees of freedom. This tests the null hypothesis that the true correlation is zero.

Interpretation:

- Correlation (r): Values range from -1 to 1, where values close to 1 or -1 indicate a strong relationship, and values close to 0 indicate a weak relationship.
- **Significance (p-value):** A low p-value (typically < 0.05) indicates that the correlation is statistically significant.

To perform the simultaneous keyword correlation and analyze the clustering, we utilized Equation (1) with the assistance of software analysis. The co-occurrence threshold was set at 5. Out of the 2,811 keywords identified, 70 met this threshold. For the Cirrus data mining process, the stop words were set to automatic, and several abbreviations such as AB, KW, TI, etc., were added to the stop word list. This clustering technique aims to identify research topics that remain underexplored and to examine the connections between keywords published in prior research, ultimately contributing to the development of a robust conceptual research model. The following figures present the results of the co-occurrence keyword analysis and clustering.

Result

The results of the data analysis obtained through the PRISMA approach show highly relevant and significant findings related to the morphological differences between the Tombulu dialect of Minahasa and Indonesian, especially when examined in the context of emerging local language teaching. The literature selection process applied in this study provides a very comprehensive and in-depth overview of the key issues that are the main focus of this study, as well as how the findings are interconnected and form a strong basis of understanding. Further, more in-depth analyses using VOSviewer allowed us to identify linguistic patterns contained in the selected literature data, as well as map the interrelationships between various concepts and topics related to language morphology and local language teaching, providing a clearer perspective on the interaction between the two languages. To dig deeper into respondents' experiences, understandings and views on these issues, qualitative data obtained through interviews and questionnaires were analyzed using Voyant Tools. This tool not only allows the

visualization of frequently occurring words, but also provides an in-depth analysis of the frequency and relationship between words in linguistic contexts, providing additional, more detailed insights into the morphological aspects emphasised by respondents in local language teaching, as well as making a significant contribution to understanding the dynamics of language teaching in bilingual societies. Figure 2a of VOSviewer network visualization highlights key research themes in Indonesian local languages, linguistic analysis, and reduplication, emphasizing their interconnections. At its core, Indonesia is strongly linked to local language, linguistic diversity, and Bahasa Indonesia, reflecting a focus on language preservation and regional variations. The computational linguistics cluster underscores the role of natural language processing (NLP) and machine translation in studying low-resource languages, supporting digital preservation and automated linguistic analysis. Meanwhile, reduplication, closely tied to affixation, phonetics, and morphology, emerges as a central feature of Indonesian and regional languages, crucial for word formation and semantic intensification. The word cloud in Figure 2b visualization further reinforces the prominence of Indonesian linguistics and reduplication in academic research, with keywords like "Scopus," "university," and "study" highlighting higher education's role in linguistic studies. Additionally, terms such as "English," "translation," and "processing" indicate the growing intersection between computational linguistics and local language studies.

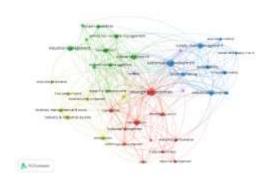




Figure 2a. Keywords Network Visualization

Figure 2b. Keyword Cloud

Source: Author data analysis, 2025

Overall, both visualizations emphasize the importance of linguistic diversity, digital language analysis, and reduplication in Indonesian research, underscoring the need for continued studies in morphology, NLP, and language education. These connections align with the table of keywords, occurrences, and total link strength, showcasing the prominence and relevance of these themes in shaping the research landscape.

Keyword	Occurrences	Total Link Strength
Indonesia	70	198
Linguistics	52	194
Computational Linguistics	42	180
Natural Language Processing Systems	42	175
Language	41	138
Semantics	31	135

Keyword	Occurrences	Total Link Strength
Reduplication	68	131
Human	19	129
Humans	15	108
Article	14	101
Local Language	33	101
Natural Languages	18	76
Language Processing	14	73
Machine Translations	13	67
Male	9	63
Natural Language Processing	11	56
Morphology	12	55
Corpus Linguistics	10	51
Adult	6	50
Phonetics	6	50

Table 1: Keywords with Their Occurrences and Total Link Strength

Source: Author data analysis, 2025

Table 1 presents key terms related to Indonesian linguistics, computational linguistics, and language processing, ranked by their occurrence frequency and total link strength in a VOSviewer analysis. The most frequently occurring keywords include "Indonesia" (70 occurrences, 198 link strength) and "linguistics" (52 occurrences, 194 link strength), indicating a strong research focus on Indonesian language studies. Similarly, "computational linguistics" (42 occurrences, 180 link strength) and "natural language processing systems" (42 occurrences, 175 link strength) suggest an integration of digital tools and AI-driven analysis in linguistic research. Notably, "reduplication" (68 occurrences, 131 link strength) ranks high, reinforcing its significance in Indonesian morphology, particularly in word formation and semantic development. Other key terms, such as "local language" (33 occurrences, 101 link strength) and "natural languages" (18 occurrences, 76 link strength), highlight ongoing interest in preserving regional dialects. The presence of "semantics," "morphology," and "phonetics" suggests that structural linguistic elements remain central to computational research. Meanwhile, "machine translations" and "language processing" reflect advancements in digital linguistics. Overall, this analysis underscores the growing intersection between traditional linguistic research and computational methodologies, particularly in the Indonesian language context.

Based on Table 1, the proximity of co-occurrence between keywords is evident to ascertain the relationship between these keywords and other terms when combining keywords, titles, and abstracts, the keyword cloud depicted in figure 3 can be examined. These visualizations allow for the calculation of the correlation of keywords to terms in the titles and abstracts, as demonstrated in following figures:

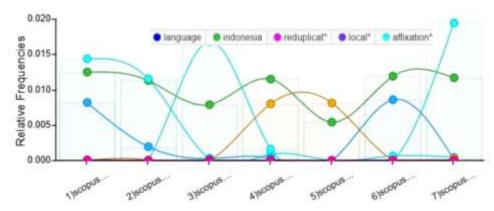


Figure 3. Term Frequency Trends

Source: Author data analysis, 2025

The keyword trend analysis visualizes the relative frequencies of key linguistic terms across Scopus-indexed documents, highlighting research patterns over time. The legend identifies five key terms: language (blue), Indonesia (green), reduplication (pink), local (purple), and affixation (cyan)**. Among them, "Indonesia" and "language" show consistent fluctuations, indicating a stable research focus on Indonesian linguistic studies. In contrast, "affixation" exhibits notable peaks, reflecting periodic interest in morphological research, while "reduplication" appears less frequent but remains consistently present, reinforcing its role as a specialized linguistic topic. The sporadic yet significant presence of morphology-related terms suggests a growing research interest in Indonesian linguistic structures, particularly in affixation and reduplication, which are essential components of morphological and syntactic analysis. This trend underscores the increasing emphasis on Indonesian morphology in both linguistic and computational research domains.

Discussion

The discussion begins with a description of the morphological contrast between the Minahasan Tombulu dialect and Indonesian, highlighting key differences in word formation, affixation, and structural patterns. The description of the morphological contrast between the Minahasan Tombulu dialect and Indonesian is shown in:

A. Affix

- 1. Contrast of affixes and words derived from the Noun category (Tombulu)
- a. Prefixes for Forming Nouns: pah-, maka-

The form of *pahketer* which means 'a tool used for cutting' consists of the root word *ketor* 'to cut' which is attached to the prefix *pah* -. The verb *ketor* when attached to the prefix *pah*-functions as a noun former. The prefix *pah* - means a tool used to do work as stated by the root word.

The prefix pah- has dialectal variations, namely pa'-, pa-, and pe-, as seen in the following examples.

Example: *pahukur* 'tool for measuring'

pa?kelew 'tool for closing'pawetu 'stabbing tool'pasaput 'tool for wrapping'

shape ? 'who owns the land' consists of the basic word *tana*? 'land' and the prefix *maka*-. The prefix *maka*- functions to form a noun, meaning, among other things, owner. Example:

maka'anak 'who owns the child'
maka'a'e 'the owner of the feet'

makawale 'the owner of the house'makangaran 'the owner of the name'

These examples can also be categorized as verbs because they have the meaning of having what is stated in the root word.

b. Noun-Forming Suffix: -en

The word sendeen 'vegetables' consists of the root word sende 'vegetables' and the suffix -en. The function of the suffix -en is to form nouns and means something that is stated by the root word (sende 'vegetables'). This suffix can also be attached to verbs with the same function but different meanings, namely something that is the result of what is stated by the root word. Example:

Kemesen 'laundry'
Wiliten 'stitch'
Lampangan 'street'
Pukelen 'punch'

There are also other forms with the same meaning, but require repetition of the first syllable in addition to the suffix -en. Example

Kakaanen 'food' eelepen 'drink'

c. Noun Forming Confixes: ta- ... -en, pah- ... -an, pa- ... -en, ka- ... -en

The word *tantowakuen* consists of the root word *towaku* 'tobacco' and the confix *ta-...en*. The function of *ta-...-en* is to form a noun with the meaning of someone who likes ... or often does work related to what is stated by the root word, *tantowakuen* means smoker. In addition to the noun category, the root word can also be categorized as a verb or adjective. Other examples:

talingkumen 'smoker (cigarette/tobaku roller) ---lingkun (verb)

tangkekosen 'bedwetter' --- kekos (verb)
tambunu?en 'murderer' --- wunu? (verb)
tanupi?en 'angry' --- upi? (adjective)

pahlampangan form consists of the basic form lampang 'walking' and the confix pah- ... -an which functions to form nouns from verbs. The resulting noun means location.

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The form pah- ... -an is a variation of the form pa'- ... -an, depending on the speaker's location (dialect). Example:

pahkara?an 'running place'pahwilitan 'sewing place'pahlelo?an 'bathing place'pahtaneman 'planting place'

The form *patuarien* consists of *tuari* 'brother' and the confix *pa-...-en*. This confix forms a new noun from the basic form of the noun. The affix *pa-...-en* means a person who is considered to be what is stated by the root word.

patuarien 'a person who is considered a younger brother (brother).

Another example:

paito?en 'who is considered an uncle'

paina?en 'who is considered the mother"

paama?en .who is considered as a father'

pakaka?en 'who is considered an older brother'

The form *kale?osan* consists of *le?os* 'good' and the confix *ka-...-an* as a noun formation from an adjective. This affix means something that is characterized by what is stated by the basic word or indicates a place that has what is stated by the basic word. Example:

kalewo?an 'ugliness'kaena?an 'pleasure'kasusa?an 'distress'karano?an 'watery place'

kauranan 'a place that gets a lot of rain' or 'gets rain'

Contrast of Affixes and Words Derived from the Verb Category (Tombulu)

By paying attention to the distribution, both function and meaning, of word forms, it is found that the affixes related to verbs are prefixes, infixes, suffixes, confixes, and affix compounds. These affixes can be inflectional or derivational.

a) Verb prefixes: mah-, pah-, maka-, mapa-, meki-, meN-, i-

mahapus form consists of the base *apus* 'bind' and the prefix *mah*-. The function of this prefix is to form a moderate tense. The meaning is doing the work stated by the base. Here the form above means tying.

Another example: mahwerit 'is throwing' mahlawa 'is climbing' mahteles 'is buying' mahame' 'is crying'

This prefix has dialectal variations ma'- and ma-. This prefix when attached to a noun, adjective or numeral will function as a verb former and as a tense marker. The meaning of this prefix when attached to a noun and adjective is doing what is mentioned in the stem or using what is mentioned by the stem, while the meaning of this prefix when attached to a numeral is dividing with what is mentioned by the stem.

Example: *mahwahi* 'is digging'

mahroda 'wearing/riding wheels'

mahlambo? 'is getting long'mahketer 'is exerting force'

mahtelu 'divide three'

The form of pahwangker which means 'being sold' consists of the stem wangker r and the prefix pah-. The function of this prefix is to indicate passive and medium tense. Its meaning is to state a job that is being done according to what is mentioned by the stem. Its variations are dialectal variations, namely pa'- and pa-.

Another example: pahsawut 'being pulled out'

pahtanem 'being planted'

pahteles 'being purchased'

pahilek 'being shown'

The form of makalengen which means 'having hands' consists of langkal lengen and the prefix maka-. This prefix is a verb former from the base of a noun. Its meaning is to have what is stated in the base. This prefix can also mean owner. If it means that, then the resulting form is a noun.

another example: maka'a'e 'has legs'

makawale 'have a house'makangaran 'has a name'makasisim 'have a ring'

However, in the following forms *then*-does not have the meaning as explained above, but rather expresses an activity that has been completed.

makakan 'finished eating'

makatalinga 'finished listening'
makasawut 'finished pulling out'

makawangker 'finished selling'

The form of mapawilit which means 'to order to sew' consists of the stem wilit 'to sew' and the prefix mapa- which functions as a new verb former with another meaning. Here the prefix means to order to do what is stated in the stem.

Another example: *mapatepi* 'order to sweep'

mapaturu? 'tell me to show you'

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mapateles 'order to buy'
mapawangker 'tells to sell'

Apart from the forms above, in the Tombulu language there are forms with the prefix mapa- as follows:

mapalemes 'letting oneself go limp'

mapareges 'to break away'mapailek 'to show oneself'mapalaput 'sticking oneself'

The affix *mapa*- functions as a reflexive former. Its meaning is to let oneself do the work mentioned in the stem. The form of mekikorkor which means 'please scratch' consists of the base korkor 'scratch' and the prefix meki-. The function of this prefix is to form a new verb with the meaning of politely ordering (momohon or asking) someone to do the work mentioned in the base.

Another example: *mekiwilit* 'please sew it up'

mekiteles 'please buy'mekituru? 'ask to teach'mekilutu? 'ask to cook'

This prefix can also be attached to adjectives and form verbs. Its meaning is to make something like the one mentioned in the base.

Example: *mekikoki?* 'shrink'

mekisela? 'raise'
mekipoto? 'shorten'
mekilambo? 'lengthen'

The form mewangker which means 'usually sells' consists of the stem wangker and the prefix me- which functions as a marker of habit. The meaning of this prefix is to state an activity that is usually done.

Another example: *menero* 'to look for'

memurut 'to pick up'
merokrok 'to expose'
mengento? 'waiting'

The basis of each of these examples is as follows:

sero 'search'

purut 'pick up'
rokrok 'unpack'

1562 A Contrastive Morphological Analysis of the Tombulu ento? 'wait'

By comparing the forms after affixation and the stem forms we can draw the conclusion that the prefix is actually *meN*- with the allomorphs *me*-, *mem*-, *men*-, and meng-.

In fact, the prefix *meN*- is often attached to the base that is being duplicated. Its meaning is to express an action that occurs repeatedly.

Example: meleo-leong 'always playing'

merura-rura 'always spitting'

looking back

manapu-naput 'always wrap'

escorting 'always singing'

This prefix can also be attached to adjectives with repetition; its meaning is to make. So far only one example has been found, namely: *mewute-wuter* 'making heavy'. The form iwangker which means 'used to sell (sold)' consists of the prefix i- and the base wangker. This prefix is a passive former. However, in this case the prefix is a passive former called instrumental passive. Its meaning is used to do what is stated in the base.

Another example: *itia?* 'thrown away'

iwuri 'returned'ikua 'said'iwilit 'stitched'

b) Verb Infixes: -um-, -im-, -in-

The form tumemu which means '(will) pound' consists of the stem temu 'tumbuk' and the infix - um-. This infix is an inflectional infix because it is used to form the present and future tenses. The meaning of this infix is to indicate activities that are carried out now or later.

Another example: kumewe? '(will) tear'

sumila? '(will) lick'

rumaung '(will) disturb'

numuwu? '(will) speak'

instead the following forms: mupu? '(will) pick'

mendo '(will) take'
mantik '(will) write'
mangker '(will) sell'

mibit '(will) seed'

the base is: upu? 'pick'

endo 'take'

pantik	'write'
wangker	'sell'
bibit	'seed'

and it seems that the tense former here is m-. Since the function and meaning of this form are the same as the infix -um-, we can conclude that m- is an allomorph of this prefix, and it appears only if the first sound of the stem is /p, b, w/ or a vowel. In the first case, it seems that the consonants are removed.

The infix -um- and its allomorph m- can also function as derivational affixes when added to nouns. The meaning is to carry out work that is related to what is stated in the stem.

Examples:	towaku	'tobacco'	tumowaku	'(will) smoke'
	ngaran	'name'	ngararan	'(will) name'
	wahi?	'hoe	mahi?	'(will) hoe'
	pajeko	'plow'	majeko	o '(will) plow'

This infix can also be placed on adjectives to obtain verbs. In this case, the infix means (will) carry out work that is related to the one mentioned in the stem.

Example:	teren	tumeren	'(will) straighten out'
	sigi	sumigi	'(will) respect'
	lambo'?	lumambo	'(will) extend'

The form of *tumingkas* which means 'has run' consists of the stem *tingkas* 'run' and the infix - *im*- which functions as a past tense marker. Its meaning is to state an activity that occurred in the past.

Another example:	simawang	'has helped'
	limampang	'has been running'
	nimange	'has gone'
	nima?wa?	'have tried'

the stems of *nimange* and *nima?wa? are ange* and *wa'wa* respectively. From the examples above, it can be concluded that the infix -*im*- has similar properties to the infix -*um*-, namely for stems that start with a certain vowel or consonant, the allomorph used; the allomorph -*im*-here is *nim*-

infix -im- can also function as a verb former from noun and adjective stems.

The first example is:	londey	limondey	'has been boating'
	rimoda wheel	'has	wheels'
	towaku timowa	ku 'have	e smoked'
	wahi'	nimahi' 'have	e hoeed'

The meaning of the affix in the example above is to use what is mentioned in the base in the past tense.

1564 A Contrastive Morphological Analysis of the Tombulu Examples of verbs with adjective stems:

rimangdang 'has turned red'

simela 'has grown bigger'

rimemdem 'has turned black'

rimou 'has moved away'

The meaning of the infix in the example above is that it has become like what is mentioned in the base. prefix form meaning 'already written' consists of the prefix stem 'write' and the infix - in-. The function of this infix is a past passive marker. Its meaning is to state an activity that has been done as stated in the stem.

Another example: kinuwang 'already peeled'

Winanti 'already cut down'

tinuas 'already poured'

rinewok 'already collected'

In the Tombulu language the following forms are also found:

niilek 'already seen'

niali 'already taken'

nienou 'already persuaded'

niupu? 'already harvested'

The basis of each of the above forms is:

ilek 'see'ali 'bring'

enou 'persuade'

upu 'harvest'

Apparently, *ni*- has the same function and meaning as -*in*-. Ni- can therefore be considered an allomorph of -m-.

c) Verb Suffixes: -en, -an

The form e *saen* which means '(will) be united' consists of the stem *esa* and the suffix *-en*. This suffix functions as a passive marker for the present and future tenses. Its meaning states what kind of activity is mentioned in the stem that is done now or in the future.

Another example: naramen 'tamed'

sungsungen 'upheld' kenengen 'carried' eneen 'granted' The form of *the predicate* meaning '(will) be written' consists of the *predicate stem* and the suffix -an which functions as a passive locative marker for the present and future tenses. Its meaning is to state an activity that is imposed on something at the present time or in the future.

Another example: sewa'an '(a place) that is (to be) rented'

tepian '(will) be swept' telesan '(will) be bought'

d) Verb Confixes: ma-...-an, pa-...-an, maka-...-en, ka-...-an, papa-...-en, peki-...-en.

The form *masondolan* which means 'connecting each other' consists of the base *sondol* and the confix *ma-...-an*. Its function is to form reciprocal, can be attached to verbs or adjectives. Its meaning is to express reciprocal activities.

Another example: *masawelen* 'exchange each other'

masuaten 'compare each other'

male 'osan 'make up'

ma'esaan 'mutually united'

The confix ma-...-an has ma-...-en as an allomorph.

The form of *pasondolan* which means 'connected to each other' consists of the base *sondol* and the confix *pa-...-an*. Its function and meaning are almost similar to *ma-...-an*. The difference is that *pa-...-an* indicates passivity. Its meaning is to state activities that are reciprocated by each other.

Another example: pasawelan 'mutually exchanged'

pawitongan 'questioned each other'

pasuaten 'compared to each other'

paesa'an 'mutually united'

This confix also has another function and meaning, namely as a passive tense former. Its meaning is to state that the activity mentioned in the stem is being carried out.

Example: pa(h)mill 'is being ground'

pa(h)wiliten'being sewn'pa(h)tepian'being swept'pa(h)pantikan'being written'

The confix pa-...-an has the allomorph pa-...-en .

The form *maka?upi?en* which means 'annoying' consists of the stem *upi?* and the confix *maka...-en* which functions as a verb former from adjectives or other verbs. Its meaning is to make something like what is stated in the stem.

Another example: *makapa?aren* 'fun'

makalaleien 'miss you'

makanawu?en 'falling'

makarou?en 'far apart'

The form *papatipu?en which* means 'ordered to pick' consists of the stem *tipu* 'pick' and the confix *papa-...-en* which functions as a passive former for verbs with the prefix mapa-. The meaning is to unite the activities mentioned in the stem ordered to be done by someone.

Another example: papaureten 'ordered to pick up'

papawangkeren 'told to sell'

papatelesen 'told to buy'
papaelepen 'told to drink'

The form *peki-...-en* in *pekiwiliten* which means 'asked to sew' is a passive forming confix for verbs with the prefix *meki-*. The stem is *wilit* 'sew'. The meaning of the confix is to state that the activity mentioned in the stem is asked to be done by someone.

Another example: *pekilawa?en* 'asked to pray'

pekigilingen 'asked to grind'
pekiwangkeren 'asked to sell'

pekikehongen 'asked to withdraw'

e) Verb Compound Affixes: ipa(h)-, kina-...-an, nipa-...-an, nimapa-, pinapa-

The form *ipahwangker* which means 'being sold' consists of the stem *wangker* 'sell', the prefix *i*- and the prefix *pah*-. The prefix *i*- functions as an instrumental passive former; the prefix *pah*-also functions as a passive former but also in a moderate tense. The combined meaning of the two prefixes is to state that the activity mentioned in the stem is being applied to something.

Another example: *ipahlawa?* 'being climbed'

ipahaten 'being transported'

ipahteles 'being purchased'

The form of *kinatekelan* which means 'asleep' consists of the stem *tekel* 'sleep', the confix *ka-...-an* and the infix *-in-*. The confix *ka-...-an* functions as a passive former that states unintentional or capable, while the infix *-in-* functions as a past tense former for verbs in passive form. The combined meaning of the two affixes, namely stating an unintentional activity or one that was able to be done in the past.

Another example: kinawou?an 'smell'

kina?ayoan 'achieved'kinatelesan 'bought'kinationan 'caught'

The form *nimapatepi* which means '(has) ordered to sweep' consists of the base *edge* 'sapu', the prefix *mapa*- which functions as a verb former with the meaning of ordering to do what is stated in the base, and an allomorph of the infix *-im*- which functions as a past tense former. The

combined meaning of the two affixes, namely stating to order someone to carry out the work stated in the base in the past.

Another example: *nimapaturu?* '(have) been told to show you'

nimapateles '(had) ordered to buy it'

nimapawangker '(has) ordered to sell'

nimapawilit '(had) ordered to sew it up'

The form of *pinapawangker* which means '(has been) ordered to sell' consists of the stem *wangker*, the prefix *papa*- which functions as a passive former for verbs with the prefix *mapa*- and which means stating that the activity mentioned in the stem was ordered by someone to do, and the infix *-in- which* forms the past passive tense. The combined meaning of these two affixes is to state that the activity mentioned in the stem was ordered by someone to do in the past.

Another example: *pinapatipu?* '(have) been told to pick'

pinapapurut '(has been) ordered to pick up'

pinapateles '(was) told to buy'

pinapatekel '(have) been told to sleep'

The description above only covers a few examples of the results of combining more than one affix and stem. Observations on the collected data show that various combinations that produce combined functions and meanings can occur in Tombulu language verbs. A special study of the verbs of this language seems necessary to be able to find out to what extent the placement of these combined affixes is possible.

Contrast of Affixes and Words Derived from the Adjective Category (Tombulu)

By paying attention to distribution, function and meaning, so far only the prefixes *ka*-and *maka*- and the infix -*im*- have been found in adjectives in the Tombulu language.

a) Adjective Prefixes: ka-, maka-

The form *kaloang* which means 'very wide' consists of the prefix *ka* - and the base *loanang* 'wide'. This prefix functions to form a superlative. Its meaning is to state the most about what is stated in the base.

Another example: kawuten 'very heavy'

kasela 'very big'

kaeneng 'very lazy'

karindon 'very weak'

There are several forms found in the Tombulu language that at first glance resemble the prefix ka-. However, because the stem has a very different meaning from the form after $the \ ka$ - is attached, these forms are difficult to consider as forms consisting of the stem and the prefix ka-. These forms are as follows:

kawawa? 'very poor' wawa? 'bottom'

kawawo 'very easy' wawo 'above'

kaawes 'suitable' awes 'add'

karuhru 'coward' ruhru 'stab' karioga 'rare' rioga 'unpack'

The form *makararem* which means 'further away' consists of the prefix *maka-* and *rarem* 'far'. The prefix *maka-* is a higher level former. Its meaning is to state a state at a higher level.

Another example: makarorakla 'more cured'

makaratemo 'getting colder'

makapenesl a 'more and more quiet'

makarou?mo 'already further'

The examples above show that the prefix *maka* - is often combined with the clitics *ia* or *mo* when placed on adjectives to form a higher degree of comparison.

b) Adjective Infix: -im-

The infix -im- placed on the adjectives of Tombulu language has a dual function, namely as a marker of past tense and at the same time changing the meaning of the adjective. The meaning that arises from the placement of this infix is very different from the meaning of the base.

Example: timekur 'weak (past tense)' 'slumped'

kimurumbukmo 'already strong' kurumbuk 'hunchbacked'

kimeremuso 'wrinkled' keremus 'dirty'

limeka?mo 'already full' leka? 'fat'

Contrast Of Affixes and Words Derived from the Adverb Category (Tombulu)

By using the same analysis method as the previous types of words, so far the only affixes found concerning adverbs are the prefix ma- and the confix ka-...-an.

a) Adverbial Prefix: ma -

The following forms are marewe-rewek 'quickly'

matowo-towo '(say) not true'

malake-laker 'often'

Consists of the prefix ma- and reduplication of the base. The function of *ma*- and reduplication is as an adverbial former. Its meaning is to explain the condition mentioned in the base. So far only a few examples have been found.

The following forms: kawengian 'night'

karepoan 'too late'

kawondoan 'early'

consists of the confix *ka-...-an* and the bases respectively *wengi* 'night', *repo* 'afternoon', *wondo* 'morning'. This confix forms an adverbial from an adverbial and its meaning is to provide certain information on the condition mentioned in the base. So far only the examples above have been found.

Reduplication

In the Minahasa language, Tombulu dialect contains complete reduplication and partial reduplication. Based on the data obtained, the most common reduplication is in the form of partial reduplication. The following describes the reduplication found in the categories of nouns, verbs, adjectives, and adverbials.

Noun Reduplication

In the form of *wiwilit* 'needle' there is a repetition of the first syllable of the stem, namely *wilit* 'evil'. This partial repetition functions to form nouns from verbs. In addition to verbs, the formation of nouns by repetition like this can also occur with adjectives.

Another example: lelelon 'a person who is always drunk with longing'

pepenet 'tool for closing' or 'door'

wiwingkot 'answer'

wawangko 'big' or 'thumb'

kakan 'used for eating' or 'kanan'

in the following forms: papa?ayangan 'which is done'

lalaneian 'scrubbing stone'

tetekelan 'bed'

mamawangun 'the one who builds'

lalaya?an 'part of the maengket dance'

reduplication of the first syllable occurs; this reduplication occurs with or without the suffix -an. This reduplication forms nouns from the base of the verb. Complete or nearly complete reduplications also exist, but appear to be very rare. So far the following forms have been encountered:

Tu?a-tu?a 'old-old'

pele-peleng 'everything'

Verb Reduplication

In the following forms: *mahkere-keret* 'shouting'

mahtingka-tingkas 'running around'

mahnuwu-nuwu? 'speaking'
mahase-aseng 'breathing'

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1570 A Contrastive Morphological Analysis of the Tombulu reduplication occurs with the removal of the final consonant of the stem and the attachment of the prefix mah-

. In the following forms: *meleo-leong* 'always playing'

memele-meleng 'always choosing'

memoho-moho 'always chasing away'

manaput-naput 'always wrapping'

menu'tu-nu'tul 'always save'

menganta-antar 'always singing'

reduplication occurs with the removal of the final consonant of the stem and the attachment of the prefix *meN*-. Actually, the changes that occur are not only the removal of the final consonant of the stem but some of the initial consonants of the stem also change due to the attachment of the prefix *meN*-. Here the following stems change:

peleng - meleng

woho -moho

saput - naput

tu'tul - nu'tul

deliver - deliver

in the following forms: *lumuka-lukar* 'will be on guard'

lumampa-lampang 'going for a walk'

tumio-tion 'will hold on'
kumanta-kantar 'will sing'
lumiga-ligaw 'will wonder'

reduplication occurs with the removal of the final consonant of the stem and the attachment of the infix -um-.

In the following forms: *kimia-kiar* 'has been digging-digging'

simawe-sawel 'has changed'
limepe-lepot 'has folded'
kimaha -kahat 'has seized'

rimura-rura? 'have been spitting'

reduplication occurs with the removal of the final consonant of the stem and the attachment of the infix -im-.

In the following forms: *rinepu-repu* 'has been broken'

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pinasu-pasu? 'already heated'

kineto-ketor 'already cut into pieces'

sinapu-saput 'already wrapped' liniga-ligaw 'already questioned'

reduplication occurs with the removal of the final consonant of the stem and the attachment of the infix -in-.

In the following forms: tere-terenen 'straightened out'

rinte-rinteken 'smoothed' tio-tionen 'to hold'

respect-respect?en 'respect-respect'

reduplication occurs with the removal of the final consonant of the stem and the addition of the suffix -en .

In the forms: mahsawa-sawangan 'helping each other'

ma hsio-siongan 'kiss each other'

mahwere-werenan 'looking at each other'

mahale-aleyan 'asking each other'

mahkisu-kisulan 'punching each other'

reduplication occurs with the removal of the final consonant of the stem and the attachment of the confix *mah-...-an*.

In the following forms: peme?o-me?osen 'to rub'

pemahi-mahi?en 'hoe-hoe'

keke-nge?ke?en 'to be laughed at'
penawe-nawelen 'changed-changed'

pengwe-ngawesen 'added-added'

reduplication occurs with the removal of the final consonant of the stem and the attachment of the confix peN-...-en.

The examples above show that the stem is reduplicatated by the removal of the final consonant. The function of reduplication here is to form a verb. Basically, its meaning is to state an activity that occurs repeatedly. Because this reduplication occurs by attaching an affix, the overall meaning is added to the meaning of each attached affix.

In the following forms: *mahpapantik* 'will write'

mahbabaca 'will read' mahiilek 'will see'

mahwiwilit 'will sew'

mahtetekel 'going to sleep'

partial reduplication occurs, namely the repetition of the first syllable of the stem and the attachment of the prefix *mah*-. The function of reduplication accompanied by the attachment of this prefix is to form a verb; its meaning is to state an activity that will take place.

In the following forms: *mahwiwingkotan* 'mutually responding'

Mahkukua?an 'saying to each other'

Mahwiwihi?an 'mutual sneering'

mahsisiongan 'kissing each other'

mahkakarotan 'clawing each other'

reduplication occurs partial reduplication, namely the repetition of the first syllable of the stem and the attachment of the confix mah-...-an. The function of reduplication accompanied by this confix is to form verbs, and its meaning is to express activities that are carried out in a reciprocal manner.

In the following forms: *mahipi-ipi* 'dreaming'

mahwali-wali 'together'

mahera-era 'moving'

mahwuni-wuni 'hiding'

There is a complete reduplication accompanied by the attachment of the prefix *mah*. The function of reduplication accompanied by the attachment of this prefix is to form a verb. Its meaning is to state an ongoing activity. Actually *mahwali-wali* is not a verb but an adverb. Another example similar to this form is *mahtou-tou* 'live-live'.

Adjective Reduplication

Some of the following forms:

pera-pera 'drought, running out'

lake-laker 'mostly'

rangda-rangdang 'slightly red' ruku-rukus 'a bit thin'

is a complete reduplication and some are almost complete reduplication. Complete reduplication occurs if the stem ends with a vowel, while almost complete reduplication occurs if the stem ends with a consonant.

This reduplication does not change the adjective into another adjective, but the meaning of the adjective formed after reduplication is also not exactly the same as the meaning of the base, as can be seen below:

pera 'dry'

laker 'many'
rukus 'thin'

In addition to the reduplication forms above, there are also the following forms:

mawuta-wuta 'very full'

kapasu-pasuna 'it's hot'

kawangun-wanguna 'at its best'

kaketer-keterna 'at its strongest'

These forms consist of prefixes, reduplication of the stem with or without the clitic -na. Both the prefix ma- and the prefix ka- function as superlative formers. The meaning is to state that the condition mentioned in the stem is at the highest level. So far the examples obtained are only those mentioned above. There are similar forms but with different functions and meanings:

maruku-rukus 'to become thin'

marembu-rembur 'getting fat'

mawangu-wangun 'to make (something) good'

The function *of ma*- accompanied by reduplication here is more like a verb former than an adjective former. Its meaning is to change or transform something into what is stated in the stem.

4. Adverb Reduplication

Some of the following forms:

mawali-wali'together'uli-ulit'really'marewe-rewekhurry upmatowo-towoto-pretendmaure-ure'long-long'

matelu-telu 'three of a kind'

Is a complete repetition, namely if the stem ends with a vowel, and some are almost complete repetitions, namely if the stem ends with a consonant. The stem consists of adjectives or numerals. It seems that the function of repetition is to form adverbs. The meaning is to provide information about the state of an activity. The examples above show that except for *uli-ulit*, repetition is accompanied by the prefix *ma-*.

Compounding

There are two types of compound words in the Tombulu language, namely:

1. Compound words that are exocentric, such as

endo wengi 'day and night'

1574 A Contrastive Morphological Analysis of the Tombulu tu?a sombor 'old young'

2. Compound words that are endocentric, such as

Po?po sombor 'young coconut'

popo atep 'thatch hut'

sera ko?ko 'chicken fish'('side dish')

serit nyendo 'sunlight'

The elements in compound words type a) are equal, while in compound words type b), one of the elements is the core. The following describes compound words that are categorized as nouns, adjectives, and function words.

a) Noun

The following forms: *stone rope* 'kolang kaling'

tou tu?a 'grandfather'

lambo? 'thief'

le?os ate 'kind person'

Each consists of two elements that have their own meaning, namely

rope 'rope' stone 'stone' tou 'person' tua' 'old'

lambo? 'long' legend 'arm'

le?os 'good' ate 'heart'

The combination of elements such as the examples above produces a noun form with a special meaning. The elements that form it can consist of noun + noun, noun + adjective, or adjective + noun.

b) Adjective

The following forms: *photo? Lila?* 'clever'

sel ulu 'stubborn'

chatty? 'chatty'

ate frame 'arrogant'

'uncertain 'flooded road

Each consists of elements that have their own meaning:

photo? 'short'

lila 'tongue'

ulu 'head'

nuwu? 'talk'
ate 'heart'
rua 'two'

The combination of the above elements produces an adjective with a special meaning. The constituent elements can consist of an adjective + noun, an adjective + verb or a numeral + noun.

c) Task Words

Compounding by producing task words seems to be rare. So far, only *rua telu* 'kira-kira' has been found.

Who?pira 'some'

rua means 'two' and *telu* means 'three'; *wo*? Means 'perhaps' and *pira* means 'how many'. The elements that form the compound words above are numerals + numerals and function words + function words.

	Tombulu dialect		Indonesian	
1	Affixation		Affixation	
	Prefix	mah-, ma-, me-, ka- , pa-, mei-, maka-, papa-	Prefix	meN-, pe-N, ber-, per-, menge-, ter-, di-, se-, ke-
	Infix	-um-, -im-, -in-	Infix	-el-, -er-, -em-
	Suffix	-an, -mo (-o), -lah, -me (e-), -en	Suffix	-an, -kan, -i
	Conflict	ka-an, pa-an, pe- an, pe-en	confix	peN-an, ke-an, per-an, ber-an, meN-kan, meN-i, se-nya.
	Combined			
	prefix+prefix	ipa-, ipapa-, meipa- , meipapa, meipaka-	prefix+prefix	-
	prefix+infix	pina-, kina-, mina-, pinaka-, pinapa-, minapa-	prefix+infix	-
	prefix+suffix	maka-en, papa-en, paka-an, papa-an, paka-mo-me, maka-an	prefix+suffix	memper-kan diper-kan diber-kan
	prefix+infix+suffix	pinapa-an, pinaka- an, pinapa-en, mina-an, minaka- mo, pinapa-anolah, kina-an	prefix+infix+suffix	

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Table 2. Morphological Contrast of Minahasan Language Tombulu Dialect – Indonesian Language based on Affixation

Sources: Authors 2025

Tombulu dialect		Indonesian	
Reduplication			
Intact	pera-pera 'kering- kering' rate-rate 'dingin- dingin'	Intact	long-long small-small children houses
Partial (Partial Loop)			
Partial with prefix	ma- mawuta-wuta mawuni-wuni	Partial with prefix	-
Partial with infix	-um- lumuka-lukar Kumantar-kantar Sinapu-saput	Partial with infix	fingers rope get married
Partial with suffix	-nen -men -r -s tere-terenen tio-tionen nara-naramen lake-laker ruku-rukus	partial with suffix	-an rocking horse
reduplication with confix	ka-en ka-na kawangun- wangunen kapasu-pasuna	reduplication with confix	to-an, bluish
reduplication with multiple affixes	Mahwiwingkotan pengeke- ngeke?en mahkakarotan	reduplication with multiple affixes	-
ka+reduplication+na	kapasu-pasuna kawangun- wangna kaketer-keterna	se+reduplication+nya	the best as soon as possible as wide as possible
Copy Voice Loop	-	Copy Voice Loop	back and forth twists and turns colorful riot

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			full-bodied
	-		scribbles
			get married
			side dishes
			vegetables
	-		cheers
Synonym Recurrence		Synonym repetition	
	-		customs
			politeness
			origin
			orphan

Table 3. Morphological Contrast of Minahasan Language Tombulu Dialect – Indonesian Indonesian Language based on Reduplication

Sources: Authors 2025

	Tombulu dialect		Indonesian	
3.	Compound Words		Compound Words	
	Exocentric (does not contain core elements)	endo wengi tu?a sombor tali watu	Exocentric	husband and wife old young scorch to the ground
	Endocentric (two elements that are both core)	po?po sombor popo atep sera ko?ko serit nyendo sela ulu	Endocentric	greenhouse yellow complexion airplanes

Table 4. Morphological Contrast of Minahasan Language Tombulu Dialect – Indonesian Indonesian Based on Compound Words

Sources: Authors 2025

Conclusion

This study successfully identified and explained the morphological differences between the Tombulu dialect of Minahasa and Indonesian, focusing on key aspects such as affixation, word formation, reduplication, compound word structure, and unique morphemes. The findings show that although both languages belong to the Austronesian language family, there are significant differences in morphological structure and usage that need to be understood in the context of local language teaching, particularly in designing teaching materials for local languages. The Tombulu dialect, compared to Indonesian, has a more complex and diverse morphological system. The process of affixation and word formation in Tombulu is more complicated, with different rules and structures from Indonesian. In addition, the process of reduplication and compound word formation in Tombulu dialect shows striking differences, illustrating unique linguistic characteristics. Understanding these morphological differences is important in designing effective teaching strategies, especially for the younger generation who will be the successors of local language use. The revitalization of the Minahasa language, particularly the Tombulu dialect, through the development of morphology-based learning models, as well as the

provision of resources such as learning modules and digital applications for pronunciation and lexicon reference, are important steps in language preservation. This research also contributes to the development of a more structured and applicable local language teaching methodology, taking into account existing linguistic differences.

Nonetheless, this study has some limitations, including that it only focuses on the Tombulu dialect, so it does not represent other Minahasa dialects or other local languages in Indonesia. Future research could expand the scope by examining other dialects and languages to gain a broader understanding of regional language diversity. In addition, this study relied more on linguistic analysis with limitations in exploring socio-cultural factors that influence language use. Practically, this research is useful for educators, policy makers, and language revitalization practitioners. The results of this study provide a theoretical foundation for curriculum and material development that integrates the morphological complexity of regional languages. The development of digital tools and resources for language learning can also contribute to the sustainability and revitalization of regional languages.

Overall, this research makes a significant contribution to the understanding of morphological differences between the Tombulu dialect and Indonesian, as well as providing insights that can be applied in the development of local language teaching methodologies and language preservation.

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