



RESEARCH ARTICLE

Section: *Language and Linguistics*

The phenomenon of Arabic language absorption into Mandailing language: An autosegmental phonology analysis

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*Correspondence: rahlina@usu.ac.id**ABSTRACT**

Around the 7th-8th century AD, Arabic began to influence the Mandailing language when the influence of Arabic appeared together with the influence of Islam brought by Arab traders and preachers which resulted in language contact. In the 7th century, the Arabs had come to Indonesia to trade and mostly broadcast Islam. This study attempts to explore Arabic language absorption of words into the Mandailing language. This study employed qualitative approach. There are six (6) informants in this research. This study was conducted in Kotanopan, Panyabungan, and Padang Sidempuan city. From the analysis, it was found that the first phenomenon is that the absorbing language accepts foreign phonemes as they are without any changes. Then the second phenomenon is that the absorbing language makes phonological modifications to foreign phonemes and replaces them with the phonemes of the closest speakers of the absorbing language. The third phenomenon is a change by fully adjusting to the absorbing language. This research will provide knowledge for the community that many Arabic words are absorbed into Mandailing. This shows that there are features of Arabic compared to other foreign languages that can enrich the Mandailing language vocabulary.

KEYWORDS: absorption, absorption process, Arabic, autosegmental phonology, Mandailing

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1. Introduction

1.1 The Background of the Study

Mandailing is the name of a region located in the southernmost and western part of North Sumatra province, bordering West Sumatra province. Mandailing is located at 00 13'30"-01 20'24" north latitude and 98 50'30"-99 57'19" east longitude with boundaries north of the border of South Tapanuli district (Batang Angkola sub-district, Barumon, West Padang Sidempuan, Sosopan, and Silaen sub-district). South bordering South Tapanuli Regency (Sosa sub-district) and Pasaman Regency of West Sumatra Province. The south is bordered by Pasaman Regency of West Sumatra Province, and the west is bordered by Batang Natal District and Natal District of Mandailing Natal Regency (Pulungan, 2008: 41). Before the Mandailing region became a regency (1998), it was still included in South Tapanuli Regency. The establishment of the Mandailing Natal Regency and its separation from the previous Regency was a long struggle carried out by the Mandailing nation (tribe) since the Dutch Colonial period. The Mandailing region is in the interior, but in the west, it is directly related to the west coast of Sumatra; on this west coast, there is a port or Bandar Natal that can connect the outside world.

Contact with the outside world was made through this port centuries ago. It is also the gateway for the entry of new ideas and the entry of Islam into the Mandailing hinterland. The position of the port of Natal is strategic for marketing crops such as spices, which since the 7th-8th centuries AD have long been carried out in parts of the coast of the archipelago, especially in the Malacca Strait. Thus, when connected with the location of the city/port on the west coast of Sumatra through from Samudera Pasai (Aceh), then Barus, Sibolga, Natal, and Padang Pariaman (West Sumatra), all of which are on the west coast of Sumatra. So, the theory of trade routes used in analyzing the history of the entry of Islam into the archipelago becomes stronger, that Islam has also entered the Natal area, then introduced by Muslim traders to the interior of the Mandailing region (Pulungan, 2008: 41).

The location of the Mandailing region, which is directly adjacent to the Minangkabau region (West Sumatra), contributes greatly to the Islamization process in the interior of Mandailing, Angkola (South Tapanuli), and up to the border of North Tapanuli (Batak Toba). The development of Islam in this region is always associated with the Padri War in Minangkabau West Sumatra in 1821-1837. Mandailing people call it Ugamo Padori or Bonjol religion because the development of Islam was carried out by Padri warfighters from Bonjol Minangkabau. Some see the arrival of Padri fighters from Minangkabau as a war aggression to occupy Mandailing territory into its territory, and some see it as an expansion of Islamic religious development. The first perception arises from the traditional/customary government that has been running all this time, and the second perception arises from most people who accept Islam peacefully (Pulungan. 2008: 42).

The presence of Islam in the Mandailing Natal area, South Tapanuli Regency, has brought great changes and progress to civilization and culture with its recommendations that Muslim communities constantly try to change their fate and work, master and prosper the earth, do good, and stay away from evil (Hasibuan, Achiriah, & Solihah, 2023; Kasman, 2021). This advice is conveyed through da'wah delivered by Islamic religious experts. So this da'wah activity resulted in the interaction between Arabic into the Mandailing language, continuing with the entry of Arabic into the Mandailing language as a form of language absorption, especially in the barrel of Islamic religion. The definition of barre,l according to Moeliono (1985) refers to a variety of language that is viewed from the point of view of its feasibility in various types of language use situations.

Kridalaksana (1985) states that word absorption is a "loan," which is a sound, phoneme, grammatical element, or lexical element taken from another language. Language absorption is common and inevitable because language is used as a vehicle for language speakers to communicate and interact with each other. Around the 7th-8th century AD, Arabic began to color the Mandailing language when the influence of Arabic appeared together with the influence of Islam brought by Arab traders and preachers, which resulted in language contact. Language contact that occurs between one society and another will affect the language concerned. Language contact cannot be separated from the cultural contact that happens, even seen as one aspect of cultural contact. Language contact is defined by Thomason (2001, p.2) as "the use of more than one language at the same place and time." Thomason further says that the term language contact is applied to such situations where speakers of the same language interact with speakers of a different language. Language contact occurs due to the spread of languages through conquest, migration, trade, globalization, and colonization (Mesthrie, 2009). It is a very common phenomenon and when one language comes into contact with another language, then both

will influence each other.

By the 7th century, Arabs had come to Indonesia to trade and, mostly, to broadcast Islam. Arabic vocabulary was widespread and understood by many people in their daily communication. Because of this, the influence of Islam on Mandailing Natal and South Tapanuli Regency and its surroundings has indirectly spread Arabic through writing and translating religious books written in Jawi writing. Thus, the Arabs automatically interacted with the Indonesian people, resulting in Arabic as the Quran's language, which is read daily in prayer readings, greatly influencing the mandailing language vocabulary. In addition, Arabic terms, especially those related to Islam, such as terms of philosophy, tawhid, and tafsir, are absorbed into Mandailing as a result of the education received by the community.

Studies show that Arabic loanwords in Indonesian are predominantly related to Islamic concepts, morality, and cultural practice (Mardiana, Zurin, & Ulfa, 2024; Muassomah, 2023). The absorption process often involves semantic changes, including meaning expansion, narrowing, or total alteration (Ukhrawiyah, 2019). Factors contributing to these changes include technological advancements, socio-cultural developments, and differences in usage contexts. Arabic ranks third in loanword contribution to Indonesian, after Dutch and English, with approximately 1,495 words (Pantu, 2014). The influence extends beyond vocabulary to include the use of Arabic script in various Indonesian texts and impacts on syntax, particularly in Qur'anic translations. This linguistic absorption reflects the historical and cultural ties between Arabic and Indonesian societies, enriching local expressions and communication (Mardiana et al., 2024).

Many Arabic words are absorbed into Mandailing. Researchers listening to Mandailing speakers observed that the vocabulary words *rasoki*, *faraid*, *kurgan*, and *masjid* are taken from Arabic, namely *rizqi* and *faraid*, Qur'an. It can be seen that the Arabic language that enriches Mandailing's vocabulary which is not all elements of vocabulary that are accepted intact. Still, some are absorbed through letter adjustments and pronunciation or pronunciation. This happens because the two languages have different sound systems and sound symbols (Eckman, Elreyes, & Iverson, 2003; van Heuven, 2008). The difference in sound between the two languages is caused by the existence of sounds in Arabic that Mandailing does not own. Similarly, the sound symbols between the two languages are not the same. Arabic has a sound symbol called *hijaiah* letters (Wisesty, Mubarak, & Adiwijaya, 2017), while Mandailing uses a sound symbol called *alphabet*. Thus, the elements of absorbed vocabulary are elements of a language (language of origin) that enter and become part of another language (receiving language), which is then used by the speakers as if it were their language.

Phoneme variations occur at the phonological level through different phonological patterns, such as addition, deletion, substitution, and epenthesis (Kerswill, 1987; Lacheret-Dujour, 1989; Munson, 2010; Oshika, Zue, Weeks, Neu, & Aurbach, 1975). Phonological changes occur during the adaptation of foreign words. Haugen (1972) argues that speakers of the receiving language understand foreign word patterns by changing them according to the sound patterns of their language. It is further argued that speakers of the recipient language change the sounds of their native language that are closest to the sounds of the other language. Sipra (2013) states that foreign words are adopted according to the sound closest to the original sound or perhaps with some phonological changes. Related to this, Al-Qinal (2002) states that foreign words are adopted or adapted. If words do not change their original form and pronunciation, then they are adopted. If foreign words are phonologically changed, then it is an adaptation. Some phonological processes are substitution, deletion, addition, assimilation, and epenthesis (Hall, 2020; Mndeme & Ligembe, 2022; Mose, 2021). Many researchers have described the process of phonological change (Diani & Azwandi, 2021; Ramsammy, 2015; Sen, 2016), but they did not observe Mandailing language.

Lenition is the change from a strong sound to a weak sound (Bauer, 1988; Cyran, 2008; Harris, Urua, & Tang, 2023). Some sounds are relatively stronger, and some sounds are relatively weaker than other sounds, voiced sounds are considered stronger sounds than voiceless sounds. Inhibited sounds are stronger than continuous sounds. Consonants are stronger than semi-vowels. Oral sounds are stronger than glottal sounds, and front and back vowels are stronger than central vowels. This type of Arabic sound change can be seen in Malay (Al Qarni, Syed Jaafar, & Hamdi, 2023; Ali Huddin & Sapar, 2022; Mawaridi, Mohamad Isa, & Hassan, 2024), such as the word *رَيْدَة* /*riḍa:*/ becoming [rela]. In this example, there are two weakening sounds, namely, the vowel sound /i/ becomes the vowel sound /e/, and the velar dental consonant sound /d/ becomes the alveolar consonant sound /l/. Other examples can be seen in Malay pronunciation where some Arabic phonemes which

are originally “strong” have been sounded “weak,” such as the phoneme /ʃ/ in the word قحص /ṣihḥah/ to /sihat/, ربح /ṣabr/ to /sabar/, /قُبْيَصُم/ to /musibah/ is pronounced with the phoneme /s/. This form of phoneme change in this type of lenition is also discussed by Beg (1979) regarding the change in the sound of the uvular phoneme /q/ in the word قُبَّح /qubbah/ to /kubah/, the word قَدَّع /qaḥḥidah/ to /kaedah/ is pronounced with the phoneme /k/. So, this study attempts to explore Arabic language absorption of words into the Mandailing language.

2.1 Theoretical Basis

2.1.1 Word Absorption

Word absorption is a multifaceted concept explored across different domains. In linguistics, it refers to the integration of standard language words into recipient languages (Sawek & Muhibah, 2019). This process involves sound and spelling adjustments, leading to vocabulary expansion and language integration over time. Absorption is the process of taking vocabulary from a foreign language (Muassomah, 2023; Yaacob et al., 2014).

Loanwords are vocabulary taken or absorbed from one donor language with adjustments to the existing methods in the absorbing language (model). This lexical borrowing process is prevalent in many languages (Hosokawa, 2023; Schoonheim, 2021). Loanwords can significantly impact vocabulary size test scores, with their inclusion generally yielding higher scores, especially for less proficient learners (Laufer & McLean, 2016). The journey of loanwords across languages can lead to changes in form and meaning, sometimes rendering them unrecognizable in their original language (Garrett & Johnson, 2013; Schoonheim, 2021).

2.1.2. Language Absorption Process

The process of absorption is found in many languages worldwide. Many languages take words from other languages and integrate them. Absorption from one language to another can occur lexically. In the process of lexical word absorption, the process of sound absorption will also be carried over until the word finally changes its sound when it has been absorbed into another language.

Let us examine the absorption of Arabic vocabulary into the Mandailing language. It will be seen that the Arabic vocabulary that enriches Mandailing language vocabulary is not all elements of vocabulary accepted as a whole. Still, some are absorbed through letter adjustments and pronunciation or pronunciation. This happens because the two languages have different sound systems and sound symbols. In fact, these two languages have different families, namely the Semitic family and the Austronesian family. The difference in sound between the two languages is caused by the existence of sounds in Arabic that Mandailing does not own. Likewise, the sound symbols between the two languages are not the same. Arabic has a sound symbol called hijaiyah letters, while Mandailing uses a sound symbol called the alphabet. Thus, the elements of absorbed vocabulary are elements of a language (language of origin) that enter and become part of another language (recipient language), which is then used by the speakers as if it were their language.

When a language is absorbed into another language, one of three phenomena will occur, namely (i) Full Absorption (Well-Integrated Loan Words), (ii) Partial Absorption (Partially-Integrated Loan Words), and (iii) Absorption by changing (Modified-Integrated Loan Words) (Amrulloh & Humairo, 2020; Aprilianti, 2018; Sawek & Muhibah, 2019). What is meant by the first phenomenon is that the absorbing language accepts foreign phonemes as they are without any changes. The second phenomenon is that the absorbing language makes phonological modifications to foreign phonemes and replaces them with the phonemes of the closest speakers of the absorbing language. The third phenomenon is a change by fully adjusting to the absorbing language.

The phonological process is the core of linguistic borrowing because it has a varied phonological system. An absorption word that enters the absorption language from the source language can hardly be separated from the phonological process because it must be modified to match the phonology of the absorption language.

2.1.3 The Process of Sound Change

There are several types of sound changes, namely (a) lenition, which consists of the removal of consonant clusters (cluster reduction), apocope, syncope, haplology, and compression; (b) sound addition which consists of anaptyxis, epenthesis, and prosthesis, (c) metathesis, (d) fusion, (e) unpacking, (f) vowel breaking, (g)

assimilation, (h) dissimilation, (i) abnormal sound change (Blevins, 2006; Garrett & Johnson, 2013; McMahon, 1994). The theory of sound change proposed concerns the level of words, phrases, and sentences. Furthermore, voiced sounds can be considered stronger than voiceless sounds (Raphael, Dorman, Freeman, & Tobin, 1975; Yamauchi, Shinohara, & Tanaka, 2019). Inhibited sounds are stronger than continuants, consonants are stronger than semi-vowels, oral sounds are stronger than glottal sounds, and front and back vowels are stronger than central vowels. When phonetic changes occur, it is often in the direction of strong sounds to weak sounds. That is, we will more often find a change from the phoneme [k] to [ʔ], as opposed to [ʔ] to [k]. Of course, this kind of change is possible, though less likely. This rarer type of sound change can be referred to as fortition to distinguish it from lenition. So, for example, we can say that the final consonant of the English word [naive] has undergone fortition in Tok Pisin, where it is adapted to [naip]. The change of [b] from [p] to [f] in Kara is a good example of lenition: [bulan] becomes [fulan].

2.1.4 Autosegmental Theory of Phonology

Goldsmith as stated in Leben (2018) mentions that created the theory of autosegmental phonology is used for analyzing tonal sounds. The theory was used to prove the existence of autosegments for each high or low tonal segment. The theory of segmental phonology at an early stage shows the tonal system organized into a sequence of segments (sequence of segments) High or Low on the tonal tier (tier) associated with segments on the C-V sequence. These High and Low segments are independent of the C-V sequence in terms of their application. The principles of the autosegment theory of phonology include phonetic features classified as autosegments that correspond to segments in the C-V row the same as the tone sounds. If the tone sound is classified as an auto segment, then on the tone series, the word “suprasegment” in the original sense (which distinguishes the meaning between tone sound and segment) need not be used anymore.

In this autosegment phonology theory, the segment is considered the smallest sound unit located at the lowest stage. This stage is associated with a series of - another series to explain a sound. Thus, the theory of phonology autosegment can be considered as a theory of phonology is very complex and is held as a multilinear phonology or non-linear phonology (non-linear phonology) which organizes phonetic features into large units for phonemes, even each phoneme is arranged according to a linear sequence.

From the point of view of the development of theory, some facts can state that the theory of segmental phonology has been more advanced when compared to the theory of generative phonology. These facts can be explained as follows :

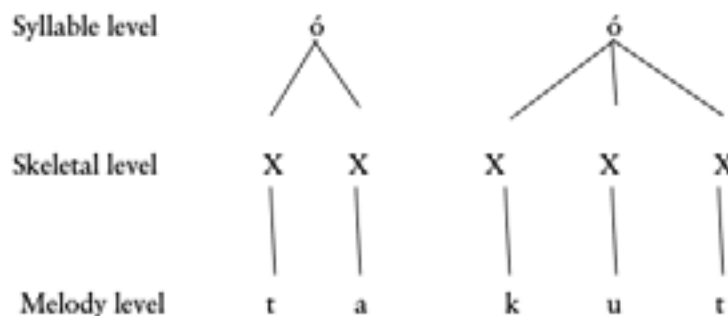
- a. Shows the continuity between abstract sounds (phonology) and concrete sounds (phonetics) clearly.
- b. Reduce the abstract nature (abstractness) of the sound on the internal structure.
- c. Avoiding difficulties in compiling a formula for sound changes that are specific formulas for a language (language specifics rule ordering).

In addition to the above, autosegment phonology theory has closely linked phonological analysis with speech production, perception, and language acquisition. This includes morphology and syntax by showing various relationships, both synchronic and diachronic. In other words, the theory of autosegment phonology can be regarded as the theory that opened a new era for the growing fields of phonetics and phonology (Bird & Ladd, 1991).

Fundamental to this autosegmental theory is that phonological representation consists of two or more levels. There are levels characterized as KV-stratum level, melody level or phoneme level, and X-stratum level. Each of these levels has its own set of segments. The term segment in generative phonology is different from what is understood in standard and structural theories. Segments no longer only refer to phoneme units but can also be used to refer to tones, consonants, vowels, syllables, and other units (Ahmad, 2005).

The process of segment linking can be seen in the following representation.

Figure 1: Autosegmental representations that produce grammatical forms



(Ahmad, 2005)

The representation above shows three segments: the melody-level segment consisting of the phoneme, the skeletal-level segment consisting of the C (consonant) and V (vowel), and the syllable-level segment represented by \acute{o} . A connecting line will connect these segments at different levels. To produce a precise and grammatical form, the universal convention of Well-Formedness Condition (WFC) requires that the connecting lines should not cross (Ahmad, 2005). This shows that vowel sounds are connected to the V gatra, and consonant sounds are connected to the C gatra.

Autosegmental theory, according to Ahmad (2005), was introduced to deal with problems related to aspects of phonology. The basic form of this theory is that the representation of phonology consists of two or more levels (tiers), and each level contains a separate string of segments. In phonology, the tiers are the CV level and the melody level, also known as the phoneme level. The CV level or syllable level explains that K represents consonants and V represents vowels. This syllable level is also called the skeletal tier or feature level. In contrast, the melodic level is the level of segments that represent phonemes rather than a morpheme or syntax.

In the formation of the phonological process, there will be lines in the representation of syllables that symbolize or give something meaning. Here are some symbols used in the Autosegmental formula.

- = | association line. It is used to connect two autosegments that show the articulatory apparatus working together (at the same time) for the same sound.
- = |... dotted line as a spreading feature. Used to show the spread of segment relationships from one stage to the next and never had a previous relationship. (used for feature assimilation or sound change process).
- = | cancellation line. Used to cancel the relationship between autosegments (used = in sound changes or shifts)
- = X
|
Ø omission. Used to indicate the omission of a segment.
- = C Consonant
- = V vocal
- = σ syllables

(Chaiyanara, 2007)

Ahmad (2005) states that in autosegmental theory, tone features are represented at different stages or levels

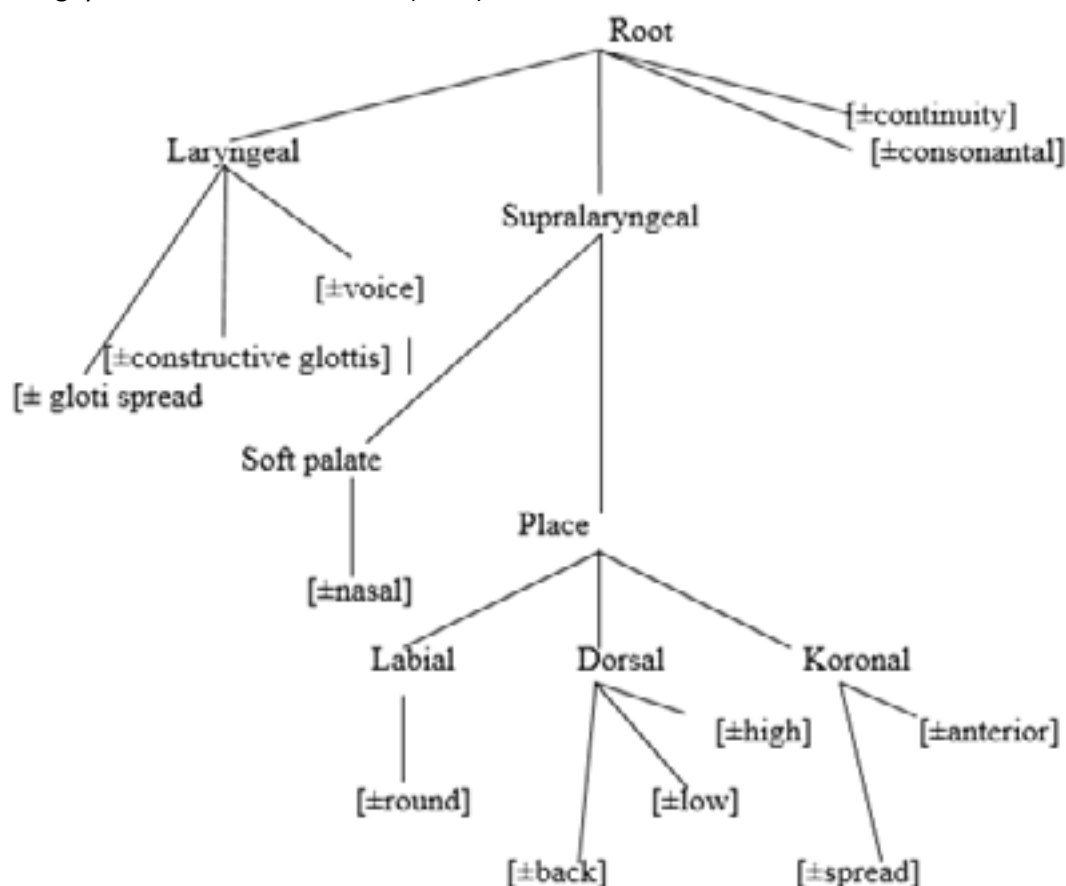
than segmental stages or levels. So, the link between segmental stages is indicated by association lines. These association lines are associated (coregistration) with the phonetic features of an utterance. This line is connected or related to phonetic features. One stage is correlated with another stage; for example, a tone segment can be associated with a vowel segment.

2.1.5 Sagey's Distinguishing Features (1986).

This representation describes the structure of how to produce a language, especially generating phonemes originating from the lungs through the vocal cords, earrings (glottis), nasal cavity, and oral cavity. Phonemes produced through the nasal cavity are known as nasal sounds, and phonemes through the oral cavity will go through the articulation areas of dorsal, coronal, and labial.

The following is a picture of the distinction feature tree of the Sagey Model (1986).

Figure 2 Sagey's Distinctive Feature Tree (1986)



(Sagey (1986))

Figure 2. above is an image of Sagey's (1986) tree of distinguishing features supported by roots. The root has nodes that control [±continuous] and [±concordant] features in addition to learning nodes and supralaryngeal nodes. Furthermore, the supralaryngeal nodes are divided into soft palate nodes and regional nodes. In the regional nodes, there are three main articulations: labial, coronal, and dorsal. The labial terminal contains labial consonants. The dorsal terminal also consists of the vowel features of high, low and back. The coronal also houses the anterior and spread. The autosegmental approach is used specifically to analyze the Lenition phenomenon that occurs in vowels and consonants in Arabic absorption words in Mandailing.

3. Methodology

This research used a qualitative approach that uses a descriptive research design to investigate phoneme changes in Arabic words absorbed into Mandailing based on facts obtained in the field. In this study, the use of these methods can provide a complete and accurate picture of the Arabic vocabulary absorbed in Mandailing. This research is a field research that aims to find out in depth the Arabic words absorbed into Mandailing through

Mandailing ethnic speakers informants who are in Kotanopan, Panyabungan, and Padang Sidempuan city. The Autosegmental Phonology Theory will be used in the phonological processes that occur in the absorption of Arabic into Mandailing. This theoretical model provides a clear picture of the phonological processes by that appear in the Arabic word absorption into Mandailing.

3.1 Data Collection Method

Given the large number of Mandailing language speakers and the vast area of Mandailing language use, as well as the limitations of energy, time, and money, the data source in this study was determined by selecting a portion of the population of Mandailing language speakers. Researchers chose a portion of all Mandailing language speakers or Mandailing language usage areas that became the object of research as a representative that made it possible to make generalizations about the population that was used as a research sample. Therefore, researchers took six informants from 3 Mandailing language use areas as research samples, namely two people from the Kotanopan, two people from Panyabungan city, and two people from the Padang Sidempuan area. This sample (the area used for research) because this area is a common area of use.

The method of providing data in this study is the listening method, which is a way of obtaining data by listening to the use of Arabic words by Mandailing language speakers informants and listening, in this case listening to spoken language. This method has a basic technique in the form of tapping techniques because, in essence, listening is realized by tapping in the sense that researchers try to get data by tapping Mandailing speakers in pronouncing Arabic vocabulary from several informants through recordings. Furthermore, this tapping technique is followed by the method of *simak bebas libat cakap*, where the researcher only observes the use of Arabic by informants as well as recording. The sample consists of 90 Arabic words selected purposively.

3.2 Data Processing

Recordings in the form of Arabic words or word order absorbed into Mandailing were listened to repeatedly to obtain the absorption process that occurred and sorted based on the type of sound change. Arabic words absorbed into Mandailing are transcribed based on the IPA (International Phonetic Association) international phonetic symbols. IPA symbols function to describe the detailed features contained in Arabic words and word order that are considered to have phoneme changes in phoneme adjustments in the absorption process into Mandailing.

3.3 Data Analysis

This research uses data analysis with qualitative rules. Neuman (2003: 38) explains how qualitative data analysis is described, namely how it has moved to a more explicit and systematic step-step approach. The data is organized based on Crowley's (1992) type of sound change from Arabic absorbed into Mandailing. It is then described through the process and pattern of Arabic absorption, which includes the Autosegmental phonological process.

The principle of phonological analysis used in this study is the principle of phonological naturalness to describe in detail the phonological processes that occur in phoneme changes from both languages, namely Arabic, which is absorbed into Mandailing. The principle of phonology in this study plays an important role in choosing the output representation (output structure).

4. Results and Discussion

Based on the results obtained from the research field in Padang Sidempuan district, Mandailing Natal Regency, researchers obtained 90 Arabic vocabularies absorbed into Mandailing through 3 informants. From these data, it was found that there was a phonological process in the absorption of words from Arabic into Mandailing, including Lenition and Fortis.

4.1. The Process of Arabic Absorption into Mandailing Language.

The phonological process is the core of linguistic borrowing because it has a varied phonological system. The absorption word that enters the absorption language from the source language can hardly be separated from the phonological process because it must be modified to match the phonology of the absorption language.

Arabic vocabulary absorbed into Mandailing undergoes several absorption processes as follows.

1. Lenition and Fortisi

Lenition or sound weakening is a change from a strong sound to a weak sound.

While fortisi is a change from a weak sound to a strong sound.

Based on the data obtained in the field, some words experience sound changes in strong vowel sounds into weak vowels and vice versa, some of which can be seen in Table 1 below.

Table 1. Sound changes in strong vowel sounds into weak vowels and vice versa

No.	Arabic	Mandailing	Phonological Process
1.	شريعة [ʃari:ʃatun]	sare'at [sareʃat]	Replacement vowel. high. long. /i:/ → vowel. low. [ɛ].
2.	دفاع [dufa:ʔun]	doah [dʔah]	Replacement of high vowels. /u/ → low vowels [ɔ].
3.	فرايد [faraʔid]	Piraid [piraid]	The middle vowel sound changes/a/ → high vowel [i].
4.	خواتير [xawa:ʔir]	Kuwatir [kuwatir].	Replacement of middle vowel /a/ → high vowel /u/.
5.	رمضان [ramadɑ:n]	Romodon [romodon]	Middle vowel replacement. /a/ back vowel.[ɔ].

The data above shows the replacement of vowel sounds of Arabic absorption words into Mandailing.

Based on the data (1) above, it can be seen that there is a replacement of vowel sounds. High, back, long, unrounded /i:/ becomes a low, front, unrounded vowel. [ɛ]. In data (2), the high, front, rounded vowel sound /u/ is replaced with a low, back, rounded vowel sound [ɔ]. Then data (3) shows the replacement of the middle vowel sound, center, unrounded. /a/ becomes a high, front, unrounded vowel [i]. Furthermore, data (4) occurs in the process of replacing the middle, central, unrounded vowel sound /with a high, back, rounded vowel /u/. Similarly, data (5) replaces the middle, central, unrounded vowel sound /with a back, low, rounded vowel [ɔ]. Thus, the process of Lenition change or sound weakening that occurs in the above-mentioned absorption words is the change of high vowel sounds into low vowels. Vice versa, the central vowel sound turns into a back vowel as a form of fortition.

The process of replacing the high, front, long, unrounded vowel sound [i:] with a low, front, unrounded vowel [ɛ] in the Arabic absorption word into Mandailing can be seen in its representation in autosegmental phonology as follows.

Based on Sagey's (1986) model, the replacement of high, front, long, unrounded vowels [i:] with low, back, unrounded vowels [a] in the data above can be formulated as in Figure 3 below.

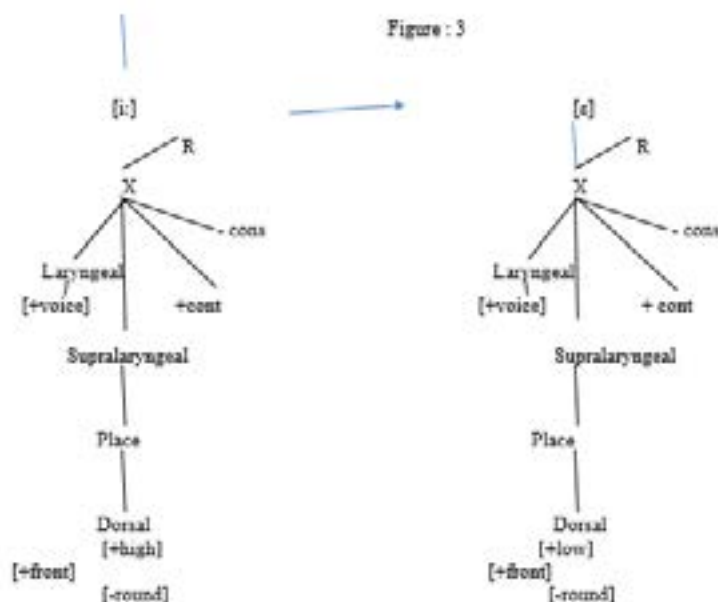


Figure 3. Replacement formula of high, front, long, unrounded dorsal vowel [i:] in Arabic with the low, front, unrounded dorsal vowel [ε] in Mandailing

Figure 3 above is a formula for replacing the high, front, long, unrounded vowel sound /i:/ with a low, front, unrounded vowel /ε/. This replacement shows a change in the features possessed by the vowel phoneme /i:/, namely [+silabic, +high, +front, -round, +long+dorsal] to features [+silabic, +low, +front, -round, +dorsal] which is shaded by the dorsal node in the hierarchical tree image above. This results in the change of the feature [+high,+long] on the vowel [i:] to the feature [+low] on the vowel [ε]. The change is in data (1) where the word سُارِيسَاتُون [ʃari:ʃatun] in Arabic becomes sareʔat [sarɛʔat].

In this case, the Mandailing language makes phonological modifications to foreign phonemes, namely Arabic phonemes, and replaces them with phonemes that exist in the closest Mandailing language speakers. The similarity can be seen in the closeness of the features of the two vowel phonemes, which both have the same features [+sonorant, +front, -round, +dorsal].

The data (1- 5) above can be illustrated using Levin's (1985) syllable-level representation, as in Figure 4 below.

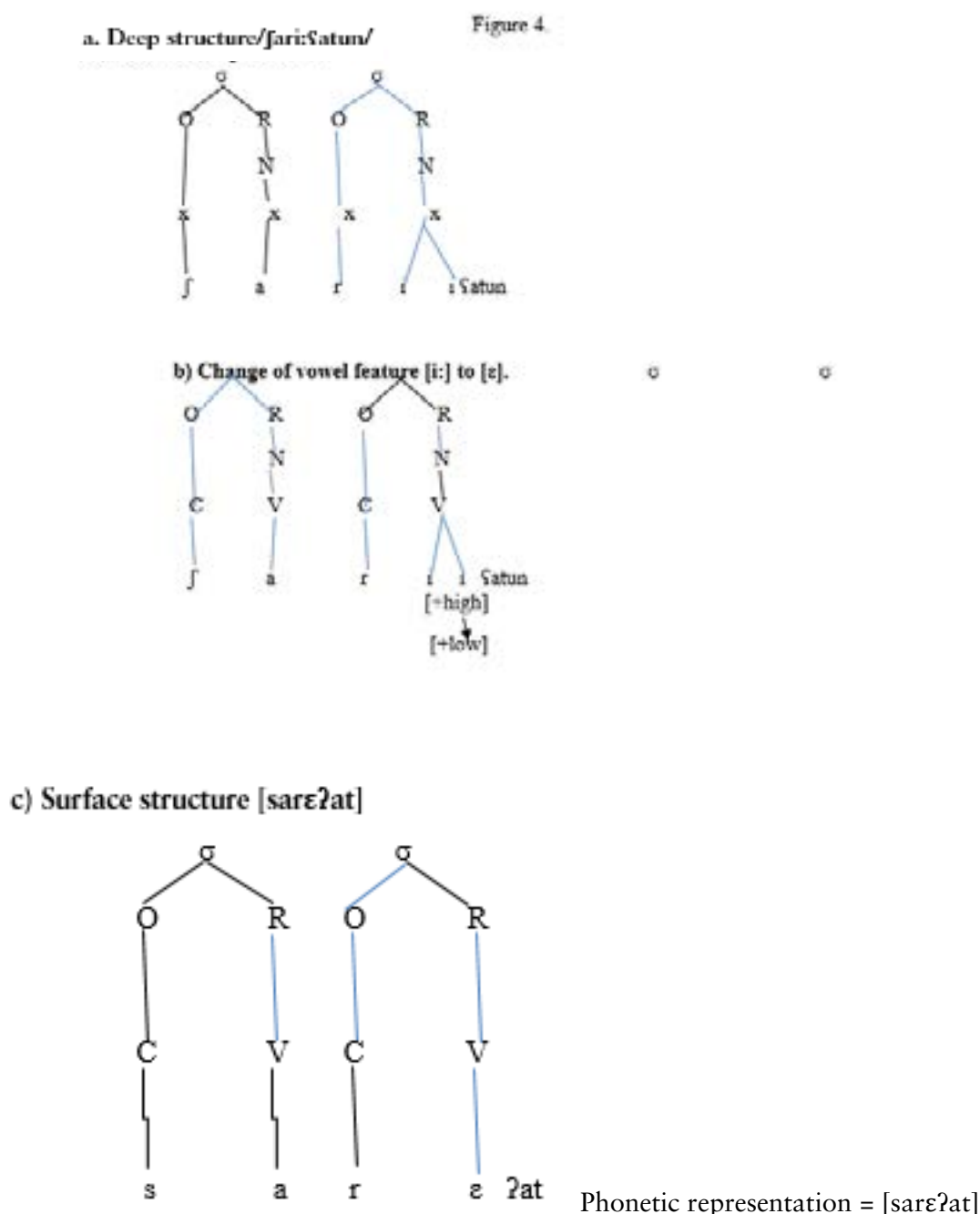


Figure 4. Representation of vowel change /i:/ [+high, +front, -round, +long+dorsal] □ vowel [ε] [+low, +front, -round, +dorsal] in the word ʃari:ʃatun □ [sarɛʔat].

From Fig. 4(a) above, it can be explained that the Arabic high, front, long unrounded vowel /i:/, which has the distinguishing feature [+high, +long] that occupies the nucleus position, consists of two vowels [i] which expresses the length at the end of the open syllable in the word /ʃari:ʃatun/ changes into a low, front, unrounded vowel /ɛ/ in Mandailing because the feature [+high, +long] changes into the feature [+low] in figure 4(b). The replacement of the high, long, unrounded vowel /i:/ of Arabic into the low, front, unrounded vowel [ɛ] of Mandailing results in the word ʃari:ʃatun absorbed into Mandailing changing into [sareʔat] as in figure 4(c).

Apart from Arabic vowel sounds that experience the process of replacement in the form of Lenition in Mandailing language absorption words, there are also Arabic consonant sounds that experience Lenition, as the data below shows. Based on the data obtained, some of them can be seen in Table 2 below, which shows the existence of consonant sounds that experience lenition in Arabic absorption words into Mandailing.

Table 2: The existence of consonant sounds that experience lenition in Arabic absorption words into Mandailing.

No.	Arabic	Mandailing	Lenition Process
6	زكاة [zaka:tun]	sakat [sakat]	[z] → [s]
7.	أجرة [a:xiratun]	aherat [aherat]	[x] → [h], [i] → [ɛ]
8.	معرفة [maʃrifatun]	maʔrepat [maʔrepat]	maʔrifat

Referring to Table 2 above, data (6) shows the process of weakening the voiced alveolar fricative consonant sound [z] into an alveolar fricative consonant, voiceless [s].

The alveolar fricative coronal consonant /z/ ز is a voiced coronal consonant in Arabic. This consonant has the following distinguishing features [+kons, +kor, +kont, -son, +alv, -ant, +suara]. In Mandailing words, the consonant is replaced with a voiceless alveolar fricative coronal consonant [s], which has the following distinguishing features [+cons, +cor, +cont, -son, +alv, -ant, -voice]. This results in the change of the [+voice] feature in the alveolar fricative coronal consonant /z/ ز to the [-voice] feature in the alveolar fricative coronal consonant [s]. Lenition forms, in this case, the weakening of the [+voice] consonant □ [-voice].

Furthermore, data (7) shows the replacement of the voiceless velar fricative dorsal consonant [x], which has distinguishing features [+cons, +dor, -cont, -son, -ant, -voice] in Arabic. This consonant is replaced with a voiceless glottal fricative consonant [h] in Mandailing, which has distinguishing features [+cons, +glot, -cont, -ant, -voice]. This replacement results in the change of the feature [+dorsal] in the voiceless velar fricative dorsal consonant /x/ خ to the feature [+glottis] in the voiceless fricative glottis consonant [h]. In this case, there is a weakening of the sound (Lenition) for the fricative, velar, voiced dorsal consonant [x] as a stronger sound because it is an oral sound, while the consonant sound [h] is glottal.

Similarly, in data (8), a fricative, pharyngeal, voiced consonant [ʕ] is replaced by an inhibited, glottal, voiceless consonant [ʔ]. The voiceless fricative pharyngeal consonant [ʕ] ع is a consonant that has the following distinguishing features [+cons, +cont, +faring, +son, -voice] in Arabic is replaced by the voiceless plosive glottal consonant [ʔ] which has the following distinguishing features [+cons, +glot, -cont, -son, -voice] in Mandailing. This consonant substitution shows a change in features [+faring, +kont, +son] that is present in the consonant /ʕ/ becomes a feature of the [+glot, -cont, -son], which is on the consonant [ʔ]. This situation indicates lenition because the consonant [ʕ] is a pharyngeal consonant stronger than [ʔ] as a glottal consonant. In addition, the pharyngeal consonant [ʕ] is a voiced consonant stronger than the consonant /ʔ/ as a voiceless consonant. This happens because in the Mandailing consonant inventory, there are no pharyngeal consonants, so they are adjusted according to the closest sound to the original sound, which is glottal.

Based on the Sagey Model (1986), the formula for replacing the voiced alveolar fricative coronal consonant /z/ into a voiceless alveolar fricative coronal consonant [s] in the data (6) above can be formulated as shown in Figure 5 below.

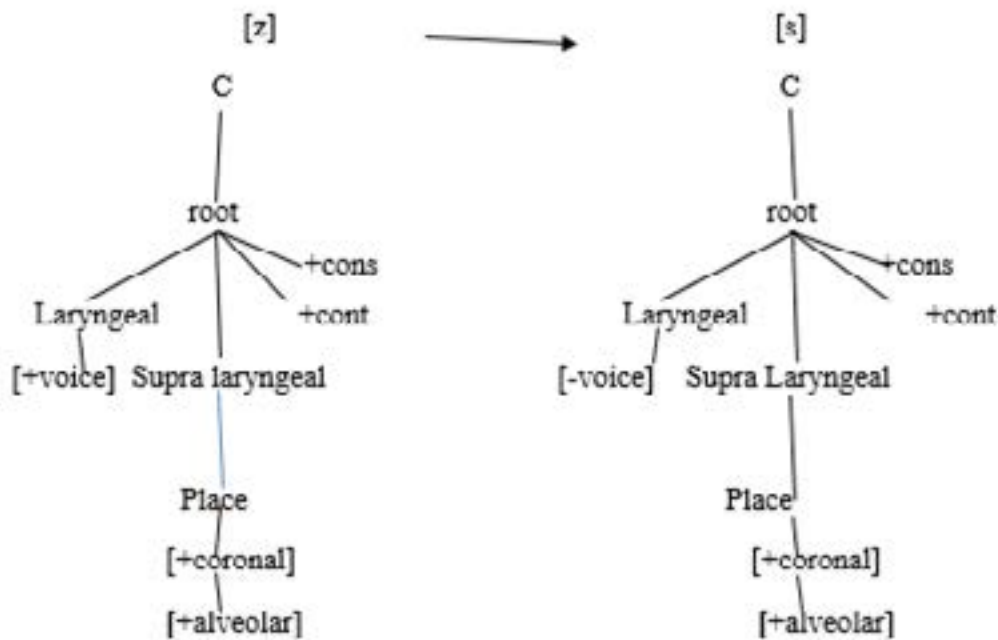


Figure 5. Arabic voiced alveolar fricative coronal consonant /z/ substitution formula → voiceless alveolar fricative coronal consonant [s] in Mandailing absorbing words

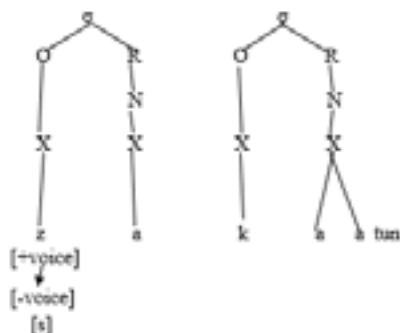
The formula in Figure 5 above is the formula for replacing the Arabic voiced alveolar fricative coronal consonant /z/, which has the distinctive features [+consonant, +coronal, +continuance, -Sonoran, +alveolar, -anterior, +voice] into a voiceless alveolar fricative coronal consonant [s] which has the distinctive features [+consonant, +coronal, +continuance, -sonoran, +alveolar, -anterior, -voice]. This occurs for the sound adjustment of the word absorbed from Arabic into Mandailing due to the absence of the voiced alveolar fricative coronal consonant /z/ in Mandailing, so it is replaced with a consonant that is close to Mandailing. This replacement involves the features [+alveolar, +voice] that the consonant [z] has in the word absorbed from Arabic changing into the features [+alveolar, -voice] in Mandailing.

Based on Sagey's (1986) model representation and Levin's (1984) syllable-level representation, the change that occurs in the word زَكَرْ [zaka:tun] absorbed into [sakat] in Mandailing in data (6a-6d) is as illustrated in figure 6 below.

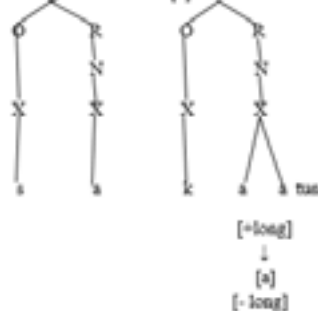
a. Deep structure /zaka:tu:n/



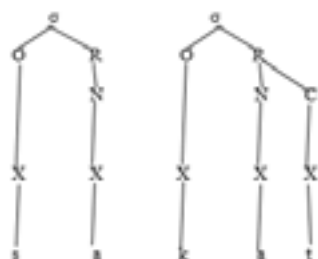
b) Feature changes



c). Vowel change /a:/ to vowel [a]



d) Surface structure



Phonetic representation = [sakat]

Figure 6: Representation of voiced alveolar fricative coronal consonant replacement /z/ → [voiced alveolar fricative coronal consonant /z/ Arabic → voiceless alveolar fricative coronal consonant [s] in Mandailing absorption words.

Figure 6 (a-d) above, it can be explained that the voiced alveolar fricative consonant /z/ in Arabic, which has the distinguishing feature [+coronal, +alveolar, +voiced,] is replaced by the voiceless alveolar fricative coronal consonant /s/ in Mandailing language because the feature [+voiced] owned by the alveolar fricative coronal consonant /z/ changes to the feature [-voiced]. As a result of this feature change, the alveolar fricative coronal consonant /z/ in BAQ is replaced with a consonant that is close to the DM consonant.

2. Anaptixis Process.

In this process, a short vowel is inserted between two consonants to simplify the syllable. The following can be seen in the anaptyxis process in the absorption process of Arabic into Mandailing.

Table 3: The anaptyxis process in the absorption process of Arabic into Mandailing.

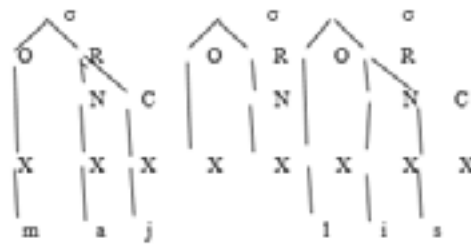
9.	قرآن [Qurʔa:n]	Kura'an [kuraʔan]	Vowel [a] between consonant [rʔ]
10.	سُبْحَة [ʃubha:t]	subahat [subahat]	Vowel [a] between consonant [bh].
11.	مَدْرَسَة [madrasah]	madarosah [madarɔsah]	Vowel [a] between consonant [dr]
12.	مَجْلِس [majlis]	majolis [majolis]	Vowel [ɔ] between consonant [jl]

Data (9-12) shows that in the process of absorption of Arabic into Mandailing, there is an insertion of short vowel sounds [a], [u], and [ɔ] between consonant sounds that can create new syllables. This can be seen in data (9), the word [qurʔa:n], which consists of two syllables [qur.ʔa:n]. In Mandailing, this word turns into three syllables [ku.ra.ʔa:n] by adding the vowel [a] between the consonant /r/, which is at the end of the first syllable, and the consonant /ʔ/, which is at the beginning of the second syllable in Arabic. Similarly, in data (10), the word [ʃubha:t] which consists of two syllables [ʃub.ha:t] in Arabic, turns into [subahat] in Mandailing. This happens because of the insertion of the vowel /a/ between the consonant /b/ at the end of the first syllable and the consonant /h/ at the beginning of the second syllable. In data (11), the word [madrasah], which consists of three syllables [mad.ra.sah] in Arabic, turns into [madarɔsah], which forms four syllables [ma.da.rɔ.sah] in Mandailing. This happens because of the insertion of the vowel /a/ between the consonant /d/ at the end of the first syllable and the consonant /r/ at the beginning of the second syllable. Likewise, with data (12), the word [majlisun], which consists of two syllables [maj.lis] in Arabic, experiences the insertion of the vowel [ɔ] between the consonant sound [j] at the end of the first syllable. The consonant [l] at the beginning of the second syllable produces the word [majolis], which consists of three syllables as an absorption word in Mandailing.

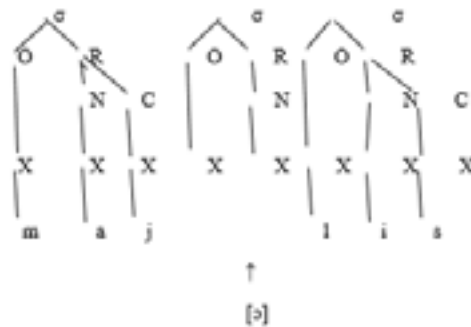
This insertion process is also included as an epenthetic process, which is a process of inserting sounds into words, especially loan words, to adjust to the phonological pattern of the borrowing language, Mandailing. The Mandailing language syllable pattern is CV.CV.CVC. or three syllables, while the borrowed language syllable pattern, Arabic, has a syllable pattern of CVC.CVC or two syllables.

The process of vowel insertion between consonants at the end of the first syllable and the beginning of the second syllable in a word absorbed from Arabic into Mandailing can be seen through Levin's (1984) syllable-level representation. The following can be seen: the process of vowel insertion /ɔ/ from the consonant sequence in the word [majlis] in Arabic is absorbed into [majolis] in Mandailing, as shown in Figure 7 below.

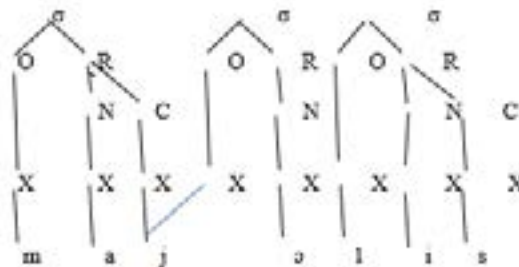
a. Deep structure/majlis/



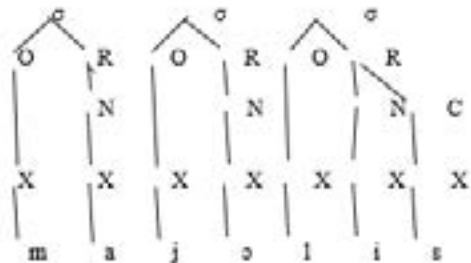
b) Vowel insertion [ɔ]



c) Ignition /j/



d) Surface Structure



Phonetic representation = [majɔlis].

Figure 7. Representation of Vowel insertion [ɔ] in the absorption word /majlis/ → [majɔlis]

Figure 7. above shows the process of insertion of the vowel [ɔ]; because the double consonant /jl/ does not exist in Mandailing, the alveo palatal consonant /j/ is infiltrated with empty gatra x and simultaneously with it, the

vowel [ɔ] is inserted by default in the nucleus position, namely in empty gatra x. With the insertion of the vowel [ɔ] between these double consonants, the alveo palatal consonant /j/, which occupies the coda position in the first syllable, is forced to undergo the process of splicing to the empty gatra x in the next syllable. As a result of this splicing process, the Arabic syllable form changes from two syllables to three syllables in the Mandailing absorption word [maj.lis] → [ma.jɔ.lis].

Conclusion

The researcher made the following conclusions about the absorption of words from Arabic into the Mandailing language:

1. This research still needs to be continued to obtain Arabic vocabulary absorbed into Mandailing.
2. The existence of Arabic vocabulary absorbed into the Mandailing language shows that contact between two languages, namely foreign languages and local languages, can occur due to the influence of Islam's entry into South Tapanuli Regency and Mandailing Natal Regency.
3. The absorption of Arabic vocabulary into Mandailing is quite productive.
4. In this paper, researchers convey two processes of Arabic vocabulary absorption into the Mandailing language: the Lenition process, or sound weakening, which is a change from a strong sound to a weak sound, and the Anaptixis process, which is the insertion of a short vowel between two consonants to simplify the syllable.
5. The Autosegmental Phonology Theory, used to show how the absorption process in the form of Lenition and Anaptixis in Arabic absorption words in Mandailing, can clearly show changes in Arabic distinguishing features in the absorption words in Mandailing.

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Public Interest Statement

This study explores how Arabic has influenced the Mandailing language through centuries of contact, especially via trade and the spread of Islam. By examining borrowed Arabic words and their phonological adaptations, the research reveals how Mandailing has absorbed and transformed foreign elements. Conducted in Kotanopan, Panyabungan, and Padang Sidempuan, this study highlights the linguistic richness resulting from cultural exchange. The findings offer valuable insights into language development and demonstrate how Arabic has uniquely contributed to the vocabulary of Mandailing, enriching local linguistic heritage and fostering deeper understanding of historical language contact.

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